



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

DOC TYPE: Meeting Minutes

TITLE: Unconfirmed minutes of WG 2 meeting 59
Microsoft Campus, Mountain View, CA, USA; 2012-02-13/17

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.

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Universal Coded Character Set (UCS)

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2012-09-12

Title: Unconfirmed minutes of WG 2 meeting 59 Microsoft Campus, Mountain View, CA, USA; 2012-02-13/17
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 and roll call

Input document:

[4105](#) 2nd Call for meeting 59 in Mountain View, CA; Mike Ksar; 2012-01-17

The convener, Mr. Mike Ksar, opened the meeting at 10:13h. He welcomed the delegates. This is the meeting of WG2 to talk about the progression of ISO/IEC 10646. We will get printed copies of the agenda, the latest one is on line. I would like to welcome our host Dr. Mark Davis, the president of the Unicode consortium.

Dr. Mark Davis: I am glad to be here – there are so many familiar faces. I will keep my remarks short. The Unicode Consortium and ISO have had a productive relationship for over 20 year with over 110k characters encoded. We have been able to preserve the contents of the standards and have been adding more characters. Now we are focusing on minority and regional scripts. We have had intensely successful collaboration more than any other group I am aware of. (He showed a graph of growth of use of Unicode.) The character encodings are grouped according to the script they are targeted at. Unicode/10646 had a steady growth in usage over the years – it is at 60 percent now. There is also a steady fall in use of ASCII and Latin-1 etc. The data taken from web indexes is approximate; you will get different results in different indexes. A pie chart of scripts was shown. A vast majority is Han; then the common characters etc., and then Latin, Arabic, Yi etc. In terms of languages, the data presented is as collected by Google. The proportions will vary depending on the pages you sample. English could vary by about 10%. The rank ordering will be similar. The major languages by size make up about 75%. There is a list of small percentage languages. It does not match at all the literate population of the world. The % of population varies widely from the web page statistics. The chart includes first and second language speakers. There are concrete steps to take for minority and regional languages. Open Fonts will help. CLDR data contains 118n core data. It has a broad reach; in mobile as well as desktops. SEI deals with minority scripts. There is also Golden Data for training - for language detection, formal and informal. Having a good language detection does make a difference between good and bad experiences on the web. Need to have large volumes to be more reliable. Word lists is another important area, for proper segmentation, to do a good search job etc. These raise the ability of providers to support more languages. My main purpose is to emphasize the collaboration between WG2 and Unicode.

Mr. Michael Everson: Is it time to switch the default encoding for web pages to UTF-8?

Dr. Mark Davis: It depends on the pages. Most browsers do auto detection fairly well. It would be better to leave it in Auto. We will continue to see non Unicode encodings, but will be of little interest over time.

Mr. Mike Ksar: Thank you Dr. Mark Davis. For people who are new at WG2 meetings, if you have a contribution you should give them to me. If you need to make copies please give them to me. The meetings will start at 09:00h every day. We will stay as late as we need to in the evenings. There are 100+ documents on the agenda. There is no way we will be able to cover all these in this meeting. We will continue till Thursday noon (till 14:00h perhaps) and the drafting committee will work on the resolutions. We will come back on Friday morning to discuss and adopt the resolutions. We will most likely finish by noon on Friday.

1.1 Roll Call

Input document:

[4101](#) Experts List – post Helsinki meeting 58; Ksar; 2012-02-02

Mr. Mike Ksar: We will go around the table and introduce ourselves. Please state your national body and your affiliation. Other WG2 experts are expected to arrive later during the meeting. Dr. Umamaheswaran has printed the experts list. Please sign in and update your information and suggestions for any other deletions or additions. Also, give your business cards to Dr. Umamaheswaran to ensure your name is spelled correctly in the attendance list.

Dr. Umamaheswaran: You would like to check if we need to keep the postal addresses.

Mr. Mike Ksar: We may need to keep just the name, affiliation and email-id etc. The spreadsheet containing experts list will not be maintained on WG2 document register any more. I will use an email id list that I maintain to communicate with WG2 experts.

The following **25** attendees representing **8** national bodies, and **4** liaison organizations were present at different times during the meeting.

Name	Representing	Affiliation
Mike KSAR	.Convener, USA	Independent
Irina SHLYAPNIKOVA	.Host, Unicode Consortium	Unicode Consortium
Mark DAVIS	.Host, Unicode Consortium	Unicode Consortium
LU Qin	.IRG Rapporteur	Hong Kong Polytechnic University
Julie S. C. CHUANG	.TCA – Liaison	Academia Sinica
Lin-Mei WEI	.TCA – Liaison	Chinese Foundation for Digitization Technology
Alain LABONTÉ	Canada; Editor 14651; SC35 - Liaison	Independent
V. S. (Uma) UMAMAHESWARAN	Canada; Recording Secretary	IBM Canada Limited
CHEN Zhuang	China	Chinese Electronics Standardization Institute
Wushour SILAMU	China	Xinjiang University
Tero AALTO	Finland	CSC-IT Center for Science
Michael EVERSON	Ireland; Contributing Editor	Evertype
Satoshi YAMAMOTO	Japan	Hitachi Limited
KIM Kyongsok	Korea (Republic of)	Busan National University
Algidas KRUPOVNICKAS	Lithuania	Lithuanian Standards Board
Evaldos KULBOKAS	Lithuania	Lithuanian IT Association
Craig CUMMINGS	USA	Rearden Commerce
Ken LUNDE	USA	Adobe Systems Inc.
Lisa MOORE	USA	IBM Corporation
Richard COOK	USA	Dept. of Linguistics, Univ., of California, Berkeley
Roozbeh POURNADER	USA	Google Inc.
Ken WHISTLER	USA; Contributing Editor	Sybase Inc.
Michel SUIGNARD	USA; Project Editor	Independent
Deborah ANDERSON	USA; SEI, UC Berkeley – Liaison	Dept. of Linguistics, Univ., of California, Berkeley
Peter CONSTABLE	USA; Unicode Consortium – Liaison	Microsoft Corporation

Drafting committee: Messrs. Mike Ksar, Michel Suignard, Satoshi Yamamoto, and Dr. Deborah Anderson, assisted in checking the draft resolutions prepared by the recording secretary Dr. Umamaheswaran.

2 Approval of the agenda

Input document:

[4205](#) Proposed Draft Agenda – Meeting 59; Mike Ksar; 2012-02-05

Mr. Mike Ksar: We will go over the agenda items in document [N4205](#).

- Under item 3, we have the 'meeting minutes' document. If you have any feedback please give them to Dr. Umamaheswaran.
- There is nothing to report under item 5.

- Item 6 is for your information.
- Under Item 7, we can have ad hoc meetings for contributions from Lithuania and Hungary. Experts from Hungary cannot attend this meeting.
- There are several IRG related documents under item 8. Dr. Lu Qin has to leave by end of Wednesday; also other IRG experts are expected to attend on Wednesday.
- Under Item 9 we have contributions in support of ballot comments. We will take these as we go through the ballot dispositions.
- Item 10.1 lists contributions carried forward; we can decide to carry these forward or not.
- Item 10.2 lists new scripts, and 10.3 lists additions to existing scripts/characters.

Discussion:

- a. Dr. Umamaheswaran: 10.4.4 and 10.4.5 should be moved to 10.3.30 and 10.3.31
- b. Dr. Debora Anderson: We should move item 8.8 documents N4233 and N4213 to 10.4.3
- c. Mr. Michel Suignard: We may have an ad hoc on Wingdings/Webdings. Myself and Mr. Michael Everson will be meeting. If anyone is interested you can join.
- d. Dr. Umamaheswaran: The roadmap snapshot document under item 7.5 will be ready later in the week.

The agenda document [N4205](#) was updated reflecting the discussion. It was also updated and posted to the WG 2 website as new topics or contributions were identified as the meeting progressed.

All the changes made during the meeting are included in the appropriate sections in these minutes. Some agenda items have been reorganized or renumbered. Agenda items that were not discussed have been deleted, and any relevant documents are grouped to be carried forward. The following table of contents reflects the items that were discussed.

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3 Approval of minutes of meeting 58

Input document:

[4103](#) Meeting 58 draft minutes - Meeting 58; Uma; 2012-01-03

Mr. Mike Ksar: You can give any comments and corrections offline to Dr. Umamaheswaran.

The following corrections were identified:

- In section 11.2.3 – The name of the character 'Mark's chapter symbol' should be 'Marks chapter symbol'.
- In section 8.5 item g, 'telecons ... 1 hour ..' should be 'telecons ... 2 hours..'

Disposition:

WG2 approved the meeting minutes with the above corrections.

4 Review action items from previous meeting

Input document:

[4103](#) Meeting 58 draft minutes - Meeting 58; Uma; 2012-01-03

Dr. Umamaheswaran reviewed and updated the action items from the previous meetings. The resulting updated status for each item is shown below. All the action items recorded in the minutes of the previous meetings from 25 to 51, and, 53 to 55 have been either completed or dropped. Status of outstanding action items from previous meetings 52, 56, 57 and new action items from the last meeting 58 are listed in the tables below.

Of the 56 items reviewed, 8 items were carried forward; the rest were either completed or dropped.

4.1 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.	<i>M52.5 (Principles for Dandas)</i> : 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. (Mr. Michael Everson indicated he will provide some text to include in the P&P document at meeting 58.) M53, M54 M55, M56, M57 and M58 – in progress.	In progress

4.2 Outstanding action items from meeting 56, San Jose, CA, USA, 2010-04-19/23

Item	Assigned to / action (Reference resolutions in document N3804 , and unconfirmed minutes in document N3803 for meeting 56 – with any corrections noted in section 3 in the minutes of meeting 57 in document N3903)	Status
AI-56-12	All national bodies and liaison organizations	
	To take note of and provide feedback on the following items.	
b.	(Authors of the document are from several national bodies) <i>M56.18 (Jurchen script)</i> : WG2 invites the authors of the proposal to encode Jurchen script in document N3788 to further revise the document based on feedback in document N3817 , discussion at meeting 56, and in consultation with other Jurchen experts. M57 and M58 – in progress.	Dropped

4.3 Outstanding action items from meeting 57, Busan, Korea (Republic of), 2010-10-04/10

Item	Assigned to / action (Reference resolutions in document N3904 , and unconfirmed minutes in document N3903 for meeting 57 – with any corrections noted in section 3 in the minutes of meeting 58 in document N4103)	Status
AI-57-4	IRG Rapporteur and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following items:	
a.	M57.02 (Miscellaneous character additions): WG2 accepts the following characters for encoding in the standard: ... h. CJK UNIFIED IDEOGRAPH-9FCC (corresponding to Adobe-Japan1-6 CID+20156), with its source reference UTC-00867, and with its glyph as shown in document N3885 . The IRG convener is to take note of this addition and remove it from the IRG's collection for future extension. ... M58 – in progress.	Completed.
AI-57-7	Ireland (Mr. Michael Everson)	
d.	is invited to make contributions on proposed changes or improvement to charts, for feedback from national bodies and liaison organizations, prior to bringing them up as ballot comments. M58 – in progress.	Completed.
AI-57-8	China (Mr. Chen Zhuang)	
	To take note of and act upon the following items:	
b.	M57.27 (Khitan): With reference to documents N3918 and N3925 on Khitan, WG2 endorses the ad hoc report in document N3942 , and invites China to submit a revised proposal addressing the	In progress.

	feedback received to date. M58 – in progress.	
c.	M57.28 (Chinese Chess symbols): With reference to document N3910 on Chinese Chess Symbols, WG2 invites China to submit a revised proposal addressing the feedback received during meeting M57 and any further national body feedback received prior to WG2 meeting M58. M58 – in progress.	In progress.
AI-57-9	Norway (via Messrs. Karl Pentzlin and Michael Everson)	
a.	Is invited, with reference to the disposition of its ballot comment T2 on CD 10646 3rd edition in document N3936 , to submit a separate contribution proposing new characters addressing the issue of removing the annotation on U+041A LATIN CAPITAL LETTER ENG, including addressing any data that may be broken. M58 – in progress.	Completed.

4.4 New action items from meeting 58, Helsinki, Finland, 2011-06-06/10

Item	Assigned to / action (Reference resolutions in document N4104 , and unconfirmed minutes in document N4103 for meeting 58 (this document you are reading)).	Status
AI-58-1	Recording Secretary - Dr. V.S. UMaaheswaran	
a.	To finalize the document N3904 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N4104 .
b.	To finalize the document N3903 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N4103 .
AI-58-2	Convener - Mr. Mike Ksar	
	To take note of and act upon the following items:	
a.	<i>M58.26 (Roadmap snapshot):</i> WG2 instructs its convener to post the updated snapshot of the roadmaps (in document N4056) to the WG2 web site and communicate the same to SC2 secretariat.	Completed.
b.	<i>M58.28 (Request for encoding symbols from SC35):</i> With reference to requests from SC35 in document N3897 , WG2 requests SC35 to provide more information on the use of these symbols in plain text, addressing the feedback in document N3996 . SC35 is also asked to include a Proposal Summary Form on any proposal submitted to SC2.	Completed.
c.	<i>M58.25 (Normatively referenced Unicode Technical Reports):</i> Considering the concerns expressed in the document N4092 , WG 2 requests SC2 to adopt the following resolution and communicate the same to the Unicode Consortium. Considering the concerns expressed in the document JTC1/SC2/WG2 N4092 , SC2 requests the Unicode Consortium to accept the following: When the Unicode Consortium proposes to update any Unicode Technical Report that is normatively referenced by ISO/IEC 10646, the Unicode Consortium is asked to submit a notification of the planned update and/or the draft update text to SC 2, before the Consortium officially approves the update; The Unicode Consortium will consider all feedback on such a planned update received as liaison contributions from SC 2, and expressing the opinions of SC 2 and/or its participating national body members regarding a planned update; and In the event that the Unicode Consortium and SC 2 have different opinions on details of such an update, the Consortium will give full consideration to the SC 2 opinions and make its best effort to collaborate with SC 2 to reach a consensus.	Completed.
d.	To add relevant contributions carried forward from previous meetings to agenda of next meeting. (See list under AI-58-11 - items a to e - below.)	Completed.
AI-58-3	Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)	
	To prepare the appropriate amendment texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:	
a.	<i>M58.01 (Moving of characters from 3rd edition to Amendment 1):</i> WG2 accepts moving the following character out of the 3 rd edition and including it in Amendment 1 to the 3 rd edition of the standard: A78F LATIN LETTER MIDDLE DOT (with a changed name from LATIN LETTER GLOTTAL DOT).	Completed – items a to g, see FDIS 3 rd edition – document SC2/N4211 .
b.	<i>M58.02 (Deleting 2 Batak characters from 3rd edition):</i> WG2 accepts deleting the two Batak characters from the 3 rd edition -- 1BFA BATAK SYMBOL BINDU GODANG, and 1BFB BATAK SYMBOL BINDU PINARJOLMA, pending more evidence for their usage in plain text.	
c.	<i>M58.03 (Correction of G-sources in CJK main block):</i> WG2 accepts the following corrections to G-sources in the CJK Unified Ideographs main block: replace the G source reference for 5655 in the CJK main block with HYD 10685.050 remove the G source reference for 58ED in the CJK main block	
d.	<i>M58.04 (Correction of glyphs):</i> WG2 accepts changing the representative glyphs for: 2D7F TIFINAGH CONSONANT JOINER to that shown in document N4069 ; Adjustments to several glyphs arising from ad hoc report on Wingdings and Webdings as described	

	in document N4115 .	
e.	<i>M58.05 (New source identifiers for orphaned CJK ideographs):</i> WG2 accepts the proposal for new source references of the form UCI-xxxxx, per document N4111 , and requests the Unicode Consortium to update Unicode Technical Report #45, assigning UCI source labels for all the ideographs which have no other source reference in ISO/IEC 10646, coordinating with the project editor. Three CJK Unified Ideograph Extension C characters --- 2AD12, 2B089, and 2B08F (per item 5 in document N4021 from IRG) are also to be given UCI source labels. The project editor is instructed to add appropriate text to the standard.	
f.	<i>M58.06 (Disposition of ballot comments of FCD 3rd edition):</i> WG2 accepts the disposition of 3 rd edition FCD ballot comments in document N4098 . The following significant changes are noted: marking 288 "Multilingual Latin Subset" to be a fixed collection; deleting 33 characters - 109C0 through 109F0 – Meroitic fractions and numbers, pending more satisfactory evidence for including them; fixing erroneous glyph for 2AAC9 (an ideograph in the CJK Extension C set); removing "GB 12052-90" and "GB 15564-1995" from the Sub-clause 'S.1.6, G-Source'; addition of the following formal name aliases: 2448 MICR ON US SYMBOL for 2448 OCR DASH, and, 2449 MICR DASH SYMBOL for 2449 OCR CUSTOMER ACCOUNT NUMBER removal of the following Named UCS Sequence Identifiers: <U+21F3, U+20E2> KEYBOARD SYMBOL SCROLLING, and, <U+2139, U+20E2> KEYBOARD SYMBOL HELP moving of one character from 3 rd edition to Amendment 1 per resolution M58.01 above; deleting the two Batak characters per resolution M58.02 above; correction of G-sources of two CJK unified ideographs per resolution M58.03 above; adding new source references of the form UCI-xxxxx for ideographs which have lost their original source references over the years, per resolution M58.05 above.	
g.	<i>M58.07 (Progression of 3rd edition):</i> WG2 instructs its project editor to prepare and to forward the final text of the 3 rd edition, which will include the changes arising from resolutions M58.06 above, along with the final disposition of comments to the SC2 secretariat for an FDIS ballot. WG2 further instructs the IRG to assist the project editor with the review and finalization of the multiple-column charts for CJK Unified Ideographs Extension B. The target revised starting date for FDIS is 2011-11.	
h.	<i>M58.08 (Disposition of PDAM1 ballot comments):</i> WG2 accepts the disposition of PDAM1 ballot comments in document N4099 . The following significant changes are noted: renaming 0605 ARABIC COPTIC NUMBER MARK to ARABIC NUMBER MARK ABOVE; deletion of 16AF5 BASSA VAH COMMA and moving 16AF6 BASSA VAH FULL STOP up by one position to 16AF5; moving 1F53E RIGHT-FACING ARMENIAN ETERNITY SIGN to 058D, and 15F3F LEFT-FACING ARMENIAN ETERNITY SIGN to 058E in the Armenian block, with an annotation for 058E that it maps to AST 34.005: 1997; changing the block name and the names of all the characters in the block - 'Coptic Numbers' (102E0-102FF), by inserting the word 'Epace' after the word 'Coptic' in the names; changing the block name and the names of all the character in the 'Sindhi' block (112B0-112FF), by replacing 'Sindhi' with 'Khudawadi' in their names.	Completed – items h to w; see document SC 2/N4201
i.	<i>M58.09 (Format of NUSI.txt file):</i> WG2 accepts the proposed change to clause 25 describing the format used for NUSI.txt data file, detailed in document N4114 , and to change the data in NUSI.txt file to follow this new format. This change will allow the NUSI.txt files in ISO/IEC 10646 and the Unicode Standard to be identical.	
j.	<i>M58.10 (Tirhuta script):</i> WG2 accepts to create a new block named Tirhuta in the range 11480 to 114DF, and populate it with 82 characters in code positions 11480 to 114C7 and 114D0 to 114D9, with their glyphs and character names as shown on pages 14 and 15 in document N4035 . The repertoire includes some combining characters and some two part vowels needing decomposition specification.	
k.	<i>M58.11 (Khojki script):</i> WG2 accepts to create a new block named Khojki in the range 11200 to 1124F, and populate it with 61 characters in code positions 11200 to 11211, and 11213 to 1123D, with their glyphs and character names as shown on page 4 in document N3978 . The repertoire includes some combining characters.	
l.	<i>M58.12 (Elbasan script):</i> WG2 accepts to create a new block named Elbasan in the range 10500 to 1052F, and populate it with 40 characters in code positions 10500 to 10527, with their glyphs and character names as shown on pages 19 and 20 in document N3985 .	
m.	<i>M58.13 (Nabataean script):</i> WG2 accepts to create a new block named Nabataean in the range 10880 to 108AF, and populate it with 40 characters in code positions 10880 to 1089E, and 108A7 to 108AF, with their glyphs and character names as shown on page 4 in document N3969 .	
n.	<i>M58.14 (Linear A script):</i> WG2 accepts to create a new block named Linear A in the range 10600 to 1077F, and populate it with 341 characters in code positions 10600 to 10736, 10740 to 10755 and 10760 to 10767, with their glyphs and character names as shown on pages 5 to 11 in document N3973 .	
o.	<i>M58.15 (Pau Cin Hau script):</i> WG2 accepts to create a new block named Pau Cin Hau in the range 11AC0 to 11AFF, and populate it with 57 characters in code positions 11AC0 to 11AF8, with their	

	glyphs and character names as shown in the consolidated charts in document N4107 .	
p.	<i>M58.16 (Manichaean script)</i> : WG2 accepts to create a new block named Manichaean in the range 10AC0 to 10AFF, and populate it with 51 characters in code positions 10AC0 to 10AE6, and 10AEB to 10AF6, with their glyphs and character names as shown on page11 in document N4029 .	
q.	<i>M58.17 (Lithuanian dialectology characters)</i> : WG2 accepts the recommendation in the ad hoc report on Lithuanian dialectology (document N4116) and accepts to encode in the standard 14 characters in various blocks as follows: a. 8 characters in the Miscellaneous Symbols and Arrows block: 2B4E SHORT NORTH EAST ARROW 2B4F SHORT SOUTH EAST ARROW 2B5A NORTH EAST ARROW WITH HOOKED HEAD 2B5B SOUTH EAST ARROW WITH HOOKED TAIL 2B5C NORTH EAST ARROW WITH HORIZONTAL TAIL 2B5D SOUTH EAST ARROW WITH HORIZONTAL TAIL 2B5E BENT ARROW POINTING DOWNWARDS THEN NORTH EAST 2B5F SHORT BENT ARROW POINTING DOWNWARDS THEN NORTH EAST b. 2 characters in the Supplemental Punctuation block: 2E3D VERTICAL SIX DOTS 2E3E WIGGLY VERTICAL LINE c. 2 character in the Latin Extended-D block: A794 LATIN SMALL LETTER C WITH PALATAL HOOK A795 LATIN SMALL LETTER H WITH PALATAL HOOK, and, d. 2 character additions to the Cyrillic Extended-B block: A69C MODIFIER LETTER CYRILLIC HARD SIGN A69D MODIFIER LETTER CYRILLIC SOFT SIGN The glyphs are as shown in the consolidated charts in document N4107 .	
r.	<i>M58.18 (Old Hungarian script)</i> : WG2 accepts the recommendation in the ad hoc report on Hungarian Runic/Szekely-Hungarian Rovas, (document N4110) and accepts to encode in the standard 111 characters as follows: 2E41 REVERSED COMMA, and, 2E42 DOUBLE LOW-REVERSED-9 QUOTATION MARK, In the Supplemental Punctuation block, create a new block called Old Hungarian in the range 10C80 to 10CFF and populate it with 109 characters in code positions 10C80 to 10CB2, 10CC0 to 10CF2 and 10CF9 to 10CFF. with their glyphs and character names as shown in pages 4 to 7 in document N4110 .	
s.	<i>M58.19 (Teuthonista phonetic characters)</i> : WG2 accepts the recommendation in the ad hoc report on Teuthonista phonetic characters (document N4106), and accepts to encode in the standard 85 characters as follows: create new block named Combining Diacritical Marks Extended in the range 1AB0 to 1AFF, and populate it with 15 characters in the code positions 1AB0 to 1ABE, 14 combining characters 1DE7 to 1DF4 in Combining Diacritical Marks Supplement block, 8 characters in the range A798 to A79F in Latin Extended-D block, and, create new block named Latin Extended-E in the range AB30 to ABBF, and populate with 48 characters AB30 to AB5F, with their glyphs and character names as shown in pages 4 to 11 in document N4106 .	
t.	<i>M58.20 (Duployan Shorthands)</i> : WG2 accepts to encode the 148 characters required for Duployan Shorthands and Chinook script as follows: a. 2E3C STENOGRAPHIC FULL STOP (changed from 'Stenographic Period') in the Supplemental Punctuation block, with its glyph as shown in document N3895 ; b. create a new block Duployan in the range 1BC00 to 1BC9F, and populate it with 143 characters at code points 1BC00 to 1BC6A, 1BC70 to 1BC7C, 1BC80 to 1BC88, 1BC90 to 1BC99, and 1BC9C to 1BC9F, with their names and glyphs from document N4088 , and c. create a new block Shorthand Format Controls in the range 1BCA0 to 1BCAF, and populate it with four characters in code positions 1BCA0 to 1BCA3 with their names and glyphs from document N4088 .	
u.	<i>M58.21 (Wingdings and Webdings)</i> : WG2 accepts the recommendation in the ad hoc report on Wingdings and Webdings (document N4115) and accepts to encode in the standard 506 symbols in 10 blocks as follows: 7 characters in the Miscellaneous Technical block 1 character in the Dingbats block 140 characters in the Miscellaneous Symbols and Arrows block 1 character in the Supplemental Punctuation block 2 characters in the Enclosed Alphanumeric Supplement block 105 characters in the Miscellaneous Symbols and Pictographs block Create a new block named Ornament Symbols in the range 1F650-1F67F and populate it with 43 characters 1 character in the Transport and Map Symbols block Create a new block named Geometric Shapes Extended in the range 1F780-1F7FF, and populate it with 84 characters, and	

	Create a new block named Supplemental Arrows-C in the range 1F800-1F8FF and populate it with 122 characters with the glyphs, character names and their code positions as shown on pages 53 through 83 in document N4115.	
v.	<p><i>M58.22 (Miscellaneous character additions):</i> WG2 accepts to encode the following 29 characters in the standard:</p> <p>1F544 NOTCHED RIGHT SEMICIRCLE WITH THREE DOTS in the Miscellaneous Symbols and Pictographs block, with its glyph as shown in Table 1 in document N3971;</p> <p>1F545 SYMBOL FOR MARKS CHAPTER in the Miscellaneous Symbols and Pictographs block, with its glyph as shown in consolidated charts in document N4107;</p> <p>0C00 TELUGU SIGN COMBINING CANDRABINDU ABOVE in the Telugu block with a corresponding annotation to 0C01 “indicates a contextually elided nasal” to differentiate it from 0C00</p> <p>0C81 KANNADA SIGN CANDRABINDU in the Kannada block, and,</p> <p>0D01 MALAYALM SIGN CANDRABINDU in the Malayalam block, with their glyphs as shown on page 7 in document N3964 (all these three are combining marks);</p> <p>08FF ARABIC MARK SIDEWAYS NOON GHUNNA, a combining mark, in the Arabic Extended-A block, with its glyph as shown in the table at the top of page 2 in document N3989;</p> <p>08A1 ARABIC LETTER BEH WITH HAMZA ABOVE, in the Arabic Extended-A block, with its glyph as shown in table 1 on page 1 in document N3988;</p> <p>037F GREEK CAPITAL LETTER YOT in the Greek and Coptic block, with its glyph from page 2, and proposed annotations for 03F3 and 037F, from document N3997;</p> <p>191D LIMBU LETTER GYAN (with an annotation that it is equivalent of JNYA), and</p> <p>191E LIMBU LETTER TRA, in the Limbu block, with their glyphs as shown on page 1 in document N3975;</p> <p>0978 DEVANAGARI LETTER MARWARI LETTER DDA, in the Devanagari block with its glyph as shown on page 1 of document N3970;</p> <p>A698 CYRILLIC CAPITAL LETTER DOUBLE O, A699 CYRILLIC SMALL LETTER DOUBLE O, A69A CYRILLIC CAPITAL LETTER CROSSED O, and, A69B CYRILLIC SMALL LETTER CROSSED O, in the Cyrillic Extended-B block, with their glyphs as shown on page 2 in document N3974;</p> <p>1F641 SLIGHTLY FROWNING FACE, and, 1F642 SLIGHTLY SMILING FACE, in the Emoticons block, with their glyphs and annotations as shown on page 1 in document N3982;</p> <p>2E40 DOUBLE HYPHEN in the Supplemental Punctuation block, with its glyph as shown on page 1 in document N3983, including a cross reference to 30A0; also add a cross reference from 30A0 to 2E40;</p> <p>08AD ARABIC LETTER LOW ALEF</p> <p>08AE ARABIC LETTER DAL WITH THREE DOTS BELOW</p> <p>08AF ARABIC LETTER SAD WITH THREE DOTS BELOW</p> <p>08B0 ARABIC LETTER GAF WITH INVERTED STROKE</p> <p>08B1 ARABIC LETTER STRAIGHT WAW in the Arabic Extended-A block, with their glyphs and annotations as shown in the Table on page 1 in document N4072;</p> <p>1031F OLD ITALIC LETTER ESS, in the Old Italic block, with its glyph as shown on page 3 in document N4046;</p> <p>FE27 COMBINING LIGATURE LEFT HALF BELOW</p> <p>FE28 COMBINING LIGATURE RIGHT HALF BELOW</p> <p>FE29 COMBINING TILDE LEFT HALF BELOW</p> <p>FE2A COMBINING TILDE RIGHT HALF BELOW, and</p> <p>FE2B COMBINING CONJOINING MACRON BELOW in the Combining Half Marks block, with their glyphs as shown on page 2 in document N4078.</p>	
w.	<i>M58.23 (Progression of PDAM 1 to the 3rd edition):</i> WG2 instructs its project editor to create the text of for Amendment 1 to the 3 rd edition of ISO/IEC 10646, incorporating the disposition of PDAM1 ballot comments per resolution M58.08 above, character moved from 3 rd edition per resolution M58.01 above, and text changes and characters accepted for encoding in resolutions M58.09 to M58.22 above, and send it to the SC2 secretariat for a second PDAM ballot. The consolidated charts are in document N4107. The revised target starting dates are: PDAM 1.2 2011-07, DAM 2012-03 and FDAM 2012-11.	
x.	<i>M58.24 (Enhanced method for progressing PDAMs):</i> WG2 agrees to initiate a trial period starting after meeting 58, encouraging the project editor to make use of a discussion list and teleconferencing facilities to arrive at dispositions to ballot comments, and issuing of any PDAM ballots (within the scope of current SC2 projects and its subdivisions), between WG2 face to face meetings. WG2 requests the SC2 secretariat to provide the needed support by establishing a discussion list and inviting national bodies and liaison organizations to nominate experts to	Completed.

	participate in the discussions associated with ballot dispositions and related matters. Other subject matter experts may also be invited to participate at the discretion of the project editor.	
AI-58-4	IRG Rapporteur and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following items:	
	a. <i>M58.27 (P&P document - adoption and additions):</i> WG2 adopts document N3902 as the updated principles and procedures. Further, WG2 accepts the additions proposed under item A, item B (with slight modification as recorded in the minutes) and item C, in document N4049 , and instructs its ad hoc on Principles and Procedures to update the P&P document (as document N4102) for adoption at WG2 meeting 59. IRG is requested to review and provide feedback on item D in document N4049 .	Completed.
	b. to address the concerns in document N4075 on potential duplication and on possible use of IVS-s as method to encode z-variants, and provide feedback to WG2.	In progress.
AI-58-5	Ad hoc group on Principles and Procedures (Dr. Umamaheswaran)	
	a. <i>M58.27 (P&P document - adoption and additions):</i> WG2 adopts document N3902 as the updated principles and procedures. Further, WG2 accepts the additions proposed under item A, item B (with slight modification as recorded in the minutes) and item C, in document N4049 , and instructs its ad hoc on Principles and Procedures to update the P&P document (as document N4102) for adoption at WG2 meeting 59. IRG is requested to review and provide feedback on item D in document N4049 .	Completed.
AI-58-6	Ad hoc group on roadmap (Dr. Umamaheswaran)	
	a. To update the Roadmaps with the results from this meeting.	Completed; see document N4186 .
AI-58-7	Ireland (Mr. Michael Everson)	
	a. With reference to Irish proposal for replacement of Bengali chart in comment E1 on Row 098 in document N4014 (results of voting on FCD of 3 rd edition), Ireland is invited to provide more information regarding the font used for Bengali in the charts for review and comment by national bodies and liaison organizations. Also refer to similar action item AI-57-7 on Ireland.	In progress.
AI-58-8	Japan (Mr. Masahiro Sekiguchi)	
	a. With reference to comment JP.7, item b, on Code charts for CJK Compatibility Ideographs in document N4014 (results of voting on FCD of 3 rd edition), Japan is invited to provide further explanation of the problem with examples.	Dropped.
AI-58-9	China (Mr. Chen Zhuang)	
	To take note of and act upon the following items:	
	a. <i>M58.31 (Chinese Chess symbols):</i> With reference to proposal from China in document N3910 , WG2 invites China to submit a revised proposal taking into consideration the feedback comments received in documents N3966 and N3992 .	In progress.
	b. <i>M58.30 (Naxi Dongba pictographs):</i> With reference to proposal from China in document N4043 , WG2 endorses the ad hoc report in document N4112 , and invites China to submit a revised proposal taking into consideration the recommendations in the ad hoc report.	In progress.
	c. <i>M58.29 (Additional characters for Uighur and Chaghatay):</i> With reference to requests from China in documents N4066 and N4067 , WG2 endorses the ad hoc report in document N4113 , and invites China to submit a revised proposal, based on Named USI sequences, taking into consideration the consensus in the ad hoc report.	Completed; see N4218 .
AI-58-10	Unicode Consortium (Mr. Peter Constable)	
	To take note of and act upon the following items:	
	a. to arrange for UTS #37 to be entered in the WG2 register, and SC2 national bodies to be invited to comment.	Completed. N4169 .
	b. to revise document N4084 to remove the recommendation that WG2 take a resolution to instruct the IRG etc. and forward the revised document to IRG's attention.	Completed.
	c. to work with the project editor and update UTR #45 to facilitate timely action on resolution - <i>M58.05 (New source identifiers for orphaned CJK ideographs):</i> WG2 accepts the proposal for new source references of the form UCI-xxxxx, per document N4111 , and requests the Unicode Consortium to update Unicode Technical Report #45, assigning UCI source labels for all the ideographs which have no other source reference in ISO/IEC 10646, coordinating with the project editor. Three CJK Unified Ideograph Extension C characters --- 2AD12, 2B089, and 2B08F (per item 5 in document N4021 from IRG) are also to be given UCI source labels. The project editor is instructed to add appropriate text to the standard.	Completed.
	<i>M58.25 (Normatively referenced Unicode Technical Reports):</i> Considering the concerns expressed in the document N4092 , WG 2 requests SC2 to adopt the following resolution and communicate the same to the Unicode Consortium. When the Unicode Consortium proposes to update any Unicode Technical Report that is normatively referenced by ISO/IEC 10646, the Unicode Consortium is asked to submit a notification of the planned update and/or the draft update text to SC 2, before the Consortium officially approves the update; The Unicode Consortium will consider all feedback on such a planned update received as liaison contributions from SC 2, and expressing the opinions of SC 2 and/or its participating national body members regarding a planned update; and In the event that the Unicode Consortium and SC 2 have different opinions on details of such an	Completed.

	update, the Consortium will give full consideration to the SC 2 opinions and make its best effort to collaborate with SC 2 to reach a consensus.	
AI-58-11	All national bodies and liaison organizations	
	To take note of and provide feedback on the following items.	
a.	document N4013 - Proposal to encode additional Runic characters	Noted.
b.	the Rhetic character proposed in document N4046 - Proposal to Encode Additional Old Italic Characters	Noted.
c.	document N4048 - Request for comments on font-making of oracle-bone scripts (feedback to be sent to TCA and to IRG)	Completed.
d.	document N4090 - Proposal for encoding the SignWriting script	Noted.
e.	The following documents are being carried forward. National bodies and liaison organizations are requested to review and provide any feedback they may have on them: N3288 - Old Yi script; N3598 (N3705 and N3719) on Nüshu script – 2 nd Revision; N3667 - Pahawh Hmong script; N3695 - Obsolete Simplified Chinese Characters; N3762 - Kpelle script; N3768 - Landa script; N3811 - Tolong Siki script; N3841 - the Gondi scripts; N3842 - the Balti scripts; N3848 - Dhives Akuru script; N3863 - Mende script; N3864 - Zou script; N3874 - Pyu script; N3928 - Ahom script; N3959 - Gangga Malayu script; N3961 - Logographic script of Pau Cin Hau; N3963 - Tikamuli script; N3972 - Afaka script; N3977 - Woleai script; N3980 - Subscript Solidus; N4079 – English Phonotypic Alphabet (EPA); N3986 - Encoding Model for Soyombo Vowels; N3999 - Khazarian Rovas script; N4006 - Carpathian Basin Rovas script; N4011 - heraldic hatching characters; N4012 - additional playing card characters; N4016 - Balti 'B' script; N4018 - Khambu Rai script; N4019 - Khema script; N4025 - Tulu script; N4026 – Soyombo script; N4027 - Multani script; N4028 - Jenticha; N4030 - addition of six Latin characters; N4032 - Marchen script; N4033 , N4033A , N4033B , N4083 and N4094 – Report on Tangut; N4034 - Modi script; N4036 - Magar Akkha script; N4037 - Kirat Rai script; N4038 - Prachalit Nepal script; N4039 - Caucasian Albanian script; N4040 - Psalter Pahlavi script; N4041 - Mongolian Square script; N4044 - Wolof Alphabet of Assane Faye; N4073 - Metrical Symbols and related characters; N4077 - Sources for the Encoding of Jurchen; and, N4089 - playing card and tarot card characters.	Noted.
f.	<i>M58.32 (Future meetings)</i> : WG2 endorses the following schedule for future meetings of WG2 and of IRG: WG2 meetings: Meeting 59 - 2012-02-13/17, Microsoft Campus, Mountain View, CA, USA Meeting 60 - 2012-10-22/26, Chiang Mai, Thailand (pending confirmation); Berlin, Germany (as backup, pending confirmation) Meeting 61 - 2nd Quarter 2013, Berlin, Germany (pending confirmation); (Looking for backup host) IRG meetings: IRG Meeting 38, Gyeongju, Korea, 2012-06-18/22 IRG Meeting 39, Hong Kong S.A.R., 2012-11-12/16	Noted.

5 JTC1 and ITTF matters

None at this meeting.

6 SC2 matters

None at this meeting.

6.1 SC2 Program of Work

See <http://www.itscj.ipsj.or.jp/sc2/open/pow.htm>. There was no discussion.

6.1.1 Submittals to ITTF (Abstract of 3rd Edition – 2012)

An abstract of the 3rd edition was sent to ITTF in preparation for its publication once the ballot is competed. There is a link to Chapter 4 of Unicode. The FDIS ballot is now open to national bodies, and is closing on 2012-04-13.

Dr. Umamaheswaran: Editorial comments, for example - wrong collection identifier for Unicode 6.1, should be reported through ballot (still open) comment.

6.1.2 Ballot results – PDAM 1.2

Input document:

[4164](#) Result of voting on SC 2 N 4201, ISO/IEC 10646:2011/PDAM 1.2, - Information technology -- Universal Coded Character Set (UCS) --Amendment 1: Palmyrene, Old North Arabian, Sindhi, Mro, Bassa Vah, and other characters; SC2 Secretariat – 024207; 2011-11-01

Document [N4164](#) contains the voting results on PDAM 1.2. 26 national bodies had cast their ballot, 1 had commented and 4 did not vote. Of the responses, 4 were abstentions, 9 were approvals without comment, 4 (Canada, China, France and UK) were approvals with comments and 5 (Germany, Hungary, Ireland, Romania and USA) were disapprovals. Section 7.2 on page 21 details the disposition of the comments.

7 WG2 matters

7.1 Ad hoc meetings

7.1.1 Input from Lithuania

Input documents:

- [4187](#) Letter from the Prime Minister of Lithuania – Request to include current accented Lithuanian alphabet letters;
- [4188](#) Three letters of support for inclusion of current accented Lithuanian alphabet letters; Lithuanian NB; 2011-12-31
- [4189](#) Another letter of support from Fotonija for inclusion of current accented Lithuanian alphabet letters; Lithuanian NB; 2011-11-29
- [4190](#) Cover letter from Lithuanian Standards Board to WG2; Lithuanian NB; 2011-12-15
- [4191](#) Proposal to add Lithuanian accented letters to the UCS; Vilnius University, the State Commission of the Lithuanian language, Lithuanian Standards Board; 2011-12-05
- [4191-A](#) Addendum to N4191.
- [4192](#) 4 more letters of support for Lithuanian accented letters; Lithuanian NB; 2012-01-25
- [4193](#) How to Solve the Problems Addressed by Lithuania in WG2 4191; Karl Pentzlin; 2012-01-26

Output document:

- [4242](#) Lithuanian ad hoc report; WG2; 2012-02-15

Mr. Mike Ksar: We will have an ad hoc from 12:00h to 15:00h today (Monday). We have discussed this topic in many meetings earlier. Mr. Peter Constable will lead the ad hoc. Experts representing Lithuania and several other WG2 experts identified themselves as interested participants.

Mr. Evaldas Kulbokas: I would await the discussion with the experts in the ad hoc. About 6 years ago we were talking about character representation that we could not see. The belief was if we cannot see the character in the standard we could not search etc. We formalized why we are having problems working with the current implementations. We have the floating accents and can mean different things and we have to use them. The linguists don't think the same way as the standards people.

Dr. Umamaheswaran: I just wanted to get a clarification - are you suggesting there are some missing accent marks?

Mr. Evaldas Kulbokas: No. All the accent marks are there.

Results of the ad hoc:

Mr. Mike Ksar: The discussion in the ad hoc went off well. The feedback to the Lithuanian experts was that the solution for their problem is not in adding pre-composed characters in ISO/IEC10646, but to seek solutions to fix software to work properly for their requirements.

Mr. Peter Constable: Document [N4242](#) contains the ad hoc report. We discussed the Lithuanian issues. We got input from Lithuanian expert - issues related to text input and display. They identified more significant issues for text processing such as searching data in databases. There was a particular issue on Asymmetric search that will be discussed in OWG-SORT. The conclusion is not to view the problem as a character encoding issue, but to address the software shortcomings. Various avenues to improve the situation with the software shortcomings were discussed – such as how to use 14651 and engaging in CLDR project (with Locale Data facilitating the localization). There was no specific action for WG2 the ad hoc is suggesting.

Relevant resolution:

M59.20 (Lithuanian):

With reference to various documents on Lithuanian, WG2 accepts the recommendation from the Lithuanian ad hoc group in document [N4242](#).

WG2 will *not* take action to encode additional characters as was proposed in [N4191](#). Instead the recommendation is to continue using the defined USI sequences in the standard. WG2 invites national bodies and liaison organizations to alert their software implementers to take special care to properly process the USIs in the standard that are used to represent various characters in languages worldwide, including Lithuanian. WG2 further invites the Lithuanian national body to refer to the ad hoc report in document [N4242](#) for details.

7.1.2 Inputs from Hungary

Input documents:

- [4120](#) Response to the Ad-hoc Report 4110 about the Rovas scripts; Gábor Hosszú (Hungarian National Body); 2011-07-05
- [4144](#) Revised Carpathian Basin Rovas Proposal; Gábor Hosszú; 2011-10-12
- [4145](#) Khazarian Rovas Proposal; Gábor Hosszú; 2011-10-12
- [4183](#) Proposal for encoding the Szekely-Hungarian Rovas, Carpathian Basin Rovas and Khazarian Rovas scripts into the Rovas block in the SMP of the UCS; Gábor Hosszú; 2011-12-15
- [4196](#) Code chart fonts for Old Hungarian; Irish NB; 2012-01-28
- [4197](#) Remarks on Old Hungarian and other scripts with regard to N4183; Andr  Szabolcs Szelp – Everson; 2012-01-30
- [4222](#) Response to the N4197 about the Rovas scripts; Hungarian NB; 2012-02-02
- [4224](#) The contemporary Rovas usage and Rovas user community representation; L szl  S pos (Rovas Foundation); 2012-02-02
- [4224-A](#) Summary
- [4225](#) Proposal for encoding pre-combined and extended Rovas numerals into the Rovas; Tam s Rumi (Rovas Foundation); 2012-02-04
- [4227](#) Code chart font for Rovas block; Hungarian NB G bor Hossz ; 2012-02-06
- [4232](#) Comments on Hungarian Sz kely Script N4183; Andr s R na-Tas; 2012-02-10
- [4237](#) Response to the contribution N4232 about the Rovas scripts; Hungarian NB; 2012-02-12

Mr. Mike Ksar: there is a statement in document N[4237](#) --- "... based on previous ... ", which has some language that seems to be asking WG2 to bind to one person's decision. Unfortunately the document has already been posted. If the national body thinks that they can force WG2's hands we cannot accept it.

Discussion:

- a. Dr. Umamaheswaran: I suggest we can take a resolution that WG2 works on the basis of consensus and not by demands.
- b. Mr. Algidas Krupovnickas: The language of the text could be due to inability to express properly their disagreement.
- c. Mr. Mike Ksar: I have received similar messages via email and in this contribution. WG2 works on the basis of arriving at a consensus.
- d. Mr. Alain LaBont : The wording should be interpreted as they disagree with us. Perhaps not take it seriously.
- e. Mr. Mike Ksar: We cannot ignore such statements.

(After some further considerations, the convener decided that this need not be a resolution; either he will ignore it or send a note to the national body to clarify the way decisions are made in WG2.)

Dr. Deborah Anderson will chair an ad hoc on Hungarian – on Wednesday 12:00h to 15:00h to consider the different documents.

Adhoc Report (Verbal):

Mr. Peter Constable: There was no consensus to go with the script in Amendment 1. It is clear that there are additional experts starting to provide input, and we encourage their continued input and more interactions among them. Mr. Michael Everson will try to engage with them. The simplest thing would be to take the current repertoire unchanged into Amendment 2, including the block name and character names. We invite the experts to participate and provide further input.

Discussion:

- a. Mr. Michael Everson: I think it would be better to go with a different set of fonts (from revised charts in document N[4196](#)). I will provide it to the editor.
- b. Mr. Peter Constable: What would be the rationale for the font change?
- c. Mr. Michael Everson: It is partly based on the Ireland comments. We have permission from the designer of the fonts. The font is to accommodate one of the comments in N[4183](#).

Disposition:

Move 'Old Hungarian' script from Amendment 1 to Amendment 2 with no name changes, but a revised font.

See *Relevant Resolution M59.01 item b* on page 21.

7.2 Disposition of Comments PDAM 1.2

Input documents:

- [4129](#) Proposal to Change the Names for Some Pau Cin Hau Characters; SEI - Anshuman Pandey; 2011-07-25
- [4155](#) Proposal to encode an additional sans-serif heavy double quote symbol in the UCS; German NB; 2011-10-17
- [4161](#) Draft Disposition of comments PDAM 1.2; Michel Suignard; 2011-11-09

Mr. Michel Suignard: Because of the JTC1 rules we can go ahead with a CD level draft or a JTC1 level (DAM) to progress the document. If we go for a DAM, the number of countries could be much wider. Many countries are not used to commenting on the technical content. I prefer to put only non-controversial topics in the DAM. For example, Old Hungarian, should not be included in the DAM1. All the controversial items should be moved to a new PDAM 2 or removed altogether. It is likely we may initiate a PDAM2 at this meeting. A large subset of PDAM1.2 can be progressed as DAM. We also have to think about what we need to do between the meetings. Document [N4161](#) has my proposed dispositions to the various ballot comments. There is also a chart in the document that would reflect the results if all the proposed dispositions are all accepted.

Canada – Acceptance with comment

Canadian comment is towards arriving at a consensus on the Name for Old Hungarian. See *disposition of comments T1 and T2 from Hungary*.

China – Acceptance with comment

Chinese comment is also towards arriving at a consensus on the Name for Old Hungarian. See *disposition of comments T1 and T2 from Hungary*.

France - Acceptance with comment

The French comment is also towards arriving at a consensus on the Name for Old Hungarian. See *disposition of comments T1 and T2 from Hungary*.

Mr. Mike Ksar: I have received lots of contributions from various experts from Hungary. The experts from Hungary will not be attending due to a conflicting meeting. The request from Hungary is to postpone the ad hoc till Thailand. Hungarian experts did not show up in Helsinki. They could not make it to this meeting either. Not sure they will make it to Thailand also. The decision we need to make at this meeting is whether to include or take out the Old Hungarian from PDAM 1.2.

Mr. Peter Constable: It is clear that even within Hungary there does not seem to be consensus. I propose we move it out of any Draft Amendments.

Mr. Michael Everson: The same minority group keeps coming back with comments. I am opposed to taking the current Old Hungarian content out of the ballot.

Germany - Disapproval

T.1 – requests name change for 6 characters - Intonation Marks for Lithuanian dialectology - 2B4E, 2B4F, 2B5A, 2B5C and 2B5D; insert 'SLANTED' in the names. Alternative terms such as 'North-East, North-North-East ... ' etc. Different positions on the face of a clock are also acceptable.

Mr. Michel Suignard: As an editor I think the original names were fine. If I have to select between Slanted and North East etc., I would like to get an opinion.

Discussion:

- a. Dr. Ken Whistler: The proposal for Slanted would be better than the North East etc. Your disposition of accepting the German proposal as Slanted etc. is fine.
- b. Mr. Peter Constable: Various characters were used in Lithuanian dialectology; these are not for normal use in Lithuanian.

- c. Mr. Mike Ksar: Will you (Lithuanian expert in attendance) or anyone else from Lithuania have any comment on this?
- d. Mr. Algidas Krupovnickas: I understand the rationale behind the request.

Disposition: Accepted inserting 'Slanted' in the names, as proposed by Germany.

T.2 – Requests annotating FE2B similar to FE26.

Mr. Michel Suignard: This comment requesting an annotation should have been marked Editorial.

Disposition: Accepted in principle. Annotation is accommodated differently from what Germany has suggested. It will be consistent with annotations for the spanning combining marks.

T.3 - Proposes to move several Wingding characters that are in actual use into the BMP. Others should be moved to the SMP.

Mr. Michel Suignard: Ireland has similar comments. Some of the suggestions have been accepted. It is not strictly necessary to follow the German proposal.

Disposition: Partially Accepted.

T.4 - Proposes removing the Wingdings that do not comply with the Character/Glyph model.

Mr. Michel Suignard: One of the reasons for the Wingding considerations was to keep the symbols as they were in the collection. I asked one of the co-authors of the proposal also. Small deviations from Full Mapping goal from UCS to Wingdings could be tolerated. Comments from Ireland T1-T10 are also related.

On many characters there is a difference in the weight. If we have to drop some, I will prefer dropping 2-095 and 2-096 and keep 2-093 and 2-094. If we keep all of them, the first one is unified with 203D and others will be new.

Discussion:

- a. Mr. Peter Constable: The existing character is simply named Interrobang. It is not distinguishable.
- b. Mr. Michael Everson: It is a punctuation mark - not an ornament.
- c. Mr. Michel Suignard: It could also be disunified.
- d. Mr. Peter Constable: If a distinction is to be kept we may have to disunify. Your proposed disposition is that people may come back and ask for the dropped ones for compatibility mappings.
- e. Mr. Michael Everson: Putting in just one is not acceptable. I would prefer to include all at this time.
- f. Mr. Peter Constable: The case from Germany is based on the Character Glyph model; but the compatibility mapping requirement overrides it.
- g. Dr. Umamaheswaran: I suggest that we keep all four – based on Compatibility Mapping requirement overriding the Character Glyph Model principle.
- h. Dr. Ken Whistler: When you say all four, you mean only three new characters that are already in the ballot.
- i. Mr. Michel Suignard: Germany has indicated that T.4 is condition for their acceptance. If we can get Germany to revert their ballot on our non-acceptance their ballot can change. Otherwise it will stay negative.

Disposition: Not accepted.

T.5 – proposes adding a new character:

U+1F67x SANS-SERIF LOW HEAVY DOUBLE COMMA QUOTATION MARK ORNAMENT, with the rationale in proposal document [N4155](#).

Discussion:

Dr. Umamaheswaran: There is no example of use of this character in the contribution. I think we are going in the wrong direction with not even a single example.

Mr. Michael Everson: We have done so many other additions like that in Emoji etc.

Dr. Ken Whistler: The US national body has looked at it and we don't have objection to it.

Mr. Peter Constable: The argument for the character is weak. Would this result in a negative from Canada?

Dr. Umamaheswaran: No. I am bringing this up as a WG2 expert that we are accepting things with very weak rationale.

Disposition: Accepted in principle; there is a proposed new name from Ireland.

T.6 – requests the encoding of missing Latin small capital and modifier letters, as requested by SC35 in Helsinki meeting.

Mr. Michel Suignard: Document N4068 is out of scope for the Amendment ballot. (It was discussed later. See discussion under section.9.1 on page 29.)

By email: Germany has accepted the proposed disposition.
German Vote changes to 'Acceptance'.

Hungary - Disapproval

T.1 – Requests change in Block Name

Mr. Michel Suignard: There is controversy on the name of the Block. Hungary is not here. I would like to put it in an amendment only if there is consensus. There is no way to have a successful ad hoc at this meeting. Their request is to pull it out of Amendment 1 or put it into Amendment 2. There is a view that we should keep it as is and put it into Amendment 2. Fonts could be improved – style change is proposed. I had proposed some name changes.

Discussion:

- a. Mr. Michael Everson: I think we should keep the name as is based on some well-researched contributions.
- b. Mr. Peter Constable: It is clear that there are additional experts from Hungary that are taking notice and are contributing. They are also stating that Old Hungarian is not appropriate as a block name - see document [N4232](#). I agree that we should take it out of Amendment 1. An ad hoc could decide as to what we should do – to include it in Amendment 2 or not.

Comments T2—T4

Most of the other comments will be moot if we remove Old Hungarian from Amendment 1.

Ireland - Disapproval

Mr. Michel Suignard: There are several suggestions to move characters around, new names for characters etc. Most of these can be accepted in principle – though not identical to what is proposed. An ad hoc on Webdings can take these comments into account along with comments regarding these symbols from Germany.

T1 a and b - suggest moving characters.

T1 c – asks for 10 new characters.

Dr. Ken Whistler: 2B74 and 2B75 are questionable and do not fall into the same category as others. The other 8 are OK.

Disposition: We will reject 2B74 and 2B75. Accept the other 8.

T.2 - Out of scope for Amendment 1.

T.3 - Noted.

T.4

item a - requests moving of characters

Item b - proposes two new combining marks

Reference N4131R, chart on page (Red 7).

FE2B COMBINING MACRON LEF HALF BELOW

FE2C COMBINING MACRON RIGHT HALF BELOW

(part of Caucasian Albanian Script).

These two characters are related to the other combining half marks in the ballot.

Discussion:

- a. Mr. Michael Everson: There is some research in progress on the Caucasian Albanian script. The combining marks are used in Latin transliterations of these characters.
- b. Dr. Deborah Anderson: The examples in the contribution do not show usage.
- c. Mr. Mike Ksar: What is the urgency?
- d. Mr. Michael Everson: It is a scholarly script; there is no urgency.
- e. Dr. Deborah Anderson: There may be more characters coming. I am personally fine for these characters going to Amendment 2.
- f. Dr. Umamaheswaran: If the evidence of use is forthcoming at this meeting then we can accept these for Amendment 1.

Disposition: Accept only the moving of characters - part a. Evidence of use is in document N4243. The proposed new characters in item b are not accepted at this time.

T.5

Dr. Deborah Anderson: I checked with the author. The request is for adding – 'A' in the names, such as for 11AC0 .. P to PA etc. Check the consolidated charts in N4161R at the back.

Disposition: Accepted in principle.

T.6

Item a - Proposes new characters.

1F395 is part of the Webdings set. Others are new.

Discussion:

Mr. Mike Ksar: Are there any contributions on the new proposed characters?

Mr. Michel Suignard: There will be an overhaul of Wingdings / Webdings. There will be a split of these; the symbols from Wingding would be in the Amendment 1 and the Webdings would be in Amendment 2. Some of the proposed characters in T.6 could be part of Wingdings set and the others would be in the Webdings set. The US proposals would be to split the proposals.

Mr. Peter Constable: The stable part of the repertoire could go into DAM. Others should not go into the DAM. Part of the characters in T.6 should be differentiated from the Webdings / Wingdings discussion.

Mr. Michel Suignard: It is the completion argument again on characters without any supporting proposals.

Mr. Michel Suignard: The SPEAKER symbols would be into Amendment 2. The Musical Note is related to Webdings. In general any additions in Webding character would be for future amendment. Symbols related to Hands could be related to the Webdings page 49; you can see them on page 59.

Mr. Peter Constable: I can see some rationale for Speaker symbols etc. Regarding the Hand Symbols, I think we need a discussion on their merits.

Disposition: For now, none of these characters are accepted. They could go into Amendment 2 based on ad hoc. Ad hoc could recommend some for Amendment 1.

T.6 b – proposes change to name, glyph and position - for 1F581.

Disposition: Accept the change in principle. But move to Amendment 2 as part of Webdings set.

T.6 c – suggests using a different glyph for 1F58A.

Disposition: Accepted.

T.6 d – suggests changing the glyph for 1F5DB based on 1F5DA
Disposition: Accepted. Will go to Amendment 2 as part of the Webdings set.

T.6 e – proposes to reorder everything!!
Disposition: Accepted in principle.

T7

Proposes:

- changing block name for Row 1F65 to Ornamental Dingbats;
- moving of 2BBE and 2BBF into this table;
- adding POINTING in the names of several characters .. 1F650 ... 1F657
- adding POINTING in the name before LEAF for 1F650
- adding ORNAMENTAL in the names of several characters .. 1F670 ... 1F675
- proposes new character 1F678SANS-SERIF HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT; no strong evidence.
- proposes reordering of the resultant table

(some of the above are related to comments from Germany).
Disposition: Accept in principle; some reordering will be done.

T.8

Row 1F68

a. Requests moving characters 2BCB and 1F6E6 into this table.

2BCB (now in 2BF0) is not a traffic symbol. 1F6E6 is moving within the same group.
Disposition: Not accepted.

b. Reorder resulting table.

Disposition: Not accepted. (Following further discussion in the ad hoc, some reshuffling was done).

T.9 Row 1F78

Disposition: Accepted reordering. Noted one error in Irish comment. See page 68 for new order.

T.10 Row 1F80

a. and b. comments

Recommends moving several of the characters from this table to another block, and inserting several others from another block into this block.

Mr. Michel Suignard: Tried to be consistent so that we can easily find the characters. Things were moved between 2B block and 1F8 block.

See T.3 Germany response for rationale.

Disposition: Partial Acceptance.

c. Proposes several new Arrows

Disposition: All 10 characters are accepted in principle; at different locations than proposed. For Amendment 1, completing the set of arrows.

d. Proposes reordering of resulting set in the block

Disposition: Accepted in principle.

E.1 - Accepted.

E.2 - Accepted in principle.

E.3 - Row 230; not accepted.

Mr. Michel Suignard: The User Interface (UI) symbols added were preferred symbols for Reverse, Forward etc. These geometric shapes are for UI. Not other geometric symbols. (ad hoc will discuss this)

E.4 - Accepted.

E.5 - Accepted.

E.6 - Accepted.

There are also a number of corrections in names listed by the editor.

Based on the above dispositions, Ireland changed its ballot to Acceptance.

Romania - Disapproval

T.1 - 'Old Hungarian' name is NOT adequate.

The comment is not really 'actionable'. Old Hungarian will be out of Amendment 1. The comment will be moot for Amendment 1.

UK – Acceptance with comment

T.1 - Comment reaffirming keeping A78F LATIN LETTER MIDDLE DOT in the amendment.

Disposition: Noted.

USA - Disapproval

T.1

Reiterating removal of A78F LATIN LETTER MIDDLE DOT as not needed, with proposed alternative.

Mr. Michel Suignard: UK and Ireland want this to be kept. This is again 'propose to be kept in the Amendment; yet another ballot to go'.

Discussion:

- a. Mr. Michael Everson: The proposed character 02D1 is not appropriate.
 - b. Dr. Deborah Anderson: US still stands firm by our request to remove it from the ballot.
 - c. Dr. Ken Whistler: If removing from Amendment 1 and moving it into the next Amendment 2 will help us to progress the Amendment 1, we can live with it. US will come back with the same position the next time around.
 - d. Mr. Mike Ksar: I would suggest UK, Ireland, Germany and US discuss this once more and come to an agreement to prevent us going round and round on this.
- Disposition: Remove A78F from Amendment 1 and move it to Amendment 2.

T.2: Proposes corrections to names for several Pau Cin Hau characters.

See also Irish comment T.5. (See document [N4129](#) for more details.)

Disposition: Accept in principle. See final names .. ending with –A.

T.3: Requests addition of 1032F - OLD ITALIC LETTER TTE with a reference to document N4046.

Disposition: Not accepted; will need further discussion.

T.4: Proposes correcting the name for 1F545 to SYMBOL FOR MARKS CHAPTER in the nameslist.

Disposition: Accepted

T.5: Proposes correcting the names for FE29 and FE2A by removing 'DOUBLE' in their names.

Disposition: Accepted

T.6: Requests the addition of Webdings characters and modifications to the set of Wingdings characters with a reference to document N4143.

(Ad Hoc group on Webdings and Wingdings recommended proposed disposition, and is incorporated in the final disposition of comments.)

E.1 ... E.8 – all editorial change requests.

Disposition: Accepted.

Based on the above dispositions, the US changed its ballot to Acceptance.

Relevant Resolutions:

M59.01 (Disposition of ballot comments of PDAM 1.2):

WG2 accepts the disposition of PDAM 1.2 ballot comments in document N4239. The following significant changes are noted:

- a. A78F LATIN LETTER MIDDLE DOT is moved out for processing in the next amendment
- b. 109 characters in the OLD HUNGARIAN block 10C80 to 10CFF, with unchanged block name and character names, and a revised font from document N4196, are moved out for processing in the next amendment
- c. 1F37E FORK AND KNIFE WITH BLACK PLATE is moved out for processing in the next amendment
- d. 2BF4 and 10 Arrows in the range 1F880-1F889 are deleted unifying them with other symbols
- e. Two combining characters FE2B COMBINING MACRON LEFT HALF BELOW and FE2C COMBINING MACRON RIGHT HALF BELOW, from document N4131, are added
- f. 1F678 SANS-SERIF HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT is added
- g. 43 Wingdings and other symbols are added
- h. Various symbols were reordered or reassigned code positions
- i. Several of the Arrows were renamed
- j. Glyphs for several encoded Arrows in the Arrows block and in the first column in Miscellaneous Symbols and Arrows block, and some other symbols in different blocks were updated

The final code positions, glyphs and names are in the charts in document N4244.

M59.02 (Progression of Amendment 1):

WG2 instructs its project editor to prepare and to forward the final text of Amendment 1 to the 3rd Edition, which will include the changes arising from resolutions M59.01 above, along with the final disposition of comments, to the SC2 secretariat for a DAM ballot. The (unchanged) target starting dates are - DAM 2012-03 and FDAM 2012-11.

(The net count of characters is 1769 in Amendment 1.)

7.2.1 Enhanced method for progressing PDAMs

Input document:

[4104](#) Meeting 58 Resolutions; WG2; 2011-06-10 (reference: Resolution M58.24)

Mr. Michel Suignard: The trial procedure was helpful in arriving at draft dispositions. I got to a point where the work needed to create PDAM 1.3 was not worth it. We lost some opportunity not to be able to add new scripts and I was not mandated to do that. I decided not to call a telecon as it was not deemed necessary. It helped quite a bit in preparing the draft disposition of comments. It helped us prepare better for this meeting discussion on Amendment 1. For Hungarian we knew where we were going. On Wingdings and Webdings I knew I had to work with Messrs. Michael Everson and Karl Pentzlin. The rest of the repertoire of Amendment 1 was accepted without any controversy. What is missing right now is to have the ability to inject new scripts into the standard. If there is no controversy on scripts why can't we do the injection? We may be able to save a face to face meeting. As to teleconference, I know we can do it. I don't have the time to corral different members from different countries etc. We do have time in between meetings to be able to come up with multiple amendment ballots etc. Most of the scripts are not controversial with experts being very limited.

Discussion:

- a. Mr. Mike Ksar: For including new scripts in the standard we may have to wait for next SC2 meeting.
- b. Mr. Peter Constable: On behalf of Unicode I strongly endorse a new project subdivision; we give the editor the freedom to include new scripts into the scope of new amendments.

- c. Mr. Mike Ksar: We have added scripts to amendments even after the work has started into an amendment.
- d. Dr. Deborah Anderson: Because of the due diligence that is put into the work by the experts working with SEI, I feel strongly that we should be able to include the scripts which we are confident about and are stable and not controversial.
- e. Dr. Umamaheswaran: My suggestion is to include something equivalent of a WG2 resolution taking process – electronic telecon etc.
- f. Dr. Ken Whistler: We should be able to let the project editor make decisions on some of these inclusions.

<< *There was a lot of discussion on what is the best way forward* >>

Disposition: A sentence - "WG2 notes that the subdivision proposal includes provisions for including additional characters or new scripts during the ballot resolution phase towards agile processing of PDAMs and speeding up the work of WG2 between face to face meetings" was inserted in relevant resolution M59.17 on subdivision of project for Amendment 2. Document [N4248](#) contains more information.

7.3 Updated Principles & Procedures

Input document:

[4102](#) Updated Principles & Procedures – Post Helsinki meeting 58; Uma; 2012-01-04

The document was in response to an action item. It has already been distributed in SC2.

7.4 Unicode Technical Standard # 37 – version 3.1

Input document:

[4169](#) Unicode Technical Standard #37 – Version 3.1 -Unicode Ideographic Variation Database; Unicode Consortium – authors: Ken Lunde, Richard Cook, John H. Jenkins; 2011-11-07

Mr. Peter Constable: We provided a copy of the UTS #37 earlier. It is mentioned briefly in the Unicode Liaison report - document [N4238](#). There is a new update. The main difference is to accommodate agencies who want to mutually cooperate with each other. The other difference is improved processing.
Mr. Michel Suignard: The 10646-3rd edition already points to UTS 37 v3.1.

Action Item: National bodies to take note. [SC2 N4208](#) is the document number.

7.5 Roadmap Snapshot

Input document:

[4186](#) Roadmap Snapshot; Uma; 2012-02-15

Dr. Umamaheswaran explained the changes in the roadmap -- BMP and SMP. Content of other planes were unchanged.

Dr. Ken Whistler: I would like to thank Dr. Umamaheswaran for the Yeoman's work on this. Especially the churns we had on the Brahmi script. It is quite an improvement.

Relevant Resolution:

M59.21 (Roadmap snapshot):

WG2 instructs its convener to post the updated snapshot of the roadmaps (in document [N4186](#)) to the WG2 web site and communicate the same to SC2 secretariat.

7.6 Annex I on Ideographic Description Characters

Input documents:

- [4234](#) Proposed Changes to ISO/IEC 10646 Annex I *Ideographic description characters*; The Unicode Consortium and USNB - Eric Muller; 2012-02-09
- [4241](#) Information in support of N4234 (L2/12-087) to demonstrate extensive use of PUA in common IDS data; Ken Lunde; 2012-02-14
- [4249](#) Feedback on IDS; Masahiro Sekiguchi (An expert's individual contribution); 2012-02-17

Dr. Ken Lunde: In Annex I of the standard there is a description of IDS. It describes what can be included, some restrictions and a syntax. The contents can be radicals and ideographs. The restriction is on the length and it differs from practice. The UTC also publishes IDS-s in UTR 45. In IRG, the IDS-s are also used for Private Use code points in its work along with IDS-s. There was one IDS that came along with more than 16 units in the IDS. The proposal is to recognize the practice to allow PUA characters, and to remove the restrictions in the Note. We suggest these changes are good to make.

Discussion:

- a. Mr. Peter Constable: There is text in the Unicode standard similar to the Annex I in ISO/IEC 10646. The UTC has reviewed it and we agree with the proposed rewordings.
- b. Mr. Michael Everson: Why PUA characters?
- c. Dr. Ken Lunde: The committee work uses the PUA for IRG's work in the context of using IDS-s within the IRG work.
- d. Mr. Peter Constable: Use of PUA is for IRG work.
- e. Dr. Ken Lunde: Mr. Andrew West has pointed out that PUA is not permitted in the current IDS definitions.
- f. Mr. Peter Constable: A couple of years ago Mr. Andrew West did want to loosen up the definition for work on Tangut.
- g. Mr. Michael Everson: By making this change do you think that people could work with PUAs and then migrate to regular coding?
- h. Dr. Ken Lunde: No. The PUAs are used purely within the work of IRG to discuss in their unification work. It is totally different form use of PUA for purposes of interchange of data etc. By relaxing the rule, all we do recognize is that the use of IDS-s as used in IRG is within the syntax.
- i. Mr. Mike Ksar: We cannot get the standard to recognize PUA usage. There will be problem.
- j. Dr. Umamaheswaran: The proposal is not towards the general use of PUA outside of the context of IDS-s as exemplified by the internal work of IRG.
- k. Prof. Kyongsok Kim: There was a strange use of IDS-s in the past. My understanding is that use of IDS-s in CJK is very small. If the number of characters using PUA is very small, we can check the whole character, without use of IDS-s. I wonder if the US has information on how many IDS-s have been associated with PUA in IRG. I propose to give some more time for national bodies to review if these sequences are to be used. My understanding is that we don't need to have IDS-s with PUAs.
- l. Dr. Ken Lunde: The standard currently does not allow PUA to be associated with IDS-s.
- m. Prof. Kyongsok Kim: I would like to know where it is used in IRG. It was used in the past, possibly submitted by Japan. My understanding is that it was not endorsed for regular use by IRG.
- n. Dr. Ken Lunde: There is some confusion. All we are changing the syntax of IDS description in the standard to recognize that IDS can be applied to a PUA or not. It is not expanding the scope of what can be in the IDS-s.
- o. Mr. Mike Ksar: We are not supposed to use PUA in the standard.
- p. Mr. Peter Constable: All we are doing is to permit users of the standard to be able to associate an IDS with a PUA using a standard-conformant IDS syntax.
- q. Mr. Mike Ksar: I want to talk to Dr. Lu Qin about this. You are opening up the standard for misuse.
- r. Dr. Umamaheswaran: If I have a PUA character and I want to use the IDS as is in the current syntax of the standard, I am not able to use the IDS as it is defined in a conformant way.
- s. Mr. Peter Constable: Someone can challenge the way the IDS-s are being used currently, especially pointing to Private Characters.
- t. Prof. Kyongsok Kim: I have seen some strange characters in the IDS-s; and since they were PUAs I could not use them in my experience.
- u. Mr. Peter Constable: As a liaison from Unicode, as part of UTR 45, based on feedback we have received from users of UTR 45, we will be proceeding with the changes similar to the proposed text. For users of Unicode we have to permit the change.
- v. Mr. Mike Ksar: I am not against increasing the limits on the number of characters. My concern was on PUA being used for components etc.

- w. Mr. Peter Constable: The intent is not to assign code positions to anything. The issue is what can be called an IDS. The standard allows for any sequence of characters as a USI if you will. If one looks at the data IRG has, there is data called IDS. According to current definition in the standard they cannot call it an IDS. At best it is a sequence containing some Ideographic characters. There is no issue to any existing implementation. There is no risk to data interchange. PUA has to be dealt with private agreements.
- x. Mr. Mike Ksar: Why can't IRG continue to do what they are continuing to do all along?
- y. Mr. Peter Constable: One could. But, if someone comes to UTC or WG2 to use IDS-s to represent PUA the standard does not allow it now.
- z. Dr. Ken Lunde: Document [N4241](#) contains examples of IDS-s from IRG. Data. 32 of these use private use characters. They are referring to them as IDS-s. Referring to them that way is not conformant to the standard.
- aa. Dr. Lu Qin: IRG does not have a position. We are using the sequences described here for checking purposes. This is the first time we are seeing the issue presented to us. It is a fact that we are using them. On the length part we do have a potential problem. There is no position from IRG. We are using these. The private components are still private. Having a sequence embedded in a document, does not make the PUA character Public. When the data is sent to some one it is up to the recipient to interpret it. The PUA character is not public. As to calling it as IDS or not, we are using it in IRG now. It is internal to IRG work now. It is purely a WG2 issue and not an IRG issue. From the Unicode point of view, what is the issue for IDS?
- bb. Mr. Peter Constable: We had feedback on UTR 45 from Mr. Andrew West that your data is not conformant to the standard, since the IDS data is not according to the standard. For us it was a length issue. IRG also has data but includes PUA. Someone can certainly come to IRG saying that you have something called IDS but they are NOT IDS as per the standard.
- cc. Mr. Michel Suignard: We have in Annex S, the foundation of unification rules. We are using pictographs etc. which are NOT encoded. They are private components that will need to be communicated somehow. In case of IRG it is a very useful tool to use PUA characters as components of the IDS-s. I am totally in favour of the proposed changed wordings. We have to allow IDS-s to be expressed with PUA components in the context of IRG work.
- dd. Mr. Mike Ksar: Will the PUA components go away once the ideograph gets encoded?
- ee. Mr. Peter Constable: The IRG data has IDS-s with PUA components for already encoded data in URO.
- ff. Dr. Lu Qin: China had proposed with about 500 components. We could use these in IDS-s with encoded characters. To me it was a good idea; but never resurrected itself. We are still maintaining these in IRG.
- gg. Mr. Mike Ksar: Is WG2 going to be involved in managing the data using these PUA components?
- hh. Mr. Peter Constable: No. I understand your concern.
- ii. Dr. Umamaheswaran: The proposal is clarifying that components of the IDS can be PUA characters, which is currently prohibited by the current definition in Annex S. It can be associated with a PUA character or any encoded character. No one was suggesting that WG2 was going to be managing any of these nor any one would be coming to WG2 asking for such.
- jj. Mr. Satoshi Yamamoto: Document [N4249](#) contains the feedback received from Mr. Masahiro Sekiguchi from Japan. It is an individual expert contribution. The summary of his feedback is that there should be some limit such as 64 characters in the length of the IDS-s, due to security considerations.
- kk. Dr. Ken Lunde: If a program tries to validate something, the program has to set a limit. It is similar to the combining sequences being validated, which can be arbitrarily large. We don't put any limit on the combining sequences. Today the note in the standard is informative any way.
- ll. Mr. Michel Suignard: We can still put the informative note back in, with limit extended to 64 from 16. It is editorial. The initial concern expressed by Mr. Andrew West would be accommodated by 64.
- mm. Dr. Ken Lunde: I want the Note 2 out of the standard.

nn. Prof. Kyongsok Kim: It would be valuable to have some limit on the length.

oo. Mr. Mike Ksar: Japan can provide this as a ballot comment.

Disposition: Accept the proposed wording in principle from document N[4234](#).

Relevant Resolution:

M59.03 (IDS Syntax in Annex I):

WG2 accepts the proposal from the US national body in document N[4234](#) to remove the deficiency and align the definition of IDS with the current practice, and instructs its project editor to modify the text in Annex I accordingly.

8 IRG status and reports

Input documents:

[4170](#) IRG Meeting No. 37 Resolutions (IRGN1810); IRG – Qin Lu; 2011-11-11

[4172](#) IRG Updated Principles and Procedures (IRG N1823); IRG – Qin Lu; 2011-11-08

(The above documents are for national body information and feedback. They were not discussed at the meeting.)

8.1 IRG 37 Summary Report

Input document:

[4171](#) IRG Meeting 37 Summary Report; IRG – Qin Lu; 2011-11-16

Dr. Lu Qin went through the different items in the IRG meeting summary report.

Item 1 - IRG meetings

IRG meeting 38 was already approved.

IRG meeting 39 was approved for Hong Kong; location changed to Hanoi, Vietnam. 2012-11-12

(See *relevant resolution M59.22* on page 47.)

Item 2 - Font submission guidelines

It is for IRG member bodies to use unique names for each font updates – it is a versioning issue. The project editor is to give us some guidelines that we need to follow.

Mr. Michel Suignard: You can take the Korean submissions as an example.

Item 3 - Schedule for CJK Extension E

We are planning to submit Extension E to WG2 meeting 60, which will be after IRG meeting 38.

Item 4 - Extension B charts

At its meeting 37, IRG revised the CJK Extension B charts, and they were sent to the editor for the FDIS 3rd edition. – See WG2 document N[4173](#) for the IRG report on this topic.

Item 5 - IRG Internal document WDS update. It will be finalized in IRG meeting 38.

Item 6 - Use of IVD

IRG encourages the members to use the IVD to register IVS-s for their submissions. IRG will not be the registrar for IVD-s.

Item 7 - Old Hanzi

An ad hoc will be held in Tokyo 2012-02-20/23. The results will be reported to IRG meeting 38.

Item 8 - Old Hanzi Principles and Reference

This document will be revised and submitted for consideration at IRG meeting 38.

Item 9 - Old Hanzi Coding Framework

Old Hanzi Expert Group will review inputs from Japan on coding framework and from TCA on fonts. The results will be reported to IRG meeting 38.

Item 10 - IRG P&P Update

WG2 document N[4172](#) includes horizontal extension and some editorial changes for WG2 feedback. I have taken a note of the WG2 document on Urgently Needed Characters.

Item 11 - new kIRG_JSource; IRG members are to review ADOBE as a source.

Item 12 – CJK Extension F

Preliminary requirement or proposals are sought from IRG members. This is for planning for Extension F after Extension E is completed. The editorial work is likely to start in IRG meeting 39 timeframe.

Item 13 - Stroke related information

Some IRG members needed some more time to consider the WG2 request for stroke count. We are already providing information for ideographs. The stroke counts for each radical itself differs among the various IRG member bodies.

Discussion:

- a. Mr. Peter Constable: Under item 3 – WG2 meeting number is 50; it is a typo - it should be 60.
- b. Mr. Michel Suignard: It is a question of scheduling. WG2 meeting in Thailand is end of October 2012. We will have Amendment 2 in some form. If Extension E is ready by then we may be able to include in the DAM. We may have to go for a separate amendment or 4th edition for Extension E.
- c. Dr. Lu Qin: The fonts are available though they have not been sent to the project editor. If we feel comfortable after the review IRG 38 then we can send it to you. However, it would probably go through another round of review.
- d. Mr. Chen Zhuang: There are about 6000 characters in Extension E.
- e. Dr. Lu Qin: If you give us some sort of instructions we can let the IRG members know to format it in a manner suitable to you. IRG meeting 38 is in June 2012 in Korea. We are currently using the formats for internal IRG work. We will have time between June IRG meeting and October WG2 meeting to prepare the fonts that you can work with.
- f. Mr. Mike Ksar: The 3rd edition has gone out for ballot; the ballot closes in April. I would like to commend you and your team in preparation of the Extension B multiple column charts. You have done excellent work in helping the editor to prepare the 3rd edition FDIS.
- g. Mr. Michel Suignard: In Extension E most of the characters are Single Source. Very few are multiple sources.
- h. Dr. Umamaheswaran: The Urgently Needed Characters (UNC) process related proposal may influence the work of IRG on Extension F.
- i. Dr. Lu Qin: We dealt with UNC-s only once. We have a brief description of UNC-s in the IRG P&P. Right now we do not have any UNC-s from members. We can take Dr. Ken Lunde's document as input to IRG.

8.2 IRG Errata Report

Input document:

[4173](#) IRG Errata Report (IRG N1838); IRG – Qin Lu; 2011-11-10

Dr. Lu Qin: During the Horizontal extension work on Extension B several errors were found. Some of these are serious and should be made known to UCS users. These are mostly unification errors. The glyphs cannot be changed due to their identity.

Discussion:

- a. Dr. Umamaheswaran: I suggest that we include this in the next Amendment to alert all national bodies. It could possibly be kept as an Annex in the standard.
- b. Mr. Michel Suignard: We can process it as part of the Amendment. When we consolidate the Amendment in the 4th edition we need to insert these in line with the text. When were these errors discovered?
- c. Dr. Lu Qin: These were discovered during meetings IRG 36 and IRG 37.
- d. Mr. Peter Constable: As an implementer of UCS which shape should be used. The UCS-2003 glyph should be used. Is there never a case where one needs to worry about the other glyphs?
- e. Mr. Michel Suignard: In non-Taiwanese context use the UCS-2003. In the Taiwanese context the Taiwan font will be used.
- f. Dr. Lu Qin: These are unification errors, and we cannot change it. We are just letting users know that there are errors.

- g. Mr. Michel Suignard: I think all the skeletons of past errors are coming out. If someone comes in the future with the mis-unified character there will be potentially another mapping issue.
- h. Dr. Lu Qin: TCA had already brought up similar character mapping issues earlier. TCA had reviewed the fonts and they had to change the mappings.
- i. Mr. Michel Suignard: If the character that is currently mis-unified and if TCA comes up with a request then the source mappings will change. I prefer to fix these errors earlier than leaving the mistakes in the standard. If the unifications are wrong we should fix these at the earliest opportunity.
- j. Mr. Peter Constable: In fonts the vendors ship out, some users may be expecting one glyph versus another glyph. Even a variation selection solution could help. In the single column for Extension B the problem was hidden.
- k. Dr. Lu Qin: If a member body has changed a glyph within the national body all we can do is to inform UCS users. For a long time, Taiwan did not come up with the problem.
- l. Mr. Mike Ksar: What Mr. Michel Suignard is suggesting is that we should add the wrongly unified characters to the standard now.
- m. Mr. Michel Suignard: The situation is similar to what we did for some characters that were reported by Mr. Andrew West. The error does not have to be reported from Taiwan. IRG will be part of the solution.
- n. Dr. Lu Qin: We have identified the change of mapping, but the member body has to agree to any mapping changes. In this case, if TCA is not changing the mapping then we will not have a new source.
- o. Mr. Michel Suignard: I will do the analysis and propose solution. We may need to get new sources and request TCA to change their mappings. We have requested TCA to change their mapping for several characters in the past with Extension B. There are about 25 now.

Action Item: Mr. Michel Suignard is to check for possible Source-Mapping changes that we can request IRG to review and put a solution in place.

8.3 Oracle Bone font

Input document:

- [4095](#) Comments on Oracle Bone font 4048; Japan NB - Suzuki Toshiya; 2011-06-03
- [4229](#) Reply to document N4095 - Comments on Oracle Bone font N4048; TCA; 2012-02-08
- [4236](#) Comments on the work of the Old Hanzi Group towards an encoding of OBI script; SEI Liaison contribution – Adam Smith; 2012-02-10
- [4240](#) Japanese feedback to TCA document WG2 N4229; Japan NB; 2012-02-14

Ms. Lin-Mei Wei: Oracle Bone work has been too slow. The experts do not attend the IRG meetings all the time. When they do attend they repeat the discussion. So Japan had provided their opinion that Old Hanzi work should be probably outside the IRG. TCA also have found the current lack of progress and waste of time in the IRG. TCA supports the Japan suggestion to separate the work of Old Hanzi from IRG. Discussion:

- a. Dr. Lu Qin: There are problems in Old Hanzi. The ordering has already been fixed and I don't know why that issue keeps coming up. The IRG has not formed an opinion on this suggestion. My personal opinion is that the collection on Old Hanzi is nearing completion. There are problems of communication among the experts. It was under their request that we have separated to have an ad hoc meeting of their experts. I don't know where the request to separate the work from IRG, and the suggestion to bring the coding issue directly to WG2 came from. There is some merit to the suggestion. The collection of characters is being worked on. Japan is suggesting that they should have a separate encoding group and the members are uncomfortable with it.
- b. Ms. Lin-Mei Wei: Mr. Suzuki Toshiya keeps reminding us to collect the characters for Old Hanzi. We are almost finished, and Japan wants to change the order again. We had discussed this about 5 years ago and had settled on the current script. Currently the checking is done on hand-written material. If we have to submit to WG2 we need to submit the Truetype font. The font has to be checked also.
- c. Mr. Mike Ksar: Bringing the material for encoding to WG2 for encoding is not an issue.

- d. Ms. Lin-Mei Wei: The suggestion is to split the Old Hanzi experts group from IRG because the expertise is different.
- e. Mr. Michael Everson: The Old Hanzi is pre-CJK. It is ancient script. Questions like whether it is similar to Egyptian, what order to use, what catalog number etc. can be commented on only when we see the collection. I think IRG should continue to do the CJK related work. The Oracle Bone work can be in a separate group. We treat that group as another expert group.
- f. Mr. Chen Zhuang: We want to separate the work of Old Hanzi from IRG work because the expertise needed is different.
- g. Ms. Lin-Mei Wei: Some want to have IDS-s for Old Hanzi.
- h. Mr. Richard Cook: I will try to clarify somewhat if I can. There seems to be a number of different issues. My perspective is that the IRG has its work cut out --working with modern characters. One issue is IRG is distracted with Old Hanzi work. Prolonged discussion of Old Hanzi within IRG can be separated out, for example, by having a separate day of discussion on Old Hanzi work. Jumping into work on Oracle Bone without having an encoding model can also give problems. Oracle Bone spans several periods in time. The interrelationships of the characters over different periods can be there. Egyptian is different; it had a well defined catalog. It has different periods. What has come into the standard is really a small subset that has been of use for Egyptologists etc. In Oracle Bones there is very little standardization across the various periods. There is still a lot of work to be done on Old Hanzi. If they can coordinate the work of the experts without interfering with the main focus of IRG it will be better. I would suggest TCA and Dr. Lu Qin work with how to frame the work on Old Hanzi within IRG.
- i. Dr. Lu Qin: Comment to Mr. Richard Cook on his last statement - China and TCA should know that no matter where the work of Old Hanzi is done current interested experts will be involved. IRG has never delayed any items of their main work due to Old Hanzi distraction. All we do is to oversee their schedule etc. On separating the work of Old Hanzi from IRG, IRG has no opinion. If they can manage their work we should not have any problem. The problems encountered within the Old Hanzi working group is their own group problem. It has nothing to do with being associated with IRG. They always have their own ad hoc meetings along with IRG meetings.
- j. Ms. Lin-Mei Wei: One of the experts (Suzuki-san) was expressing IDS attribute etc. They are not modern CJK characters.
- k. Dr. Deborah Anderson: I am a little bit aware of the contributions and discussions etc. One can open up the discussions to other scholars from various parts of the world. (See for example document [N4236](#).)
- l. Prof. Kyongsok Kim: Old Hanzi group meets more frequently than the IRG meetings. They meet sometimes separately from IRG. How the problems are created by the current structure under IRG and how it will be solved outside IRG etc. is not clearly brought out.
- m. Mr. Richard Cook: When I said Old Hanzi interferes with main IRG work some experts from TCA has to attend both meetings etc.
- n. Dr. Lu Qin: There is no distraction within IRG due to Old Hanzi.
- o. Mr. Mike Ksar: Am I hearing that there is no consensus to move the Old Hanzi group from IRG?
- p. Mr. Michael Everson: No. What we are hearing is that it should be treated as a separate Script Group much like Egyptian etc. They can come and present their input to WG2.
- q. Dr. Lu Qin: IRG supervises the schedules etc. Once they have a complete set IRG can equally bring it forward to WG2.
- r. Ms. Lin-Mei Wei: The members in the group bring up all kinds of rules; they want IDS-s etc.
- s. Dr. Lu Qin: IRG has never placed any rules on Old Hanzi group; there was no requirement for IDS-s etc. from IRG.
- t. Prof. Kyongsok Kim: I understand China and TCA want to separate work of Old Hanzi from IRG work. I don't understand what the problem is.
- u. Dr. Ken Lunde: In answer to Prof. Kyongsok Kim – the problem is that this committee is looking at this problem. It is a subgroup that IRG monitors and coordinates. WG2 did not have to monitor argue about schedules etc. for other groups such as Cuneiforms, Hieroglyphs etc.
- v. Mr. Chen Zhuang: Instead of working as a group, the experts can submit their contributions directly to WG2 instead of working in a group under IRG.
- w. Mr. Mike Ksar: Would IRG have an issue if WG2 instructs the IRG to take Old Hanzi out of the work under IRG?

- x. Dr. Lu Qin: IRG members have to provide their input in IRG.
- y. Mr. Satoshi Yamamoto: Japan in its feedback on the TCA in document N4240 agrees with TCA's proposal to separate group outside IRG. We have articulated two concerns that have not been addressed in TCA's contribution.
- z. Mr. Richard Cook: WG2 assigned the work on Old Hanzi to IRG. Now you are considering moving the work out of the IRG scope – is that correct?
 - aa. Mr. Mike Ksar: That is what China proposing.
 - bb. Mr. Chen Zhuang: I want the experts to participate directly, by taking it out of IRG scope.
 - cc. Dr. Umamaheswaran: My suggestion is that IRG members can have a discussion at the June meeting and we can make a decision at the next meeting.
 - dd. Mr. Richard Cook: Experts are already sending in contributions to the IRG on the Old Hanzi. So make it effective after the next IRG meeting 38, 2012-06-18/22
 - ee. Ms. Lin-Mei Wei: I do not think we need to wait till the next meeting.
 - ff. Dr. Umamaheswaran: What would happen to all the documents etc. that are in current collection of IRG?
 - gg. Dr. Ken Lunde: The experts can decide whatever they want to do with them. What exists within the IRG will stay there.

Disposition/Resolution:

Remove Old Hanzi from the scope of IRG. effective after the next IRG meeting.

Relevant Resolution:

M59.19 (Old Hanzi and IRG)

WG2 accepts the proposals from China, TCA and Japan, and instructs the IRG, to remove Old Hanzi related tasks from the scope of work items of the IRG, effective after IRG meeting 38, 2012-06-18/22. Mature Old Hanzi proposals, when available, can be submitted directly to WG2.

8.4 CJK Unified Ideographs “Urgently Needed Characters” process

Input document:

[4230](#) Proposal to establish a CJK Unified Ideographs “Urgently Needed Characters” process; Unicode Consortium and USNB - Ken Lunde & John Jenkins; 2012-02-10

Dr. Ken Lunde: This document is from myself and Mr. John Jenkins. It is a proposal to establish a pipeline for urgently needed characters. The background is that the current CJK Extension E has been in the works for the past 5 years. The sheer number of characters takes a long time to review etc. In the UNC the smaller number of characters allows a speedier processing. The current IRG P&P has some information on UNC-s. But it does not have any procedures, timelines etc. Our proposal is that we establish a process.

Discussion:

- a. Dr. Lu Qin: Extension E work took about 5 years because our attention was diverted with Extension B work. I agree with Dr. Ken Lunde. It is just that the members have to make a case for UNC-s. The proposal from Dr. Ken Lunde has some more items for dealing with UNC-s. I suggest that we IRG take this document into consideration.
- b. Dr. Ken Lunde: There is a proposed concrete limit, time limit etc.
- c. Dr. Lu Qin: Macao is developing an electronic standard. In their collection there may be some UNC-s. Most of them would be unifiable.
- d. Mr. Mike Ksar: There are no urgently needed characters at present.

Action Item: IRG is to consider document N[4230](#) as feedback on the IRG P&P document, Annex on UNC-s.

9 Script contributions related to ballots:

9.1 Latin small capital and modifier letters from SC35

Input documents:

[4068](#) Proposal to encode missing Latin small capital and modifier letters; ISO/IEC JTC1/SC35; Authors: ISO/IEC JTC1/SC35/WG1; 2011-03-12

[4149](#) Request to add the characters proposed in WG2 4068 to PDAM 1.3; German NB; 2011-10-18

Mr. Peter Constable: Document N4068 is coming from SC35 from their keyboard layout work. Several modifier letters have been proposed. This was discussed in the UTC. We have a number of concerns on this proposal. There is no attested usage of these characters provided in the document. There is no clear evidence for using in plain text. They are just inventions for plain text. There is assumption that there is a need to fill up presentation forms in A to Z. If we are going to fill up all the gaps, we can have every letter in multiple forms for Latin and we need not limit to just Latin and so on. There is no particular reason for adding these.

Discussion:

- a. Mr. Mike Ksar: The request is for 19 characters.
- b. Mr. Michael Everson: I don't think that English alphabet has anything to do with it. I think the argument given from keyboard standards need these is not particularly compelling. Mr. Andrew West made a list of all the clones that are used somewhere or the other. We keep on engaging in ones and twos as they come along. I think we should simply complete the holes in these sets. There are these 19 little gaps in the standard. It is not that unusual that people have been using these contrastingly using these. I would favour adding these and we can be done with that.
- c. Mr. Peter Constable: There is a pretty arbitrary reason that these may be used sometime or the other. There are several modifier letters that have not been encoded; for example, vowel symbols from IPA that can be used as modifier letters. We have chosen not to use these because we have a particular rationale for those. For this proposal there is no particular rationale provided other than just completing the sets.
- d. Mr. Michael Everson: I will try to find the input from Mr. Andrew West. I find that these keep coming back to us.
- e. Ken Whistler: Regarding the claim that it will not open up a floodgate ... we have several on the agenda items for various things like superscripted Greek, subscript solidus etc. All these are based on the argument that we have other similar characters in the standard and for completion etc. For Math it is constrained to Latin and Greek for historic reasons; Math usage was the rationale for that set. It includes the Greek alphabet also. The claim that limitation is only for A to Z is not valid any more. The applicability for A to Z for style variations for math is NOT applicable for completion of general superscript characters, since the math is based on specific styles. Right next to the characters that are being proposed for competing the super / sub sets, there will be accented forms of these etc. and will come back to us to fill out sets of more that just a to z.
- f. Mr. Mike Ksar: When I reviewed the document there is no examples of use of these characters anywhere. If there is evidence we can entertain these.
- g. Mr. Alain LaBonté: What is the evidence for the other characters that are in the set?
- h. Mr. Peter Constable: Besides the Math set, we had individual attestations of use in plain text. SC35 is putting characters on keycaps by inventing these.
- i. Dr. Umamaheswaran: In all other cases where we have added the characters there have been some evidences of use brought forward.
- j. Mr. Michael Everson: there are 37 different runs of the letters A to Z. There can be an argument for completion of the set.
- k. Mr. Alain LaBonté: It is a question of consistency of the script of characters within the keyboard set of characters.

Action Item: Liaison representative to SC35 should communicate the discussion. Evidence of use of these in plain text is not presented.

9.2 Proposed additions for meeting 59

Input document:

- [4181](#) Proposed Additions to ISO/IEC 10646; USNB – Debbie Anderson; 2011-11-04
[4235](#) More Proposed Additions to ISO/IEC 10646 for WG2 Meeting #59; USNB; 2012-02-10

The meeting has covered all the proposed additions in the above documents under various agenda items or under disposition of ballot comments.

9.3 Requests regarding the Wingdings/Webdings characters in ISO/IEC 10646 PDAM 1.2

Input document:

[4223](#) Requests regarding the Wingdings/Webdings characters in ISO/IEC 10646 PDAM 1.2; German NB; 2012-12-27

Mr. Michel Suignard: the ad hoc on symbols have discussed the various ballot comments and contributions including consideration to document [N4223](#). These will be reflected in the disposition of comments and in the Amendment text charts.

10 Script contributions not related to ballots

10.1 New Scripts or Blocks

10.1.1 Mende script

Input documents:

[4167](#) Revised proposal for encoding the Mende script in the SMP of the UCS; UC Berkeley SEI - Michael Everson and Konrad Tuchscherer; 2012-01-24

Mr. Michael Everson: The Mende syllabary has been presented before. Document [N4167](#) replaces several previous versions. I worked with Dr. Konrad Tuchscherer who wrote a PhD thesis on this. There are several glyph variations possible. We went through the set and arrived at proper shapes for the character. There is some disagreement as to how the numbers should be encoded. The document discusses three different ways in section 8.1, 8.2 and 8.3. The option in section 8.2 was not tempting for anyone in the discussion at the UTC.

Discussion:

- a. Dr. Ken Whistler: The proposal was discussed at the UTC. There is a disagreement over which model to use for Mende numbers. Mr. Michael Everson et al prefer the atomic encoding. The UTC was favouring Ligature encoding. There is no disagreement with the syllabary itself.
- b. Mr. Michael Everson: The script itself is not currently in widespread use. It may get wider usage after it gets encoded. The atomic number encoding is similar to others like Cuneiform numbers. From a certain point of view decomposition of these glyphs could make sense. The rest of the characters are Atomic and they don't combine etc. The syllabary is large, and one should have a relatively complicated keyboarding method. The numbers are also Right to Left like the rest of the syllabary. The numbers do have constituent parts; but they never occur by themselves. In any environment where the ligation is not implemented correctly the result would be pulling the numbers apart. There is no shortage of encoding space. My preference is for atomic encoding from the usability aspects for the community.
- c. Mr. Mike Ksar: How many characters are being proposed?
- d. Mr. Michael Everson: 276.
- e. Dr. Ken Whistler: The 79 numbers could go into the table. There is a reasonable risk that we can get controversy on the ballot. Another possible way is to go for 17 numbers, with the ligature model. This also can invite controversy. The third option is to wait on the numbers awaiting further discussion to arrive at consensus. We have done this for example with Ancient Sinhala numbers. The syllabary is acceptable and we can continue to work on the numbers.
- f. Mr. Michael Everson: We can close off the Mende block if we do not agree on the numbers.
- g. Dr. Deborah Anderson: On behalf of SEI I feel confident that the syllabary of 197 characters should be acceptable and we would like to go forward with them.
- h. Dr. Ken Whistler: there are 5 columns designated for numbers in the roadmap now. We can adjust the range later.
- i. Mr. Peter Constable: While the Amendment is still in progress we can adjust the block range.
- j. Mr. Mike Ksar: I like the third option. We can progress the syllabary without the numbers. The block will reserve space for number addition.

Disposition: Accept for Amendment 2. Do not adjust the roadmap designation till later.

Relevant resolution:

M59.11 (Mende script):

WG2 accepts to create a new block named Mende in the range 1E800 to 1E8CF, and populate it with **197** characters in code positions 1E800 to 1E8C4, with their glyphs and character names as shown on pages 7 to 11 in document N4167. Mende is a right-to-left script.

10.1.2 Pahawh Hmong script

Input document:

[4175](#) Final proposal to encode the Pahawh Hmong script; UC Berkeley SEI – Michael Everson; 2012-01-20

Mr. Michael Everson: Pahawh Hmong is a messianic script from 1959. The script is easy to encode. There is a base and combining mark. There are two orthographies, used in slightly different ways. Document N4175 describes these differences. Non alphabetic characters of different kinds are detailed in the proposal. They have digits and numbers also. The two different orthographies use different glyphs for zero and the number 10. The proposal includes both glyph forms. At the UTC meeting last week it was felt that it is best to use only one shape, and use the font to select the other. The shape that is preferred is the one by larger user group. They have a number of logographs for clan names. The user community has requested they be encoded. UTC has requested actual usage case in text for these. The proposal was we might let the characters go on ballot, and if there is no corresponding corroboration, a ballot response can request to remove it. We had some feedback from one of the experts who has an English phrase book with Pahawh Hmong transliteration. He has a number of punctuation marks also. I will be checking if there are any further additions needed. The proposal had input from the user community. The proposal uses the old European long form for Billions etc. It was decided to change these to the short form for Billions etc. 16B60 16B61 in the proposal will have corresponding name changes. The editor has the final chart.

Discussion:

- a. Dr. Deborah Anderson: The proposal was to have the zero looking glyph for zero and jettison the one shaped 10.
- b. Mr. Michael Everson: The user group would not have accepted that.
- c. Dr. Deborah Anderson: With the SEI hat, that a face to face meeting was the only way to resolve all the issues. This proposal is a result of meeting the two major user communities. Now they have come together and worked in reviewing the proposal.
- d. Mr. Michael Everson: One group was going for second stage typography and the other one for third stage typography. I am really glad with the experience with them. They have number of keyboard standards, 8-bit coded fonts etc.

Disposition: Accept for Amendment 2.

Relevant resolution:

M59.15 (Pahawh Hmong script):

WG2 accepts to create a new block named Pahawh Hmong in the range 16B00 to 16B8F, and populate with **126** characters in code positions 16B00 to 16B45, 16B50 to 16B59, 16B5B to 16B61, 16B63 to 16B77, and 16B7E to 16B8F, with their names and glyphs as shown in document N4245.

10.1.3 Psalter Pahlavi script

Input document:

[4040](#) Proposal for encoding the Psalter Pahlavi script; SEI - Michael Everson & Roozbeh Pournader; 2011-05-06

Mr. Michael Everson: Psalter Pahlavi is a transitional script, found on monuments. Also on three dimensional artifacts. Letters have joining behaviour. Numbers ALSO have joining behaviour. The properties have been worked with Mr. Roozbeh Pournader. The UTC has reviewed this proposal. It is similar tot Syriac script with lots of dots for punctuation. Psalter Pahlavi is a little less standardized in terms of minor punctuation. These seven punctuation characters are for further study. 4 major punctuations, 7 numbers and 18 letters are recommended for encoding.

Discussion:

- a. Dr. Ken Whistler: 29 total characters. The proposal summary form is out of date. 10B92—10B98 are to be left out from chart on page 6 in N4040.

Disposition: Accept for Amendment 2

Relevant resolution:

M59.07 (Psalter Pahlavi script):

WG2 accepts to create a new block named Psalter Pahlavi in the range 10B80 to 10BAF, and populate it with **29** characters in code positions 10B80 to 10B91, 10B99 to 10B9C, and 10BA9 to 10BAF, with their glyphs and character names as shown on page 6 in document [N4040](#). The script is a right-to-left script.

10.1.4 Modi script

Input document:

[4034](#) Proposal to Encode the Modi Script; Anshuman Pandey; 2011-10-21

Dr. Deborah Anderson: This is a Brahmi-based script for writing Marathi. It was in use till 1950, when Devanagari was promoted as the script to use. This script is being revived and permits cataloguing huge number of documents in that script. It has been reviewed by the US national body. The proposal has 79 characters. Some are combining characters.

Discussion:

- b. Mr. Mike Ksar: Reviewed before as document N3780? Yes.
- c. Mr. Peter Constable: This is an Indic script and has some complex behaviour. The UTC has reviewed this and agree to encode the script.
- d. Mr. Mike Ksar: Why the holes?
- e. Dr. Ken Whistler: The holes are for potential other characters. The last column has the digits 0-9. They are not aligned with other Indic blocks.

Disposition: Accepted for Amendment 2.

Relevant resolution:

M59.10 (Modi script):

WG2 accepts to create a new block named Modi in the range 11600 to 1165F, and populate it with **79** characters in code positions 11600 to 11644, and 11650 to 11659, with their glyphs and character names as shown on pages 20 and 21 in document [N4034](#). Some of these characters are combining marks.

10.1.5 Mahajani script

Input document:

[4126](#) Proposal to Encode the Mahajani Script in ISO/IEC 10646; Script Encoding Initiative (SEI) -Anshuman Pandey; 2011-07-12

Dr. Deborah Anderson: Used in India till mid 20th century. It is not in common use today. It was a business related script that was taught in different schools in various northern states in India. Mostly used for financial and accounting books.

Discussion:

- a. Mr. Mike Ksar: Is it historic?
- b. Dr. Ken Whistler: It is late historic; used into mid 20th century.
- c. Mr. Mike Ksar: We should bring Mr. Anshuman Pandey into one of our meetings. His contributions are well researched and written.

Disposition: Accepted for Amendment 2.

Relevant resolution:

M59.08 (Mahajani script):

WG2 accepts to create a new block named Mahajani in the range 11150 to 1117F, and populate it with **39** characters in code positions 11150 to 11176, with their glyphs and character names as shown on page 11 in document [N4126](#).

10.1.6 Caucasian Albanian script

Input document:

[4131](#) Proposal for encoding the Caucasian Albanian script in the SMP of the UCS; UC Berkeley SEI: - Michael Everson & Jost Gippert; 2011-10-28

Mr. Michael Everson: We have looked at this document earlier; it includes a request two combining half marks (FE2B and FE2C – in response to Ireland T.4 a. – were accepted as part of Amendment 1 disposition of comments). Proposes 53 characters for Caucasian Albanian. We now have a new glyph for 1056F.

Disposition: Accepted for Amendment 2.

Relevant resolution:

M59.14 (Caucasian Albanian script):

WG2 accepts to create a new block named Caucasian Albanian in the range 10530 to 1056F, and populate with **53** characters in code positions 10530 to 10563 and 1056F with their names and glyphs from pages 6 in document [N4131](#) (with modified glyph for 1056F as shown in the chart in document [N4245](#)).

10.1.7 Grantha

10.1.7.1 Grantha script

Input document:

[4135](#) Proposal to encode the Grantha script in Unicode; Ministry of Communications and IT – Govt. of India; 2011-07-22

[4136](#) Request to encode 1135D Grantha Sign Pluta; Shriramana Sharma; 2011-08-21

Dr. Deborah Anderson: Document [N4135](#) is a proposal for Grantha script from the Government of India. They had a meeting of various experts in India ... the proposal reflects the agreement from that meeting. A letter from Tamil Nadu is also attached in support of this proposal. The US national body had reviewed this. There were competing proposals from various contributors. The proposal from India is the result of various discussions. The US national body supports the encoding of this proposal.

Document [N4136](#) is a proposal for an additional character 1135D GRANTHA SIGN PLUTA to be added to Grantha script.

Discussion:

- a. Mr. Michael Everson: Irish national body has considered all the various proposals and we are in agreement with the US national body to include it in Amendment 2. There are a number of holes in the charts, pending further discussions on some of the characters.
- b. Dr. Ken Whistler: The proposal now we have has good evidence of consensus. It is a reasonable set of characters for representing Grantha .. it has had several reviews in the US national body. A number of characters are still under consideration for future addition. Document [N4136](#) is additional documentation for the PLUTA SIGN. We have indication from various groups in India that there is consensus on adding this to the Grantha block.
- c. Mr. Peter Constable: The UTC has considered these proposals also and is in agreement for encoding these.

Disposition: Accept the Grantha script and the additional single character for Amendment 2.

Relevant resolution:

M59.09 (Grantha script):

WG2 accepts to create a new block named Grantha in the range 11300 to 1137F, and populate it with **82** characters in code positions 11301 to 11303, 11305 to 1130C, 1130F to 11310, 11313 to 11328, 1132A to 11330, 11332, 11333, 11335 to 11339, 1133C to 11344, 11347, 11348, 1134B to 1134D, 11357, 1135E to 11363, 11366 to 1136C, and 11370 to 11374, with their glyphs and character names as shown on pages 4 to 8 in document [N4135](#), and 1135D GRANTHA SIGN PLUTA with its glyph from document [N4136](#). Some of these characters are combining marks.

10.1.7.2 Two Grantha letter additions

Input documents:

[4198](#) Proposal to add two letters to the Grantha repertoire; Michael Everson; 2012-01-29

[4217](#) Feedback on Grantha document 4198 L2/12-039; Shriramana Sharma; 2012-01-31

The above two documents are for information. The proposal needs further study. They will be taken up when there is more input on these two letters.

10.1.8 Old Permic script

Input document:

[4177](#) Proposal for encoding the Old Permic script in the SMP of the UCS; UC Berkeley Script Encoding Initiative; 2012-01-24

Mr. Michael Everson: The Old Permic script is a medieval script devised by Stefan of Perm to write Komi and Kom Permyak – Uralic languages. It looks like Greek and Cyrillic. The glyphs were based on local communities. It is a Left to Right script, uses some generic diacritical marks, and does not have any script-specific digits and numbers. Space is used to separate words etc. Preliminary feedback from users in Russia indicates that some superscript characters are missing. They were requested for an exhaustive list and when we get their input we will be revising the document.

Action Item: For national body and liaison feedback.

10.1.9 Nautical Chart Symbols used in Running Text

Input documents:

- [4221](#) Proposal to Encode Nautical Chart Symbol used in Running Text; Asmus Freytag, Michel Suignard (SEI), Eberhard R. Hilf (ISN), Karl Pentzlin (DIN); 2012-02-01
- [4221-A](#) Proposal Summary Form for N4221

Mr. Michel Suignard: The set of charts I am going to present is to make experts aware of the set of symbols, its background etc. for national body feedback. It is a set of symbols used in Navigation charts for Boat Navigation. They are large pictures with text annotations. Symbols are also used in them. The symbols describe channels, buoys – floating or fixed etc. Slanted symbols are typically floating objects and the straight ones are usually fixed to rocks or something that is stable. They are used in running text – periodical updates to charts that are sent around to Marine professionals – especially those related to safety issues in navigation. Examples in different languages – English, German, French and Japanese can be seen. There is some controversy about which symbols may be needed in plain text versus non-plain text etc. Hydrographic offices send updates via magazines or web sites. There are some groupings of symbols for different usage. Several that do not contribute / affect safety are not normally sent out on notification. Marks can appear on tops of symbols at different angles. Colours are also used. There are also some compound symbols; we can use conjoining system to represent these. The hydrographers do have fonts in place; using PUA or graphic objects in preparing PDF, HTML etc. formats. These are used mainly by large maritime nations. These symbols are based on INT-1 the reference document for Charting Protocols defined by International Hydrographic Organization IHO. National versions are permitted in INT-1. The proposal is to have a subset of INT-1 for use in plain text. Noaa.gov site can be visited to get at the INT-1. There are also Obstruction Symbols which are like Cartouches. These are important for Safety – such as depth information etc.

The proposal document [N4221](#) discusses all these and discusses different ways of encoding such symbols. We do have fonts that are more complex than the Hydrographers are using. A repertoire is proposed. The names are based on INT-1. IHO S-57 also has names for symbols. The request is for WG2 experts to review the proposal and provide some feedback, and get opinions of similar Hydrographic organizations who may be using such systems.

Discussion:

- a. Mr. Michael Everson: Are abbreviations such as Y for Yellow international in scope?
- b. Mr. Michel Suignard: I think they are.
- c. Mr. Taro Alto: Finnish transportation agency has provided some review input. Three major input points. First one is that it should be more harmonized with IHO standard. The second question is how it would interact with the conventions used in different countries? How is this going to be maintained (because apparently the symbols can change etc.)?
- d. Mr. Michel Suignard: One would think that a set of Core Symbols need to be stable. They can evolve. Worldwide navigation has the same set of stable core symbols. How you describe them etc. can vary quite a bit. For example, UK and Germany worked very closely. We as experts could help them to go towards consistent text representations. They have to be consistent among the various nations any way. We welcome more input from Finnish body.

Action Item: National bodies and liaisons to feedback.

10.1.10 Uyghur script

Input document:

- [4226](#) Proposal for encoding the Uyghur script; Omarjan Osman; 2011-11-07

Dr. Deborah Anderson: This is a preliminary proposal from an expert in Japan. The UTC reviewed this proposal last week. There are some technical issues identified on the proposal. I am gathering comments to send back to the author.

Discussion:

- a. Mr. Mike Ksar: The name of the script should be Old Uyghur.
- b. Mr. Peter Constable: There is a bad link pointing to [N4266](#) in the doc register.
- c. Prof. Woushur Silamu: After we discuss in Xinjiang on relationship of the Old Uyghur and other historic scripts we will provide feedback.

- d. Mr. Michael Everson: The scripts can be written Vertical and Horizontally.
- e. Mr. Peter Constable: The examples show two writing directions. Raises the question -- is this one script or two different scripts? One looks like Arabic for example.

Action Item: National body and liaisons to feedback.

10.2 Additions to Existing Scripts or Blocks

10.2.1 Vedic Svvara markers for the Jaiminiya Archika

Input document:

[4134](#) Proposal to encode svvara markers for the Jaiminiya Archika; Shriramana Sharma; 2011-07-07

Dr. Deborah Anderson: Document [4134](#) is a request for two characters 1CF8 VEDIC TONE RING ABOVE and 1CF9 VEDIC TONE DOUBLE RING ABOVE. The document has the background and attestation. Two other characters needed are already encoded.

Discussion:

- a. Mr. Peter Constable: The Unicode consortium has reviewed these and consider them appropriate for encoding.
- b. Dr. Deborah Anderson: The US national body also has reviewed these and consider them appropriate for encoding.

Disposition: Accepted for Amendment 2.

(See relevant resolution **M59.16 item b** below.)

M59.16 (Miscellaneous character additions):

WG2 accepts to encode the following 37 characters in the standard:

- a. 111C9 SHARADA EKAM, in the Sharada block, with its glyph from page 1 in document [N4158](#).
- b. 2 combining marks in the Vedic Extensions block:
1CF8 VEDIC TONE RING ABOVE, and
1CF9 VEDIC TONE DOUBLE RING ABOVE
with their glyphs from page 1 in document [N4134](#).
- c. 061C ARABIC LETTER MARK (from document [N4180](#)) in the Arabic block, with its glyph as a dashed box with 'ALM' inside it.
- d. 1107F BRAHMI NUMBER JOINER in the Brahmi block, with its glyph from page 2 in document [N4166](#).
- e. 0C34 TELUGU LETTER LLLA, in the Telugu block, with its glyph from page 1 in document [N4214](#).
- f. 2 characters in the Ancient Greek Numbers block:
1018B GREEK ONE QUARTER SIGN
1018C GREEK SINUSOID SIGN
with their glyphs from page 1 in document [N4194](#).
- g. 101A0 GREEK SYMBOL TAU RHO, in the Ancient Symbols block, with its glyph from page 1 in document [N4194](#).
- h. 2 characters in the Cyrillic Supplement block:
0528 CYRILLIC CAPITAL LETTER EN WITH LEFT HOOK, and
0529 CYRILLIC SMALL LETTER EN WITH LEFT HOOK,
with their glyphs from page 1 in document [N4137](#).
- i. 4 characters in the Cyrillic Supplement block:
052A CYRILLIC CAPITAL LETTER DZZHE
052B CYRILLIC SMALL LETTER DZZHE
052C CYRILLIC CAPITAL LETTER DCHE
052D CYRILLIC SMALL LETTER DCHE
with their glyphs from page 1 in document [N4199](#).
- j. 2 characters in the Cyrillic Supplement block:
052E CYRILLIC CAPITAL LETTER EL WITH DESCENDER
052F CYRILLIC SMALL LETTER EL WITH DESCENDER
with their glyphs from page 1 in document [N4219](#).
- k. 4 characters in the Myanmar Extended-A block:
AA7C MYANMAR SIGN TAI LAING TONE-2
AA7D MYANMER SIGN TAI LAING TONE-5
AA7E MYANMAR LETTER SHWE PALAUNG CHA
AA7F MYANMAR LETTER SHWE PALAUNG SHA
with their glyphs from document [N3976](#).
- l. 8 characters in the Runic block:
16F1 RUNIC LETTER K
16F2 RUNIC LETTER SH
16F3 RUNIC LETTER OO

- 16F4 Runic Letter Franks Casket OS
- 16F5 Runic Letter Franks Casket IS
- 16F6 Runic Letter Franks Casket EH
- 16F7 Runic Letter Franks Casket AC
- 16F8 Runic Letter Franks Casket AESC
- with their glyphs from page 1 in document N4013.
- m. 5 characters in the Latin Extended-D block:
 - A796 Latin Capital Letter B with Flourish
 - A797 Latin Small Letter b with Flourish
 - A7AB Latin Capital Letter Reversed Open E
 - A7AC Latin Capital Letter Script G
 - A7F7 Latin Epigraphic Letter Sideways I
 - with their glyphs from page 1 in document N4030.
- n. A7AD Latin Capital Letter L with Belt in the Latin Extended-D block with its glyph from page 1 in document N4228.
- o. 2 characters in the Kana Supplement block:
 - 1B002 Hiragana Letter Small ko
 - 1B003 Katakana Letter Small ko
 - with their glyphs from document N3987.

10.2.2 Cyrillic

10.2.2.1 Two Cyrillic letters for the Orok language

Input document:

[4137](#) Proposal to encode a missing Cyrillic letter pair for the Orok language; Ilya Yevlampiev, Karl Pentzlin; 2011-07-06

Mr. Michael Everson: Orok is a language spoken in the Eastern Russia and also in Hokaido. Two characters to support Orok using Cyrillic alphabet are proposed. It has N with a hook on its left side. Uppercase and lowercase letters are proposed.

Discussion:

- a. Dr. Deborah Anderson: The US has reviewed these and we support encoding of these two characters.
- b. Mr. Peter Constable: Unicode supports encoding of these two characters.

Disposition: Accept for Amendment 2.

(See relevant resolution **M59.16 item h** on page 36.)

10.2.2.2 Four Cyrillic characters for the Ossetian and Komi languages

Input document:

[4199](#) Proposal to encode four Cyrillic characters; Michael Everson & Soslan Khubulov; 2012-01-31

Two characters, with their case pairs, for Ossetian alphabet is proposed. The request had come in earlier .. other characters from these alphabet have been encoded. I also found they were also used in Komi. The second Dzzhe and Dche are also used in Komi. Komi is a Uralic language related to Hungarian and Finnish. Ossetian is used in the middle of Russia. These are mature and are ready for encoding.

Discussion:

- a. Dr. Deborah Anderson: The US has reviewed these and supports addition of these characters.
- b. Mr. Peter Constable: Unicode also supports encoding of these characters.

Disposition: Accept 4 characters for Amendment 2.

(See relevant resolution **M59.16 item i** on page 36.)

10.2.2.3 Two Cyrillic characters for the Khanty and Nenets languages

Input document:

[4219](#) Request for 2 New Cyrillic Characters for the Khanty and Nenets Languages; Deborah Anderson (SEI, UC Berkeley) on behalf of Tapani Salminen; 2012-01-30

Dr. Deborah Anderson: Document N4219 is a proposal put together with assistance from Mr. Tapani Salminen, for use in languages used in Siberia. The request is for two characters EL with descender upper and lower case. The EL with descender (ended up being EL with Tail) was previously proposed but not encoded .. Evidence of use is provided in the document. These are not the same as EL with Hook.

Discussion:

- a. Mr. Michael Everson: Irish national body has reviewed the document. Even though Sami don't need them they are useful.
- b. Dr. Deborah Anderson: The US national body has reviewed these and we support encoding of these two characters.

Disposition: Accepted 2 characters for Amendment 2.
(See relevant resolution **M59.16 item j** on page 36.)

10.2.3 Sharadam Ekam sign

Input document:

[4158](#) Proposal to Encode the Sign EKAM for Sharada; Anshuman Pandey; 2011-11-02

Dr. Deborah Anderson: This is a request for one character to be added to Sharada script. It is an invocation sign used at the beginning of texts. Attestations are provided. The US national body has reviewed this and we support its encoding.

Disposition: Accepted 1 characters for Amendment 2.
(See relevant resolution **M59.16 item a** on page 36.)

10.2.4 Brahmi Number Joiner

Input document:

[4166](#) Proposal to encode 1107F BRAHMI NUMBER JOINER (REVISED); Andrew Glass and Shriramana Sharma; 2011-11-02

Dr. Deborah Anderson: Document N[4166](#) is a request for a Brahmi Number Joiner character used between Brahmi numbers to signify multiplication. The authors have investigated number of solutions to differentiate 104 versus 400. Various options were explored. The result is a proposal for a new character.

Discussion:

- a. Mr. Peter Constable: The Unicode experts have looked at this proposal. We have looked at the impacts of different options and determined the proposed new characters is the best solution.

Disposition: Accepted 1 character for Amendment 2.
(See relevant resolution **M59.16 item d** on page 36.)

10.2.5 Arabic Letter Mark

Input document:

[4180](#) Proposal for Arabic Letter Mark; Matitiahu Allouche & Mohamed Mohie; 2011-01-16

Mr. Roozbeh Pournader: The contribution is from experts one from Israel and the other one from Egypt. In the Bidi algorithm the Hebrew and Arabic characters have bidi classes. The RLM has the property of Hebrew letters. The proposal is for an Arabic RLM which behaves like an RLM in all aspects but with a property of an Arabic character instead of Hebrew letter. The UTC has approved it and US national body has reviewed it also.

Discussion:

- a. Mr. Peter Constable: The Unicode consortium has reviewed it and considers it appropriate for encoding.
- b. Dr. Deborah Anderson: The US national body has reviewed the proposal and considers it appropriate for encoding.

Disposition: Accepted 1 character for Amendment 2.
(See relevant resolution **M59.16 item c** on page 36.)

10.2.6 Subscript Solidus

Input document:

[3980](#) Proposal to encode a Subscript Solidus in the UCS; German NB: Karl Pentzlin; 2011-01-17

Dr. Deborah Anderson: Document N[3980](#) is a proposal from Mr. Karl Pentzlin. It references a document N[2788](#) authored by myself and Mr. Michael Everson. The Indo Europeanists have given us feedback on document N2788 that it is not needed any more. They use styled text. They use the regular 002F for the solidus. The character is not needed any more.

Discussion:

- a. Mr. Peter Constable: This is another example of more requests without proper evidence of use in plain text.

Disposition: *Not accepted*. The solution for the DIN example is to use styled a/m etc. The evidence presented is not a modifier letter; it is another example of using styled text.

10.2.7 Disunification of playing card and Tarot card characters

Input document:

[4089](#) Proposal to encode disunify playing card and tarot card characters in the UCS; Michael Everson & Karl Pentzlin; 2011-05-31

Mr. Michael Everson: This proposal is a revision of document [N4012](#), where we had proposed 23 additional Trump cards. During subsequent discussion with Unicode experts, they suggested that it would have been a mistake to unify Tarot cards with regular playing cards. Different fonts would have been necessary. Opinions on unification differ. I happen to agree that they should not have been unified. The Tarot cards themselves have their own cultural significance and meanings. Dr. Mark Davis was mentioning that if Jack of spades is sent to someone in an email and we end up in seeing another Taro card image, it will not be understood. I do not know what the outcome of the discussion in Unicode or US national body is. If it turns out that the playing cards and Tarot cards are different and we cannot tell them apart, we cannot represent them. The proposal is to disunify these. The set of 23 cards (as in document [N4012](#)) is proposed for 78 Tarot cards additionally.

Discussion:

- a. Dr. Ken Whistler: There were a number of different opinions in the Unicode and US national body discussions. The consensus was that there is a need for 23 cards. We will be in favour of proceeding with these. The issue of disunifying the Tarot from playing cards is still need to be discussed and there is no consensus at this time. We think that the set is premature pending the disunification issue.
- b. Mr. Mike Ksar: We cannot decide the disunification issue now.
- c. Mr. Michael Everson: I can agree to proceed with the 23 in Amendment 2 and postpone the Tarot card question.

Disposition: Accept 23 playing card characters for Amendment 2.

Relevant resolution:

M59.12 (Playing Card additions):

WG2 accepts to add 23 Playing Card symbols at 1F0BF, and 1F0E0 to 1F0F5, with their names and glyphs from pages 9 to 11 in document [N4089](#).

10.2.8 Five additional Latin characters

Input document:

[4030](#) Proposal for the addition of six Latin characters to the UCS; Michael Everson; 2011-05-04

Mr. Michael Everson: The proposal is to add only five characters. (A revised document N4030R2 dated 2012-08-02, has since been posted.)

The first set of these was in older Vietnamese orthography.

The second and third Reverse Open E and Latin Capital Letter Script G are missing case pairs for their lower case equivalents. The last one is an Epigraphic character. Evidence of use of lowercase B with Flourish, and Reversed Open E and Capital Letter Script G etc. are shown. Latin Letter Epigraphic I (sideways I) are also shown – in inscriptions as well as transcriptions of those.

Discussion:

- a. Dr. Deborah Anderson: The US national body has reviewed these and supports their encoding.

Disposition: Accepted 5 characters (from a revised version of N4030) for Amendment 2.

(See *relevant resolution M59.16 item m* on page 36.)

10.2.9 Telugu Letter LLLA

Input document:

[4214](#) Proposal to encode 0C34 TELUGU LETTER LLLA; Shriramana Sharma, Suresh Kolichala, Nagarjuna Venna, Vinodh Rajan; 2012-01-17

Dr. Deborah Anderson: This is a proposal for a single letter Telugu Letter LLLA. The proposal and evidence has been reviewed by the US national body and we recommend its encoding.

Disposition: Accepted 1 character for Amendment 2.

(See *relevant resolution M59.16 item e* on page 36.)

10.2.10 Glyph of Malayalam Letter TTTA

Input document:

[4216](#) Request to change the representative glyph of 0D3A MALAYALAM LETTER TTTA; Shriramana Sharma; 2012-01-12

This contribution is not relevant any more. The charts have been fixed.

10.2.11 Myanmar characters for minority languages

Input document:

[3976](#) Proposal to add minority characters to Myanmar script; Martin Hosken; 2011-05-23

Dr. Deborah Anderson: Document N[3976](#) from Mr. Martin Hosken is a proposal for 28 extra Myanmar characters for writing the Tai Laing and Shwe Palaung languages. The evidence is in the document (a revised version was provided). The US national body has reviewed this and we think it is mature enough for encoding.

Disposition: Accepted 28 characters for Amendment 2.

Relevant resolution:

M59.13 (Myanmar Extended-B additions):

WG2 accepts to add 24 Myanmar Extended-B characters at A9E7 to A9FE, with their names and glyphs from pages 9 to 11 in document N[3976](#).

10.2.12 Three Greek papyrological characters

Input document:

[4194](#) Proposal requesting 3 Greek papyrological characters; Joshua Sosin (Dept. of Classical Studies, Duke University), Paul Heilporn (Prof. of Papyrology, University of Strasbourg), Cisca Hoogendijk (SMES Papyrological Institute, Leiden University), Donald Mastronarde (Dept. of Classics, UC Berkeley), Todd Hickey (Center for the Tebtunis Papyri, UC Berkeley), and Deborah Anderson (SEI, UC Berkeley); 2012-01-27

Dr. Deborah Anderson: I have been working with Papyrologists. They had a long list of characters and after discussion they have whittled down the list to the three in document N[4194](#). They have been reviewed by other Papyrologists. They are taken from early manuscripts on papyrus. The US national body has reviewed the proposal and supports the encoding of these characters.

Disposition: Accepted 3 characters for Amendment 2.

(See relevant resolution M59.16 items f and g on page 36.)

10.2.13 Eight additional Runic characters

Input document:

[4013](#) Proposal to encode additional Runic characters in the UCS; Michael Everson and Andrew West; 2011-04-01

Dr. Deborah Anderson: Document N[4013](#) is a proposal by Messrs. Michael Everson and Andrew West for several Runic characters that are found in Tolkien writings and on Anglo Saxon Franks Casket. The US national body has reviewed the proposal and agree they are ready for encoding.

Disposition: Accepted 8 characters for Amendment 2.

(See relevant resolution M59.16 item l on page 36.)

10.2.14 Latin Capital Letter L with Belt

Input document:

[4228](#) Proposal to encode a Latin Capital Letter L with Belt; Dept. of Linguistics & TESOL, The University of Texas at Arlington, USA - Author: Joshua M Jensen, Karl Pentzlin; 2012-02-08

Dr. Deborah Anderson: Mr. Karl Pentzlin has proposed this character that is used in the Alabama language. Evidence of use is in the proposal. The US national body has reviewed and supports the proposal. 026C is the lower case equivalent.

Discussion:

- a. Mr. Michael Everson: Irish national body has examined this character and loves adding capital letter equivalences of existing characters.

Disposition: Accepted 1 character for Amendment 2.

(See relevant resolution M59.16 item n on page 36.)

10.2.15 Addition of two Kana characters

Input document:

[3987](#) Proposal to add two kana characters; Ken Lunde; 2011-02-09

Dr. Deborah Anderson: We discussed this proposal on an earlier WG2 meeting. Japan requested us to wait. Is there any further input from Japan?

Discussion:

- a. Mr. Satoshi Yamamoto: We are investigating these characters in many documents. We have found another small character also. We will discuss within the national body and feedback on future meeting. (After further feedback from Japan) ... Japan would still need more time to study. We are unable to find examples of use of these yet.
- b. Mr. Mike Ksar: Can we add these two characters in Amendment 2 and await a separate contribution on the third character? Could you please contact Mr. Masahiro Sekiguchi and let us know by Thursday?
- c. Mr. Peter Constable: If we did put them in Amendment 2, being a PDAM we can always remove it from it.
- d. Dr. Umamaheswaran: Can Japan accept including it in the PDAM 2 and comment during balloting process?
- e. Mr. Michel Suignard: It is only a PDAM stage; and if Japan has serious concerns we can always remove it at ballot disposition. You can make your comments on it; you can also come up with more characters if you find them.

Disposition: Accepted two characters.

(See relevant resolution **M59.16 item o** on page 36.)

10.3 Miscellaneous Proposals

10.3.1 Apple Symbol Fonts – A quick survey

Input document:

[4127](#) Apple Symbol Fonts: A Quick Survey; Karl Pentzlin; 2011-07-15

Action Item: For national body and liaison feedback.

10.3.2 Emoji variation sequences

Input document:

[4182](#) Emoji Variation Sequence; Peter Edberg; 2011-12-22

Mr. Peter Constable: We have several emojis in the 2nd edition. Several are unified with already encoded pre-2nd edition characters. Implementers started running into the problem of not being able to meet the user expectations of the emoji symbol. In the case of non-unified emojis one could assume that the glyph is what the user needed. In the case of unified symbol it is not clear that the glyph of the unified symbol is what the user would need in emoji usage context. The UTC came up with a list of 107 unified emoji - 96 single and 11 sequences - with the emoji VS-s. The Unicode has included these in Unicode V6.1. The VS15 - FE0E and VS16 - FE0F are used, with each of these emoji symbols; the result is a specific request to preserve the text style or emoji style.

Discussion:

- a. Dr. Umamaheswaran: Are the colours for emoji or specific shape for text symbols prescribed to be constrained to those shown?
- b. Mr. Peter Constable: No; it indicates the preferred style and is not as restrictive as the Ideographic Variants.

Disposition: Accepted the 214 Variation Sequences for emoji For Amendment 2.

Relevant resolution:

M59.04 (Emoji variants):

WG2 accepts the 214 standard variants for Emoji as described in document [N4182](#) for inclusion in the next amendment to the standard.

10.3.3 NUSI-s for Uyghur Letters

Input documents:

- [4218](#) Proposal to add a Named UCS Sequence Identifier UYGHUR LETTERS; NB China; 2012-02-01
[4231](#) Comments on [N4218](#) Proposal to add a Named UCS Sequence Identifier UYGHUR LETTERS; Roozbeh Pournader, Deborah Anderson (SEI); 2012-02-09

Prof. Woushour Silamu: At the last WG2 meeting we were asked to come up with USIs for eight Uyghur characters and one Chaghatay character. We have shown nominal and presentation forms in the document.

Discussion:

- a. Mr. Roozbeh Pournader: We see that with reference to the characters in [N4218](#), there are similar sequences appearing in other languages using Arabic characters – especially Turkic languages. We suggest neutral names be used in NUSIs. The presentation forms are already in the presentation forms block in the standard and there is no need to emphasize that.
- b. Dr. Deborah Anderson: You had a concern about the exact shape of the characters associated with the NUSIs. Mr. Michel Suignard was considering including glyphs in the NUSIs.
- c. Mr. Michel Suignard: Yes at some point in time.
- d. Mr. Peter Constable: Can we accommodate the presentation forms also in an NUSI? For a Uyghur users they will be able to find them along with the NUSI.
- e. Dr. Deborah Anderson: Another idea was how to document for users the representation they should use. We can have a Unicode Technical Note to explain how the users can use the sequences, for what characters etc.
- f. Mr. Mike Ksar: It is a possibility. Mr. Peter Constable was suggesting to include the various forms.
- g. Mr. Roozbeh Pournader: Chaghatay is a literary language and is not in current use. Our concern is that the request for adding such information in the standard can come in and the standard could be flooded. We understand the need for Uyghur as an important script.
- h. Dr. Umamaheswaran: The UTN is the appropriate avenue. One can add information that will be similar to a user manual.
- i. Mr. Roozbeh Pournader: It is a topic of interest to China. The US should not be the driver behind the UTN. It is important for China to support living languages such as Uyghur. By making the sequence names neutral we can make it applicable for other historic script requests that may come along.

Disposition: Accept 9 USIs for Uyghur for Amendment 2.

Relevant resolution:

M59.05 (Named USIs for characters for Uyghur and Chaghatay):

With reference to request for NUSIs from China in document [N4218](#) and the proposed alternative NUSIs in document [N4231](#) from SEI, WG2 accepts the proposed 9 language-neutral NUSIs from document [N4231](#) for inclusion in the next amendment to the standard. WG2 further invites China to work with experts from the Unicode Consortium in preparing a Unicode Technical Note to assist the Uyghur and Chaghatay users in implementation using the standard.

11 Architecture issues

11.1 Stabilizing CJK Compatibility Ideographs through the use of the IVD

Input document:

[4165](#) Stabilizing CJK Compatibility Ideographs through the use of the IVD; Ken Lunde; 2011-11-03

Output documents:

[4246](#) Stabilizing CJK Compatibility Ideographs through the use of Standardized Variants Ken Lunde; 2012-02-16

[4246-A.txt](#) Data File – saved as .txt

[4246-A.pdf](#) Data file – saved as .pdf

[4247](#) Preserving round-trip integrity of CJK compatibility ideographs – feedback on 4246; Masahiro Sekiguchi (An expert's individual contribution); 2012-02-16

Dr. Ken Lunde: The basic premise behind the proposal in document [N4165](#) is to stabilize the CJK compatibility Ideographs. One way of stabilizing these is through IVS-s. A number of these used in Japanese are considered to be of higher priority. They are used for personal names, for example. Using the IVDs we can make these stable under normalization processes. There is a table attached to the proposal containing support data. The table shows CJK compatibility ideograph, its Canonical equivalent, the Adobe-Japan1 IVS, its identifier, and what these compatibility ideographs are used for - such as

mapping to JIS X0213, whether it is used in personal names or in other standards. There is an id in the Hanyo-Denshi IVS – there is one character now in that set. Unicode Public Review Issue #187 is the next set of IVS-s to be registered (started back in July ended in October). The registrar is awaiting the final sequences for these. The options are to use one of the currently registered IVS-s to represent these towards stabilization, or come up with another different set of IVS-s.

Discussion:

- a. Mr. Peter Constable: Another implementation where such a solution is used is in IME-s. They are using Adobe_Japan 1 etc. Dr. Ken Lunde mentioned that there are several implementations using Adobe-Japan 1 for fonts etc. by several vendors in Japan. I just wanted to point out that besides fonts, they are also used by some IME vendors to be able to enter personal names etc.
- b. Mr. Satoshi Yamamoto: The current proposal seems to be specific to Japanese compatibility ideographs.
- c. Dr. Ken Lunde: We are trying to do this in an incremental approach. The Japanese compatibility ideographs are the highest priority. There are 1002 compatibility ideographs in total. There is a dozen or so for HKSAR. For Korean, they seem to be duplicates. There is one from Vietnamese, and 34 from Unicode. The largest number is from CNS 11643. The toughest nut to crack would be the North Korean ones, more than a 100.
- d. Mr. Peter Constable: These are reading variants, not glyph variants. For Korean they have identical glyphs. If we have an incremental approach, that is not an issue that we have to resolve now.
- e. Mr. Satoshi Yamamoto: I think this proposal is very important issue for Japan. It is being discussed in Japanese national body. We need more time to study this and arrive at some conclusion.
- f. Prof. Kyongsok Kim: For FA10 – would we be using 585A, E0101 or E0102 etc.
- g. Dr. Ken Lunde: The blue highlighted ones show that there are three compatibility ideographs that display slightly differently.
- h. Prof. Kyongsok Kim: The IVS-s can be something other than what is in the table.
- i. Mr. Mike Ksar: Japan has requested more time. We can request national bodies to communicate with Dr. Ken Lunde.
- j. Dr. Ken Lunde: I would like to hear from Japan in particular and would like to hear from TCA, Korea and Hong Kong also.
- k. Dr. Lu Qin: The IRG had an item related to IVDs in their agenda .. and we can seek input from the IRG members.
- l. Prof. Kyongsok Kim: For FA10 is canonically equivalent to two IVS-s, we will have more than one way of equivalencing them. Is that correct?
- m. Dr. Ken Lunde: F91D is canonically equivalent to 6804; but they may render differently for Japanese versus Korean etc.
- n. Mr. Peter Constable: The intent is not the presentation aspects, the intent is to preserve the compatibility equivalence between compatibility and the corresponding unified ideograph. Even if there are multiple sources with different glyphs we can have different IVS-s to maintain the distinction between the unified and compatibility.
- o. Dr. Ken Lunde: Which IVS you will use depends on the region you may need.
- p. Prof. Kyongsok Kim: You are planning to prepare this for 1002 characters. There can be more than one IVS for some compatibility ideographs..
- q. Dr. Ken Lunde: You can have multiple IVS-s per compatibility ideograph depending on the source.
- r. Dr. Umamaheswaran: The stability aspect was driven by preserving the compatibility characters in round trip. That would require a single IVS per compatibility ideograph. If there are more objectives than just the round tripping then that objectives have to be discussed.

An ad hoc group addressed the question – “Do we really want to go beyond just the round-tripping of the compatibility ideographs?” Messrs. Ken Lunde, Peter Constable, Umamaheswaran, Kyongsok Kim and Satoshi Yamamoto, Ms. Lin-Mei Wei, and Dr. Lu Qin, participated in the ad hoc.

Mr. Peter Constable: The ad hoc discussed the types of distinctions that need to be made. The fundamental issue was to deal with normalization-related stability. The result was Dr. Ken Lunde is to prepare a contribution for that objective and that document should be going out for national body for review.

[N4246](#)

Dr. Ken Lunde: Document [N4246](#) is a revised version of earlier document based on feedback in the ad hoc. The Japanese-specific examples have been removed. Instead of using IVD the suggestion is to use a standardized variant. The compatibility characters are from usual AP countries except from China. A complete list of proposed standardized variants for all 1002 is attached. VS1, VS2, and VS3 are used. Not the Ideographic Variants.

Discussion:

- a. Mr. Michel Suignard: What would be impact to the standard?
- b. Mr. Peter Constable: It will go into the clause 16, possibly separated as an attached file for data.
- c. Mr. Michel Suignard: I would need to add some specific text describing these since these are specific kind of variants.
- d. Dr. Ken Lunde: The data file has the variation sequence and the corresponding compatibility character. The list is sorted on the base character. Some of the compatibility characters map to the same base ideograph.
- e. Dr. Ken Whistler: As data file this document may have to be modified to have a description different from the name of the compatibility ideograph. As a proposal for review this format is OK for now.
- f. Mr. Peter Constable: The proposal is a modified version of what came in from Unicode consortium. Unicode and US national body would need to take a look at this modified proposal.
- g. Mr. Michel Suignard: We should perhaps have some urgency on this. In the future we could state that going forward that no more CJK Compatibility Characters will be encoded.
- h. Mr. Peter Constable: Japan had brought this issue about two years ago and they found an alternate solution using IVS-s for their need.
- i. Mr. Michel Suignard: Are VS-s preserved in IDNs?
- j. Dr. Ken Whistler: IDNs do not allow VS-s. Compatibility characters also are not allowed. Either way, IDN is not affected.
- k. Dr. Umamaheswaran: I suggest we add a small section to document [N4246](#) to address the migration of existing applications / data.

Action Item: For national body and liaison feedback.

Document [N4247](#) is a feedback on [N4246](#) from Mr. Masahiro Sekiguchi, as an individual expert.

Dr. Ken Lunde: Mr. Masahiro Sekiguchi has raised an objection and has proposed two alternatives:

- Alternative 1 – change normalization – create new normalization forms.
- Alternative 2 – Recommend that users should not use normalization if compatibility is important.

The new proposal would mean existing applications need to change.

Action Item: For national body and liaison feedback.

12 Liaison reports

12.1 Unicode Consortium

Input document:

[4238](#) Unicode Liaison report; Unicode Consortium – Peter Constable; 2012-02-14

Mr. Peter Constable: Unicode v6.1 was published 2 weeks ago. Its repertoire is synched with 3rd edition of 10646. Besides character additions, it has material related to stabilization policies and the material has been sent to WG2 experts. Emoji variation sequences are added in v6.1 which is not yet in 3rd edition of 10646. These are requested to be added in a future Amendment.

WG2 had requested Unicode on practices for normative referencing. Unicode Consortium will be happy to accommodate the requests. We will keep SC2 advised of the three normatively referenced TRs in

10646. Some references are also for text in different chapters. UAX 9 and UAX 15 were updated but no substantive changes in them. UTS 37 was already covered earlier.

Emoji VSs – as implementers started using the Emoji in the standard they discovered that in some instances they were dingbats, in some cases they were coloured symbols. They wanted some mechanism to be able present the correct glyph to the users. There are 107 of these VS-s that were added to V6.1 and it is on the WG2 agenda for inclusion as well.

Annex I IDS rewording was already discussed.

Urgently Needed Characters: The IRG adopted a new process for some urgently needed characters and were able to separate them out of the normal Extensions process. It was felt in the UTC as being very useful for users and vendors to have such small subsets be processed quickly. Separate proposal is for WG2 discussion on that topic.

We had discussed the Lithuanian text processing issues and took a resolution at the UTC to encourage the members of UTC to address the issues. The search problem was not particularly called out for. After the discussion in the ad hoc today I will take an action item to report back to UTC.

The CLDR project has two releases per year. National bodies in WG2 are invited to engage in the CLDR project for benefiting on i18n issues for them.

Mr. Mike Ksar: I would like to recommend to Lithuania that they can become a Liaison member to Unicode consortium. It does not cost any membership for Liaison member. You can contact other Unicode members such as Ms. Lisa Moore on membership details etc. You can input to CLDR work to get some of the problems you have identified in your contributions. Thank you Mr. Peter Constable for your report.

12.2 SEI

Input document:

[4220](#) SEI Liaison Report; SEI; 2012-02-02

Dr. Deborah Anderson: For those who are new I run a project Script Encoding Initiative on developing proposals on minority scripts. I encourage scholars to review the proposals. Two lists are included in the report in document [N4220](#). One list includes the scripts that have proposals submitted to WG2. Other list contains scripts being investigated.

Mr. Mike Ksar: Thank you Dr. Debbie Anderson. The work of SEI has been valuable in getting input on various minority scripts for both the UTC and WG2.

Action Item: National bodies to contact Dr. Debbie Andersen if they have any expertise / scholarship on different minority scripts.

13 Carried forward

13.1 Carried forward from meeting 58

There were no updated proposals on the following list of scripts / topics and were not on the agenda for this meeting. They are carried forward to the next meeting.

[N3288](#) - Old Yi script; [N3598](#) ([N3705](#) and [N3719](#)) on Nüshu script – 2nd Revision; [N3695](#) - Obsolete Simplified Chinese Characters; [N3762](#) - Kpelle script; [N3768](#) - Landa script; [N3811](#) - Tolong Siki script; [N3841](#) - the Gondi scripts; [N3842](#) - the Balti scripts; [N4016](#) - Balti 'B' script; [N3848](#) - Dhives Akuru script; [N3864](#) - Zou script; [N3874](#) - Pyu script; [N3928](#) - Ahom script; [N3961](#) - Logographic script of Pau Cin Hau; [N3963](#) - Tikamuli script; [N4079](#) – English Phonotypic Alphabet (EPA); [N4018](#) - Khambu Rai script; [N4019](#) - Khema script; [N4025](#) - Tulu script; [N4027](#) - Multani script; [N4028](#) - Jenticha; [N4032](#) - Marchen script; [N4033](#), [N4033A](#), [N4033B](#), [N4083](#) and [N4094](#) – Report on Tangut; [N4036](#) - Magar Akkha script; [N4037](#) - Kirat Rai script; [N4044](#) - Wolof Alphabet of Assane Faye; and, [N4077](#) - Sources for the Encoding of Jurchen.

13.2 Items from agenda carried forward to next meeting

The script proposals listed below were on the agenda, but were not discussed at this meeting. They are carried forward to the next meeting.

- [4176](#) Revised proposal for encoding the Warang Citi script in the BMP of the UCS; UC Berkeley Script Encoding Initiative (Universal Scripts Project); 2011-12-31
- [4160](#) Revised Preliminary Proposal to Encode the Mongolian Square Script; Script Encoding Initiative (SEI) - Anshuman Pandey; 2011-10-24
- [4119](#) Diwani Numerals: Towards a Model for Encoding Numerals of the Siyaq Systems; Anshuman Pandey; 2009-04-11
- [4122](#) Preliminary Proposal to Encode Diwani Siyaq Numbers in the UCS; Script Encoding Initiative (SEI) - Anshuman Pandey; 2011-07-13
- [4118](#) A Model for Encoding Numerals of the Ottoman Siyaq System; Anshuman Pandey; 2009-05-02
- [4124](#) Preliminary Proposal to Encode Ottoman Siyaq Numbers in the UCS; Script Encoding Initiative (SEI) - Anshuman Pandey; 2011-07-13
- [4117](#) Raqm Numerals: A Model for Encoding the Siyaq System of South Asia; Anshuman Pandey; 2009-04-21
- [4125](#) Preliminary Proposal to Encode Persian Siyaq Numbers in the UCS; Script Encoding Initiative (SEI) - Anshuman Pandey; 2011-07-15
- [4123](#) Preliminary Proposal to Encode Indic Siyaq Numbers in the UCS; Script Encoding Initiative (SEI) - Anshuman Pandey; 2011-07-13
- [4132](#) Proposal for encoding the Afaka script in the SMP of the UCS; UC Berkeley SEI: - Michael Everson; 2011-09-09
- [4140](#) Dhimal script; Anshuman Pandey; 2011-09-29
- [4146](#) Proposal for encoding the Woleai script in the SMP of the UCS; UC Berkeley Script Encoding Initiative - Michael Everson; 2011-10-21
- [4185](#) Preliminary Proposal to Encode the Siddham Script in ISO/IEC 10646; Script Encoding Initiative (SEI), Shingon Buddhist International Institute: Anshuman Pandey; 2012-01-20
- [3236](#) Proposal to encode Anatolian Hieroglyphs in the SMP of the UCS; UC Berkeley Script Encoding Initiative - Michael Everson; 2007-04-09
- [4147](#) Revised code chart for Anatolian Hieroglyphs; UC Berkeley Script Encoding Initiative - Michael Everson; 2011-10-21
- [4121](#) Preliminary Proposal to Encode the Bhaiksuki Script in ISO/IEC 10646; Script Encoding Initiative (SEI) - Anshuman Pandey; 2011-07-11
- [4128](#) Preliminary proposal for encoding the Moon script in the SMP of the UCS; Michael Everson; 2011-06-29
- [4130](#) Introducing 'Khatt-i Baburi', or the Script of Babur; Anshuman Pandey; 2011-09-16
- [4179](#) Preliminary proposal encoding Early Dynastic Cuneiform characters; UC Berkeley SEI - Michael Everson and C. Jay Crisostomo; 2012-01-27

The proposals listed below for additions to existing blocks were on the agenda, but were not discussed at this meeting. They are carried forward to the next meeting.

- [4148](#) Bengali nameslist annotations; Anshuman Pandey; 2011-10-28
- [4156](#) Request to Add Annotations for Bengali ISSHAR to the Names List; Anshuman Pandey; 2011-10-21
- [4157](#) Proposal to Encode the Sign ANJI for Bengali in ISO/IEC 10646; Anshuman Pandey; 2011-10-21
- [4162](#) Proposal to encode Latin letters used in the Former Soviet Union; Nurlan Joomagueldinov, Karl Pentzlin, Ilya Yevlampiev; 2011-10-18
- [4168](#) Proposal to add the currency sign for the Azerbaijani Manat to the UCS; German NB; 2011-11-10
- [4163](#) Letter re Confirmation of the Manat sign; Central Bank of the Republic of Azerbaijan –via Karl Pentzlin; 2011-10-31
- [4174](#) Preliminary Proposal to encode Metrical Symbols; Abteilung für Griechische und Lateinische Philologie der Ludwig-Maximilians-Universität München (Department of Greek and Latin Philology, Ludwig-Maximilians-University of Munich, Germany) - Authors: Martin Schrage, Karl Pentzlin; 2011-11-15
- [4178](#) Proposal for additions and corrections to Sumero-Akkadian Cuneiform; UC Berkeley SEI; 2012-01-09
- [4011](#) Proposal to add heraldic hatching characters to the UCS; Michael Everson; 2011-04-01
- [4195](#) Preliminary proposal to encode “Unifon” characters; SEI – Everson; 2012-01-28
- [4206](#) Proposal to Encode Medieval East-Slavic Musical Notation; Aleksandr Andreev Yuri Shardt Nikita Simmons; 2012-01-29
- [4208](#) Revised proposal to encode historic currency signs of Russia; Yuri Kalashnov, Ilya Yevlampiev, Karl Pentzlin, Roman Doroshenko; 2011-10-18
- [4209](#) Proposal to encode a Low One Dot Leader; Abteilung für Griechische und Lateinische Philologie der Ludwig-Maximilians-Universität München (Department of Greek and Latin Philology, Ludwig-Maximilians-University of Munich, Germany) Authors: Martin Schrage, Karl Pentzlin; 2011-10-17
- [4210](#) Proposal to encode Linguistic Doubt Marks; Abteilung für Griechische und Lateinische Philologie der Ludwig-Maximilians-Universität München (Department of Greek and Latin Philology, Ludwig-Maximilians-University of Munich, Germany) Authors: Martin Schrage, Karl Pentzlin; 2011-10-21

- [4211](#) Proposal to encode two Greek modifier letters for Critical Apparatuses; Abteilung für Griechische und Lateinische Philologie der Ludwig-Maximilians- Universität München (Department of Greek and Latin Philology, Ludwig- Maximilians-University of Munich, Germany) - Authors: Martin Schrage, Karl Pentzlin; 2011-10-15
- [4212](#) Proposal to encode combining decimal digits above; Abteilung für Griechische und Lateinische Philologie der Ludwig-Maximilians-Universität München (Department of Greek and Latin Philology, Ludwig-Maximilians-University of Munich, Germany) Authors: Martin Schrage, Karl Pentzlin; 2011-10-15
- [4213](#) Revised proposal to encode four historic Latin letters for Sakha (Yakut); Ilya Yevlampiev, Nurlan Jumageldinov, Karl Pentzlin; 2012-01-29
- [4207](#) Proposal to disunify Emoji symbols for the Western zodiac; Karl Pentzlin; 2012-01-29
- [4215](#) Proposal to encode 0C5A TELUGU LETTER RRRA; Shriramana Sharma, Suresh Kolichala, Nagarjuna Venna, Vinodh Rajan; 2012-01-18

14 Other business

14.1 Web Site Review

14.2 Future Meetings

Input documents:

- [4255](#) Thailand Meeting 60 Logistics; Martin Hosken; 2012-02-13
- [4255-A](#) TISI, National Body of Thailand Invite – The Royal Institute of Thailand; Professor Udom Warotamasikhhadit; 2012-02-13

- **Meeting 60 – 2012-10-22/26, Chiang Mai, Thailand**
Invitation from Thailand and Logistics are in document N4255 / N4255-A. The meeting is co-located with SC2 meeting 18.
- **Meeting 61 – 2nd Quarter 2013**
Possibility to have meeting in Vilnius, Lithuania was discussed, with Germany as backup. Germany as the backup (to be confirmed).
Lithuania has sent us an official invitation in 2nd Q 2013. They gave us two dates - one in May and one in June. We should go for 10/14 June 2013. Lithuania is OK with the June date. There is no SC2 plenary at that time.
- **Meeting 62 - 4th Quarter 2013 - Meeting 62 – looking for a host.**

Relevant resolution:

M59.22 (Future meetings):

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

WG2 meetings:

- Meeting 60 - 2012-10-22/26, Chiang Mai, Thailand ([N4255](#) - Logistics and [N4255-A](#) - Invitation)
(colocated with SC2 meeting 18)
- Meeting 61 – 2013-06-10/14, Vilnius, Lithuania (pending confirmation of dates);
Berlin, Germany (as backup, pending confirmation)
- Meeting 62 – 4th Quarter 2013; Looking for host.

IRG meetings:

- IRG Meeting 38, Gyeongju, Korea, 2012-06-18/22
- IRG Meeting 39, Hanoi, Vietnam (venue changed from Hong Kong S.A.R.), 2012-11-12/16

15 Closing

15.1 Approval of Resolutions of Meeting 59

Output document:

- [4254](#) Meeting 59 Resolutions; WG2; 2012-02-17

Draft resolutions prepared by the recording secretary Dr. V.S. Umamaheswaran with assistance from the drafting committee were reviewed. Some of the draft resolutions were adjusted to clarify or fix errors before adoption. The final adopted resolutions are in document [N4254](#).

Note: After the meeting adjourned, the project editor checked the disposition of comments for Amendment 1 and the charts for Amendment 1 and Amendment 2. Item g in resolution M59.01 was corrected from 44 Wingdings to 43 Wingdings, and correcting the total count of characters in Amendment 1 from 1769 to 1768.

Appreciation:

Relevant Resolutions:

M59.23 (Appreciation to DKUUG for web site support):

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

M59.24 (Appreciation to Host):

WG2 thanks the national body of the United States of America, the Unicode Consortium and its officers and staff, in particular Dr. Mark Davis, Mr. Michel Suignard, Ms. Lisa Moore and Ms. Irina Shlyapnikova, for hosting the meeting, providing excellent meeting facilities and for their kind hospitality.

15.2 Adjournment

The meeting was adjourned at 12:05h on Friday 2012-02-17.

16 Action items

All the action items recorded in the minutes of the previous meetings from 25 to 51, and, 53 to 56 have been either completed or dropped. Status of outstanding action items from previous meetings 52, 57, 58 and new action items from this meeting 59 are listed in the tables below.

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

16.1 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. (Mr. Michael Everson indicated he will provide some text to include in the P&P document at meeting 58.) M53, M54 M55, M56, M57, M58 and M59 – in progress.	In progress

16.2 Outstanding action items from meeting 57, Busan, Korea (Republic of), 2010-10-04/10

Item	Assigned to / action (Reference resolutions in document N3904 , and unconfirmed minutes in document N3903 for meeting 57 – with any corrections noted in section 3 in the minutes of meeting 58 in document N4103)	Status
AI-57-8	China (Mr. Chen Zhuang) To take note of and act upon the following items:	
b.	M57.27 (Khitani): With reference to documents N3918 and N3925 on Khitan, WG2 endorses the ad hoc report in document N3942 , and invites China to submit a revised proposal addressing the feedback received to date. M58, M59 – in progress.	In progress.
c.	M57.28 (Chinese Chess symbols): With reference to document N3910 on Chinese Chess Symbols, WG2 invites China to submit a revised proposal addressing the feedback received during meeting M57 and any further national body feedback received prior to WG2 meeting M58. M58, M59 – in progress.	In progress.

16.3 Action items from meeting 58, Helsinki, Finland, 2011-06-06/10

Item	Assigned to / action (Reference resolutions in document N4104 , and unconfirmed minutes in document N4103 for meeting 58)	Status
AI-58-4	IRG Rapporteur and IRG Editor (Dr. Lu Qin) To take note of and act upon the following items:	
b.	to address the concerns in document N4075 on potential duplication and on possible use of IVS-s as method to encode z-variants, and provide feedback to WG2. M58 – in progress.	In progress.
AI-58-7	Ireland (Mr. Michael Everson)	
a.	With reference to Irish proposal for replacement of Bengali chart in comment E1 on Row 098 in document N4014 (results of voting on FCD of 3 rd edition), Ireland is invited to provide more information regarding the font used for Bengali in the charts for review and comment by national bodies and liaison organizations. Also refer to similar action item AI-57-7 on Ireland. M58 – in progress.	In progress.
AI-58-9	China (Mr. Chen Zhuang) To take note of and act upon the following items:	
a.	M58.31 (Chinese Chess symbols): With reference to proposal from China in document N3910 , WG2 invites China to submit a revised proposal taking into consideration the feedback comments received in documents N3966 and N3992 . M58 – in progress.	In progress.
b.	M58.30 (Naxi Dongba pictographs): With reference to proposal from China in document N4043 , WG2 endorses the ad hoc report in document N4112 , and invites China to submit a revised proposal taking into consideration the recommendations in the ad hoc report. M58 – in progress.	In progress.

16.4 New action items from meeting 59, Mountain View, CA, USA, 2012-02-13/17

Item	Assigned to / action (Reference resolutions in document N4254 , and unconfirmed minutes in document N4253 for meeting 59 (this document you are reading).)	Status
AI-59-1	Recording Secretary - Dr. V.S. UMAmaheswaran	
a.	To finalize the document N4254 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N4254 .
b.	To finalize the document N4253 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N4253 .

AI-59-2	Convener - Mr. Mike Ksar	
	To take note of and act upon the following items:	
a.	<i>M59.21 (Roadmap snapshot):</i> WG2 instructs its convener to post the updated snapshot of the roadmaps (in document N4186) to the WG2 web site and communicate the same to SC2 secretariat.	Completed; see document 02n4219.pdf
b.	To add relevant contributions carried forward from previous meetings to agenda of next meeting. (See list of documents under AI-59-10 - items a to f - below.)	
AI-59-3	Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)	
	To prepare the appropriate amendment texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:	
a.	<i>M59.01 (Disposition of ballot comments of PDAM 1.2):</i> WG2 accepts the disposition of PDAM 1.2 ballot comments in document N4239 . The following significant changes are noted: k. A78F LATIN LETTER MIDDLE DOT is moved out for processing in the next amendment l. 109 characters in the OLD HUNGARIAN block 10C80 to 10CFF, with unchanged block name and character names, and a revised font from document N4196 , are moved out for processing in the next amendment m. 1F37E FORK AND KNIFE WITH BLACK PLATE is moved out for processing in the next amendment n. 2BF4 and 10 Arrows in the range 1F880-1F889 are deleted unifying them with other symbols o. Two combining characters FE2B COMBINING MACRON LEFT HALF BELOW and FE2C COMBINING MACRON RIGHT HALF BELOW, from document N4131 , are added p. 1F678 SANS-SERIF HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT is added q. 43 Wingdings and other symbols are added r. Various symbols were reordered or reassigned code positions s. Several of the Arrows were renamed t. Glyphs for several encoded Arrows in the Arrows block and in the first column in Miscellaneous Symbols and Arrows block, and some other symbols in different blocks were updated The final code positions, glyphs and names are in the charts in document N4244 .	
b.	<i>M59.02 (Progression of Amendment 1):</i> WG2 instructs its project editor to prepare and to forward the final text of Amendment 1 to the 3 rd Edition, which will include the changes arising from resolutions M59.01 above, along with the final disposition of comments, to the SC2 secretariat for a DAM ballot. The (unchanged) target starting dates are - DAM 2012-03 and FDAM 2012-11.	Completed – items a and b; see document 02n4222.pdf and zipped file 02n4223.zip .
c.	<i>M59.03 (IDS Syntax in Annex I):</i> WG2 accepts the proposal from the US national body in document N4234 to remove the deficiency and align the definition of IDS with the current practice, and instructs its project editor to modify the text in Annex I accordingly.	
d.	<i>M59.04 (Emoji variants):</i> WG2 accepts the 214 standard variants for Emoji as described in document N4182 for inclusion in the next amendment to the standard.	
e.	<i>M59.05 (Named USIs for characters for Uyghur and Chaghatay):</i> With reference to request for NUSIs from China in document N4218 and the proposed alternative NUSIs in document N4231 from SEI, WG2 accepts the proposed 9 language-neutral NUSIs from document N4231 for inclusion in the next amendment to the standard. WG2 further invites China to work with experts from the Unicode Consortium in preparing a Unicode Technical Note to assist the Uyghur and Chaghatay users in implementation using the standard.	
f.	<i>M59.06 (Characters from PDAM 1.2 ballot comments for next Amendment):</i> WG2 accepts the following characters proposed in national body ballot comments, from the disposition of ballot comments in document N4239 to be encoded in the next amendment: - 3 characters 1F594 to 1F596 from Irish comment T.6 item a - 2 characters 2B74 and 2B75 from Irish comment T.1 item c - 92 characters from US comment T.6 item c, and, - 2 characters 1F4F8 and 1F3C5 from US comment T.6 item d.	
g.	<i>M59.07 (Psalter Pahlavi script):</i> WG2 accepts to create a new block named Psalter Pahlavi in the range 10B80 to 10BAF, and populate it with 29 characters in code positions 10B80 to 10B91, 10B99 to 10B9C, and 10BA9 to 10BAF, with their glyphs and character names as shown on page 6 in document N4040 . The script is a right-to-left script.	
h.	<i>M59.08 (Mahajani script):</i> WG2 accepts to create a new block named Mahajani in the range 11150 to 1117F, and populate it with 39 characters in code positions 11150 to 11176, with their glyphs and character names as shown on page 11 in document N4126 .	
i.	<i>M59.09 (Grantha script):</i> WG2 accepts to create a new block named Grantha in the range 11300 to 1137F, and populate it with 82 characters in code positions 11301 to 11303, 11305 to 1130C, 1130F to 11310, 11313 to 11328, 1132A to 11330, 11332, 11333, 11335 to 11339, 1133C to 11344, 11347, 11348, 1134B to 1134D, 11357, 1135E to 11363, 11366 to 1136C, and 11370 to 11374, with their glyphs and character names as shown on pages 4 to 8 in document N4135 , and	

	1135D GRANTHA SIGN PLUTA with its glyph from document N4136. Some of these characters are combining marks.	
j.	M59.10 (<i>Modi script</i>): WG2 accepts to create a new block named Modi in the range 11600 to 1165F, and populate it with 79 characters in code positions 11600 to 11644, and 11650 to 11659, with their glyphs and character names as shown on pages 20 and 21 in document N4034. Some of these characters are combining marks.	
k.	M59.11 (<i>Mende script</i>): WG2 accepts to create a new block named Mende in the range 1E800 to 1E8CF, and populate it with 197 characters in code positions 1E800 to 1E8C4, with their glyphs and character names as shown on pages 7 to 11 in document N4167. Mende is a right-to-left script.	
l.	M59.12 (<i>Playing Card additions</i>): WG2 accepts to add 23 Playing Card symbols at 1F0BF, and 1F0E0 to 1F0F5, with their names and glyphs from pages 9 to 11 in document N4089.	
m.	M59.13 (<i>Myanmar Extended-B additions</i>):WG2 accepts to add 24 Myanmar Extended-B characters at A9E7 to A9FE, with their names and glyphs from pages 9 to 11 in document N3976.	
n.	M59.14 (<i>Caucasian Albanian script</i>): WG2 accepts to create a new block named Caucasian Albanian in the range 10530 to 1056F, and populate with 53 characters in code positions 10530 to 10563 and 1056F with their names and glyphs from pages 6 in document N4131 (with modified glyph for 1056F as shown in the chart in document N4245).	
o.	M59.15 (<i>Pahawh Hmong script</i>): WG2 accepts to create a new block named Pahawh Hmong in the range 16B00 to 16B8F, and populate with 126 characters in code positions 16B00 to 16B45, 16B50 to 16B59, 16B5B to 16B61, 16B63 to 16B77, and 16B7E to 16B8F, with their names and glyphs as shown in document N4245.	
p.	M59.16 (<i>Miscellaneous character additions</i>): WG2 accepts to encode the following 37 characters in the standard: <ul style="list-style-type: none"> a. 111C9 SHARADA EKAM, in the Sharada block, with its glyph from page 1 in document N4158. b. 2 combining marks in the Vedic Extensions block: 1CF8 VEDIC TONE RING ABOVE, and 1CF9 VEDIC TONE DOUBLE RING ABOVE with their glyphs from page 1 in document N4134. c. 061C ARABIC LETTER MARK (from document N4180) in the Arabic block, with its glyph as a dashed box with 'ALM' inside it. d. 1107F BRAHMI NUMBER JOINER in the Brahmi block, with its glyph from page 2 in document N4166. e. 0C34 TELUGU LETTER LLLA, in the Telugu block, with its glyph from page 1 in document N4214. f. 2 characters in the Ancient Greek Numbers block: 1018B GREEK ONE QUARTER SIGN 1018C GREEK SINUSOID SIGN with their glyphs from page 1 in document N4194. g. 101A0 GREEK SYMBOL TAU RHO, in the Ancient Symbols block, with its glyph from page 1 in document N4194. h. 2 characters in the Cyrillic Supplement block: 0528 CYRILLIC CAPITAL LETTER EN WITH LEFT HOOK, and 0529 CYRILLIC SMALL LETTER EN WITH LEFT HOOK, with their glyphs from page 1 in document N4137. i. 4 characters in the Cyrillic Supplement block: 052A CYRILLIC CAPITAL LETTER DZZHE 052B CYRILLIC SMALL LETTER DZZHE 052C CYRILLIC CAPITAL LETTER DCHE 052D CYRILLIC SMALL LETTER DCHE with their glyphs from page 1 in document N4199. j. 2 characters in the Cyrillic Supplement block: 052E CYRILLIC CAPITAL LETTER EL WITH DESCENDER 052F CYRILLIC SMALL LETTER EL WITH DESCENDER with their glyphs from page 1 in document N4219. k. 4 characters in the Myanmar Extended-A block: AA7C MYANMAR SIGN TAI LAING TONE-2 AA7D MYANMER SIGN TAI LAING TONE-5 AA7E MYANMAR LETTER SHWE PALAUNG CHA AA7F MYANMAR LETTER SHWE PALAUNG SHA with their glyphs from document N3976. l. 8 characters in the Runic block: 16F1 RUNIC LETTER K 16F2 RUNIC LETTER SH 16F3 RUNIC LETTER OO 16F4 RUNIC LETTER FRANKS CASKET OS 16F5 RUNIC LETTER FRANKS CASKET IS 16F6 RUNIC LETTER FRANKS CASKET EH 16F7 RUNIC LETTER FRANKS CASKET AC 	

	<p>16F8 Runic letter Franks Casket AESC with their glyphs from page 1 in document N4013.</p> <p>m. 5 characters in the Latin Extended-D block: A796 Latin Capital Letter B with Flourish A797 Latin Small Letter b with Flourish A7AB Latin Capital Letter Reversed Open E A7AC Latin Capital Letter Script G A7F7 Latin Epigraphic Letter Sideways I with their glyphs from page 1 in document N4030.</p> <p>n. A7AD Latin Capital Letter L with Belt in the Latin Extended-D block with its glyph from page 1 in document N4228.</p> <p>o. 2 characters in the Kana Supplement block: 1B002 Hiragana Letter Small ko 1B003 Katakana Letter Small ko with their glyphs from document N3987.</p>	
	<p>q. <i>M59.17 (Subdivision of work)</i>: WG2 instructs its convener and project editor to create a subdivision proposal (document N4248) for creation of Amendment 2 to ISO/IEC 10646 3-rd edition, to incorporate characters and scripts accepted for encoding in resolutions M59.03 to M59.16 above. WG2 notes that the subdivision proposal includes provisions for including additional characters or new scripts during the ballot resolution phase towards agile processing of PDAMs and speeding up the work of WG2 between face to face meetings. The target starting dates are: PDAM 2012-03, DAM 2012-11 and FDAM 2013-07.</p>	
	<p>r. <i>M59.18 (PDAM 2 to 3rd edition)</i>: WG2 instructs its project editor to create the text of for Amendment 2 to the 3-rd edition of ISO/IEC 10646, incorporating the characters accepted for encoding per M59.17 above on subdivision of work, and send it to SC2 secretariat for a PDAM ballot. The consolidated charts are in document N4245.</p>	<p>Completed – items c through r; see document 02n4224.pdf and zipped file 02n4225.zip.</p>
	<p>s. With reference to document N4173 - IRG Errata Report, to check for possible Source-Mapping changes that we can request IRG to review and put a solution in place.</p>	
AI-59-4	IRG Rapporteur and IRG Editor (Dr. Lu Qin)	
	To take note of and act upon the following items:	
	a. Document N4230 as feedback on the IRG P&P document, Annex on UNC-s.	
	b. <i>M59.19 (Old Hanzi and IRG)</i> : WG2 accepts the proposals from China, TCA and Japan, and instructs the IRG, to remove Old Hanzi related tasks from the scope of work items of the IRG, effective after IRG meeting 38, 2012-06-18/22. Mature Old Hanzi proposals, when available, can be submitted directly to WG2.	
AI-59-5	Ad hoc group on roadmap (Dr. Umamaheswaran)	
	a. To update the Roadmaps with the results from this meeting.	Completed; see document N4320 .
	a. To update the Roadmaps with the results from this meeting.	Completed; see document Nxxxx.
AI-59-6	Lithuanian (Mr. Algidas Krupovnickas)	
	To take note of and act upon the following items:	
	a. <i>M59.20 (Lithuanian)</i> : With reference to various documents on Lithuanian, WG2 accepts the recommendation from the Lithuanian ad hoc group in document N4242 . WG2 will <i>not</i> take action to encode additional characters as was proposed in N4191 . Instead the recommendation is to continue using the defined USI sequences in the standard. WG2 invites national bodies and liaison organizations to alert their software implementers to take special care to properly process the USIs in the standard that are used to represent various characters in languages worldwide, including Lithuanian. WG2 further invites the Lithuanian national body to refer to the ad hoc report in document N4242 for details.	
AI-59-7	China (Mr. Chen Zhuang)	
	To take note of and act upon the following items:	
	a. <i>M59.05 (Named USIs for characters for Uyghur and Chaghatay)</i> : With reference to request for NUSIs from China in document N4218 and the proposed alternative NUSIs in document N4231 from SEI, WG2 accepts the proposed 9 language-neutral NUSIs from document N4231 for inclusion in the next amendment to the standard. WG2 further invites China to work with experts from the Unicode Consortium in preparing a Unicode Technical Note to assist the Uyghur and Chaghatay users in implementation using the standard.	
AI-59-8	Unicode Liaison (Mr. Peter Constable)	
	a. <i>M59.05 (Named USIs for characters for Uyghur and Chaghatay)</i> : With reference to request for NUSIs from China in document N4218 and the proposed alternative NUSIs in document N4231 from SEI, WG2 accepts the proposed 9 language-neutral NUSIs from document N4231 for inclusion in the next amendment to the standard. WG2 further invites China to work with experts from the Unicode Consortium in preparing a Unicode Technical Note to assist the Uyghur and Chaghatay users in implementation using the standard.	

AI-59-9	Liaison representative to JTC1/SC35 (Alain Labonté)	
a.	With reference to request for missing Latin letters from SC35 in document N4068, and the associated request from German national body in document N4149, to communicate that they have not presented the needed evidence of use of these characters in plain text.	
AI-59-10	All national bodies and liaison organizations	
	To take note of and provide feedback on the following items.	
a.	Revised Unicode Technical Standard UTS 37 version 3.1 (SC2 N4208), which is referenced in ISO/IEC 10646 3 rd edition.	
b.	the Old Permic script proposed in document N4177 .	
c.	the (Old) Uyghur script proposed in document N4226 .	
d.	the proposal using standardized variants for stabilizing CJK compatibility ideographs under normalization in document N4246 and the associated data file N4246-A.pdf , and the concerns expressed in the feedback document N4247 .	
e.	the proposal for Nautical Chart Symbols in document N4221 after checking with their national or regional hydrographic organizations who would be interested.	
f.	(The following documents are being carried forward; there was no discussion on any of these at meeting 59.) N4132 - Afaka; N3928 - Ahom; N3236 - Anatolian Hieroglyphs; N4016 - Balti 'B'; N3842 - Balti scripts; N4121 - Bhaiksuki; N4147 - Code chart for Anatolian Hieroglyphs; N4140 - Dhimal; N3848 - Dhives Akuru; N4119 - Diwani Numerals Model; N4122 - Diwani Siyaq Numbers; N4179 - Early Dynastic Cuneiform characters; N4079 - English Phonotypic Alphabet (EPA); N3841 - Gondi scripts; N4123 - Indic Siyaq ; N4130 - Introducing 'Khatt-i Baburi'; N4028 - Jenticha; N4018 - Khambu Rai; N4019 - Khema; N4037 - Kirat Rai; N3762 - Kpelle; N3768 - Landa; N3961 - Logographic Pau Cin Hau; N4036 - Magar Akkha; N4032 - Marchen; N4118 - Model for Numerals of the Ottoman Siyaq System; N4117 - Model for Raqm Numerals; N4160 - Mongolian Square; N4128 - Moon; N4027 - Multani; N3598 (N3705 and N3719) - Nüshu 2 nd Revision; N3695 - Obsolete Simplified Chinese Characters; N3288 - Old Yi; N4124 - Ottoman Siyaq ; N4125 - Persian Siyaq; N3874 - Pyu; N4033 , N4033A , N4033B , N4083 and N4094 - Report on Tangut; N4185 - Siddham; N4077 - Sources for the Encoding of Jurchen; N3963 - Tikamuli; N3811 - Tolong Siki; N4025 - Tulu; N4176 - Warang Citi; N4146 - Woleai; N4044 - Wolof Alphabet of Assane Faye; N3864 - Zou; ; N4178 - Additions and corrections to Sumero-Akkadian Cuneiform; N4156 - Annotations for Bengali ISSHAR; N4168 and N4163 - Azerbaijani Manat currency sign; N4148 - Bengali annotations; N4212 - Combining decimal digits above; N4207 - Disunifying Emoji symbols for the Western zodiac; N4213 - Four historic Latin letters for Sakha (Yakut); N4011 - Heraldic hatching characters; N4208 - Historic currency signs of Russia; N4162 - Latin letters used in the Former Soviet Union; N4210 - Linguistic Doubt Marks; N4209 - Low One Dot Leader; N4206 - Medieval East-Slavic Musical Notation; N4174 - Metrical symbols; N4157 - Sign ANJI for Bengali; N4215 - TELUGU LETTER RRRRA; N4211 - Two Greek modifier letters for Critical Apparatuses; N4195 - Unifon characters.	
g.	on a quick survey regarding Apple Symbol Fonts in document N4127 (to the author).	
h.	Activities under Script Encoding Initiative (SEI) project on minority scripts (see document N4220), and to contact Dr. Debbie Anderson with names of any scholars who may be interested in any of the several minority scripts under investigation towards encoding.	
i.	<i>M59.20 (Lithuanian)</i> : With reference to various documents on Lithuanian, WG2 accepts the recommendation from the Lithuanian ad hoc group in document N4242 . WG2 will <i>not</i> take action to encode additional characters as was proposed in N4191 . Instead the recommendation is to continue using the defined USI sequences in the standard. WG2 invites national bodies and liaison organizations to alert their software implementers to take special care to properly process the USIs in the standard that are used to represent various characters in languages worldwide, including Lithuanian. WG2 further invites the Lithuanian national body to refer to the ad hoc report in document N4242 for details.	
j.	<i>M59.22 (Future meetings)</i> : WG2 meetings: - Meeting 60 - 2012-10-22/26, Chiang Mai, Thailand (N4255 - Logistics and N4255-A - Invitation); (colocated with SC2 meeting 18) - Meeting 61 – 2013-06-10/14, Vilnius, Lithuania (pending confirmation of dates); Berlin, Germany (as backup, pending confirmation) - Meeting 62 – 4th Quarter 2013; Looking for host. IRG meetings: - IRG Meeting 38, Gyeongju, Korea, 2012-06-18/22 - IRG Meeting 39, Hanoi, Vietnam (venue changed from Hong Kong S.A.R.), 2012-11-12/16	

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