



ISO/IEC JTC 1/SC 2 N\_\_\_\_\_  
ISO/IEC JTC 1/SC 2/WG 2 **N3603**  
2009-07-08

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

**DOC TYPE:** Meeting Minutes

**TITLE:** Unconfirmed minutes of WG 2 meeting 54  
Room S206/S209, Dublin Centre University, Dublin, Ireland  
2009-04-20/24

**SOURCE:** V.S. Umamaheswaran, Recording Secretary, and Mike Ksar, Convener

**PROJECT:** JTC 1.02.18 – ISO/IEC 10646

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

**ACTION ID:** ACT

**DUE DATE:** 2009-10-12

**DISTRIBUTION:** SC 2/WG 2 members and Liaison organizations

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Michael Y. Ksar  
Convener – ISO/IEC/JTC 1/SC 2/WG 2  
22680 Alcalde Rd  
Cupertino, CA 95014  
U.S.A.

Phone: +1 408 255-1217  
Email: [mikeksar@10646.com](mailto:mikeksar@10646.com)

**ISO**  
**International Organization for Standardization**  
**Organisation Internationale de Normalisation**

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

ISO/IEC JTC 1/SC 2 **N**\_\_\_\_\_  
ISO/IEC JTC 1/SC 2/WG 2 **N3603**  
**2009-07-08**

|                      |  |
|----------------------|--|
| <b>Title:</b>        | Unconfirmed minutes of WG 2 meeting 54<br>Room S206/S209, Dublin Centre University, Dublin, Ireland; 2009-04-20/24   |
| <b>Source:</b>       | V.S. Umamaheswaran ( <a href="mailto:umavs@ca.ibm.com">umavs@ca.ibm.com</a> ), Recording Secretary<br>Mike Ksar ( <a href="mailto:mikeksar@10646.com">mikeksar@10646.com</a> ), Convener |
| <b>Action:</b>       | WG 2 members and Liaison organizations   |
| <b>Distribution:</b> | ISO/IEC JTC 1/SC 2/WG 2 members and liaison organizations  |

## 1 Opening

### Input document:

[3573](#) 2nd Call Meeting # 54 in Dublin; Mike Ksar; 2009-02-16

Mr. Mike Ksar convened the meeting at 10:15h. He introduced the hosts. Dr. Ian Cowan representing the national body of Ireland, NSAI, welcomed the delegates and addressed the meeting. Professor Josef van Genabith representing the Centre for Next Generation Localisation of Dublin Centre University gave a brief presentation on their work on localization.

Experts who had contributions are to give them to the convener to get a document number and for posting to the WG2 website. An updated agenda document [N3605](#) was posted to WG2 site at start of the first day and at the end of each day of the meeting.

Mr. Mike Ksar went over the logistics. A separate room was available for ad hoc groups to meet. DCU has provided both wired and wireless network facilities. An information sheet on connecting to the network is also available. Hardcopies of most of the contributions to be discussed are also made available by DCU.

### 1.1 Roll Call

#### Input document:

[3551](#) Updated experts list; Ksar; 2008-10-19

Attending experts were asked to introduce themselves during the roll call. A document containing the names and other contact details of WG2 experts was circulated. The fax numbers have been removed from the experts list because of complaints of scam faxes. The sc2wg2alias list will be in synch with the list of names on the experts list. Attendees were requested to make any corrections, mark their attendance in that document and to give their business card to the recording secretary. Invited experts were requested to identify themselves and be recognized by the convener.

The following **37** attendees representing **11** national bodies, **3** liaison organizations, including **1** invited expert were present at different times during the meeting.

| Name               | Representing        | Affiliation  |
|--------------------|---------------------|--|
| Mike KSAR          | .Convener, USA      | Independent  |
| Josef van GENABITH | .Host, Ireland      | Centre for Next Generation Localisation, Dublin Centre University  |
| Cara GREENE        | .Host, Ireland      | Centre for Next Generation Localisation, Dublin Centre University  |
| Eithne McCANN      | .Host, Ireland      | Centre for Next Generation Localisation, Dublin Centre University  |
| Ian COWAN          | .Host, Ireland      | NSAI   |
| Tamara LOPEZ       | .Invited Expert, UK | Centre for Computing in the Humanities, King's College, London, UK |
| LU Qin             | .IRG Rapporteur     | Hong Kong Polytechnic University                                   |
| Tatsuo KOBAYASHI   | .SC2 Chair          | Justsystems Corporation  |
| Bear S. TSENG      | .TCA – Liaison      | Academia Sinica  |

| Name                         | Representing                         | Affiliation   |
|------------------------------|--------------------------------------|---|
| Lin-Mei WEI                  | .TCA – Liaison                       | Chinese Foundation for Digitization Technology                      |
| André Szabolcs SZELP         | Austria                              | Matrixware Information Services GmbH                                |
| Alain LABONTÉ                | Canada; Editor 14651                 | Independent   |
| V. S. (Uma)<br>UMAMAHESWARAN | Canada; Recording<br>Secretary       | IBM Canada Ltd.   |
| CHEN Zhuang                  | China                                | Chinese Electronics Standardization Institute                       |
| DAI Hong                     | China                                | Chinese Electronics Standardization Institute                       |
| JING Yongshi                 | China                                | North University of Ethnics   |
| NIE Hongyin                  | China                                | Institute of Ethnology and Anthropology, Academy of Social Sciences |
| SUN Bojun                    | China                                | Institute of Ethnology and Anthropology, Academy of Social Sciences |
| WANG Xiaoming                | China                                | Institute of Applied Linguistics, Ministry of Education             |
| Wushour SILAMU               | China                                | Xinjiang University   |
| ZHAO Liming                  | China                                | Tsinghua University   |
| Tero AALTO                   | Finland                              | CSC – IT Center for Science   |
| Andreas STÖTZNER             | Germany                              | Signography   |
| Karl PENTZLIN                | Germany                              | AC&S Analysis GmbH  |
| Gábor HOSSZÚ                 | Hungary                              | Budapest University of Technology and Electronics                   |
| Michael EVERSON              | Ireland; Contributing<br>Editor      | Evertime  |
| Masahiro SEKIGUCHI           | Japan                                | Fujitsu Limited   |
| Satoshi YAMAMOTO             | Japan                                | Hitachi Ltd.  |
| Yoshiki MIKAMI               | Japan                                | Nagaoka University of Technology                                    |
| Dae Hyuk AHN                 | Korea (Republic of)                  | Microsoft Korea   |
| KANG Mi-Young                | Korea (Republic of)                  | National Institute of the Korean Language                           |
| KIM Kyongsok                 | Korea (Republic of)                  | Busan National University   |
| Andrew WEST                  | UK                                   | Independent   |
| Ken WHISTLER                 | USA; Contributing Editor             | Sybase Inc.   |
| Michel SUIGNARD              | USA; Project Editor                  | Unicode Consortium  |
| Deborah ANDERSON             | USA; SEI, UC Berkeley –<br>Liaison   | Dept. of Linguistics, UC Berkeley                                   |
| Peter CONSTABLE              | USA; Unicode Consortium<br>– Liaison | Microsoft Corp.   |

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

## 2 Approval of the agenda

**Input document:**

[3605](#) **Draft Agenda Meeting 54; Convener - Mike Ksar; 2009-04-23**

There was no formal approval of the agenda. The agenda was updated as the meeting progressed and was posted to the WG2 website. All the changes made during the progress of the meeting are included in the appropriate sections in this document. Some of the agenda items have been reorganized or renumbered in these minutes. Some agenda items that were not discussed have been deleted. The following table of contents reflects where the items are discussed and recorded.

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### 3 Approval of minutes of meeting 53

#### Input document:

[3553](#) Draft minutes meeting 53; Uma/Ksar; 2008-11-05

Dr. Umamaheswaran: I had sent out the minutes of the last meeting In November 2008. Neither the convener, nor I have received any feedback on the minutes. The minutes were adopted without any modifications.

## 4 Review action items of previous meeting

Input document:

[3553-AI](#) Action items from the Draft minutes meeting 53; Uma/Ksar; 2008-11-05

Dr. Umamaheswaran reviewed the action items list in document [N3553-AI](#). Of the 64 action items reviewed, 52 items have been either completed or dropped; and 12 items are carried over. The results of the review are recorded in the following sections.

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

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

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

| Item           | Assigned to / action (Reference resolutions in document <a href="#">N3354</a> , and unconfirmed minutes in document <a href="#">N3353</a> for meeting 51 – with any corrections noted in section 3 in the minutes of meeting 52 in document <a href="#">N3454</a> ).   | Status  |
|----------------|--|---|
| <b>AI-51-4</b> | <b>IRG Convener and IRG Editor (Dr. Lu Qin)</b>  |   |
|                | To act on the resolution below.  |   |
| a.             | <i>M51.35 (IRG Principles and Procedures)</i> : With reference to item 3 in document <a href="#">N3283</a> , WG2 invites IRG to develop a set of principles and procedures to guide their work, with due considerations for the current WG2 Principles and Procedures. M52 - in progress.  | Completed; see document <a href="#">N3562</a> .   |
| b.             | <i>M51.36 (IRG Annex S Review)</i> : WG2 endorses the IRG activity to review and feedback on Annex S of ISO/IEC 10646: 2003, without impacting already unified ideographs in the standard, taking into consideration the FCD ballot progression which starts in 2008-03. M52 and M53 - in progress.  | Completed; see document <a href="#">N3561</a> .   |
| c.             | <i>M51.38 (IRG ideographs for Names)</i> : With reference to item 8 in document <a href="#">N3283</a> , WG2 endorses the IRG activity to investigate and report back to WG2 on the issues and recommendations on ideographs for names of persons, places and the like. M52 and M53 - in progress.  | In progress.  |
| d.             | <i>M51.39 (IRG Urgent-Need ideographs)</i> : With reference to item 10 in document <a href="#">N3283</a> , WG2 requests the IRG to report back to WG2 with a more complete plan related to the identified 12000 'urgent need' ideographs, along with a prioritization of this work with respect to other existing IRG work items. M52 and M53 - in progress.             | Completed; see document set <a href="#">N3560</a> .   |
| i.             | IRG convener and IRG editor to assist the project editor in preparing the relevant source-reference data for Amd. 4, Amd. 5 and Amd. 6, the Ext. C charts for Amd. 5, and the multiple-column unified CJK charts for the text of the second edition, respecting the schedules adopted in the relevant resolutions at this meeting. M52 and M53 - in progress.            | Partly completed; TCA is in progress; DPRK could not be contacted. Viet Nam is to be checked. |
| <b>AI-51-6</b> | <b>China (Mr. Chen Zhuang)</b>   |   |
|                | To take note of and act upon the following items.  |   |
| c.             | <i>M51.31 (Simple Miao script)</i> : With reference to document <a href="#">N3335</a> on Simple Miao script, WG2 invites national bodies and liaison organizations to review and provide feedback to China and invites the Chinese national body to submit a revised proposal incorporating the feedback for consideration at WG2 meeting 52. M52 and M53 - in progress. | In progress.  |

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

| Item    | Assigned to / action (Reference resolutions in document N3454, and unconfirmed minutes in document N3453 for meeting 52 – with any corrections noted in section 3 in the minutes of meeting 53 in document N3553)  | Status   |
|---------|--|--|
| AI-52-3 | <b>Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)</b>  |  |
|         | <i>To prepare the appropriate amendment texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:</i>  |  |
| v.      | <b>M52.24 (FCD of next edition):</b> WG2 instructs its project editor to prepare a working draft of the text for the next edition of the standard updated to include the text of Amendment 6 for review at WG2 meeting M53.<br>The new schedule is WD 2008-09, FCD: 2008-11 and FDIS: 2009-06.<br>M53 – in progress.   | Completed; see second edition draft document set N3593.            |
| AI-52-4 | <b>IRG Convenor and IRG Editor (Dr. Lu Qin)</b>  |  |
|         | <i>To take note of and act upon the following items:</i>   |  |
| a.      | <b>M52.26 (Multiple-column format for Ideograph charts):</b> WG2 accepts the dense formats for multiple columns as described in document N3408 as follows: <ul style="list-style-type: none"> <li>• Format from page 5 for the main CJK Unified Ideographs block</li> <li>• From page 6 for CJK Extension A block</li> <li>• From page 7 for CJK Extension B and Extension C block.</li> </ul> WG2 further requests IRG to use these formats in preparing the multiple-column formats in cooperation with the project editor with possible updates if necessary.<br>M53 – in progress. | Noted; see format used in second edition draft document set N3593. |
| b.      | <b>M52.27 (IRG matters):</b> WG2 requests IRG <ol style="list-style-type: none"> <li>a) to prepare and present plans for their work on 'Annex S revision' and 'IRG Principles and Procedures'</li> <li>b) to study and report on the request regarding Ideographic Description Sequences (IDS) from document N3459 (Unicode Liaison Report) towards inclusion in the standard</li> <li>c) to review and report on request for HKSCS extensions in document N3445</li> </ol> for consideration at WG2 meeting 53.<br>M53 – in progress.   | Item a) is in progress; items b) and c) have been completed.       |
| c.      | To investigate and report on the availability of outline fonts for producing the CJK multiple-column charts – including CJK Ext. C.<br>M53 – in progress.  | Completed.   |
| AI-52-7 | <b>Ireland (Mr. Michael Everson)</b>   |  |
|         | <i>To take note of and act upon the following items.</i>   |  |
| a.      | <b>M52.5 (Principles for Dandas):</b> 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.<br>M53 – in progress.                             | In progress.   |
| AI-52-8 | <b>Korea (Republic of) (Prof. Kyongsok Kim)</b>  |  |
|         | <i>To take note of and act upon the following items.</i>   |  |
| a.      | To prepare a contribution elaborating on the differences between Unicode and ISO/IEC 10646 reported in document N3422, and to gather and report on feedback on this document from national bodies and liaison organizations<br>M53 – in progress.  | Completed; document N3535.   |

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

| Item    | Assigned to / action (Reference resolutions in document N3454, and unconfirmed minutes in document N3453 for meeting 52, this document you are reading). | Status                         |
|---------|--|--------------------------------|
| AI-53-1 | <b>Recording Secretary - Dr. V.S. UMaaheswaran</b>   |                                |
| a.      | To finalize the document N3554 containing the adopted meeting resolutions and send it to the convener as soon as possible.                               | Completed; see document N3554. |
| b.      | To finalize the document N3553 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.                               | Completed; see document N3553. |



|                |  |   |
|----------------|--|---|
| <b>AI-53-2</b> | <b>Convener - Mr. Mike Ksar</b>  |   |
|                | <i>To take note of and act upon the following items.</i>   |   |
| <b>a.</b>      | <b>M53.29 (Roadmap snapshot):</b> WG2 instructs its convener to post the updated snapshot of the roadmaps (in document <a href="#">N3518</a> ) to the WG2 web site and communicate the same to SC2 secretariat. The roadmap ad hoc is to remove Old Hanzi, and add Bronze (about 4000) and Small Seal (about 10000) in the Tertiary Ideographic Plane for the next version of the roadmap.   | Completed; see document <a href="#">N3518</a> .               |
| <b>b.</b>      | To add to the agenda proposals carried over from meeting 53 (see action item AI-53-11-h on all national bodies later in this table).   | Completed.  |
| <b>AI-53-3</b> | <b>Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)</b>  |   |
|                | <i>To prepare the appropriate amendment texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:</i>  |   |
| <b>a.</b>      | <b>M53.01 (Nüshu script):</b> WG2 resolves to remove the Nüshu script currently encoded in Amendment 6.2 for further study. Chinese national body is invited to provide a revised contribution including considerations for Nüshu related comments in the draft disposition of PDAM 6.2 ballot comments in document <a href="#">N3516</a> .  | Noted; removed from FPDAM 6 text.                             |
| <b>b.</b>      | <b>M53.02 (Meetei Mayek script):</b> WG2 resolves to remove the current encoding of Meetei Mayek script and replace it as follows:<br>a. Remove the current Meetei Mayek block 1C80 to 1CCF and its contents.<br>b. Create a new block ABC0 to ABFF named Meetei Mayek and populate it with a subset of 55 Meetei Mayek characters, and an additional character MEETEI MAYEK I LONSUM, for a total of 56 characters in code positions ABC0 to ABED and ABF0 to ABF9 (with glyphs, names and code positions shown in document <a href="#">N3473</a> ), and,<br>c. Relegate the remaining subset of 23 (historical) Meetei Mayek characters (listed in document <a href="#">N3478</a> ) for further study.   | Completed; see FPDAM6 in document set <a href="#">N3576</a> . |
| <b>c.</b>      | <b>M53.03 (Vedic extensions):</b> WG2 accepts the following changes in encoding of Vedic extensions in Amendment 6:<br>a. Add the following 9 characters with glyphs as shown in document <a href="#">N3488</a><br>094E DEVANAGARI VOWEL SIGN PRISHTHAMATRA E<br>1CD4 VEDIC SIGN YAJURVEDIC KASHMIRI SVARITA<br>1CE9 VEDIC SIGN ANUSVARA ANTARGOMUKHA<br>1CEA VEDIC SIGN ANUSVARA BAHIRGOMUKHA<br>1CEB VEDIC SIGN ANUSVARA VAMAGOMUKHA<br>1CEC VEDIC SIGN ANUSVARA VAMAGOMUKHA WITH TAIL<br>1CF1 VEDIC SIGN ANUSVARA UBHAYATO MUKHA<br>A8F9 DEVANAGARI GAP FILLER<br>A8FB DEVANAGARI HEADSTROKE<br>b. The following characters are moved:<br>0973 DEVANAGARI SIGN PUSHPIKA in Devanagari block is moved to A8F8 in Devanagari Extended block<br>0974 DEVANAGARI CARET in Devanagari block is moved to A8FA in Devanagari Extended block<br>1CF1 VEDIC SIGN ARDHAVISARGA is moved to 1CF2 in the Vedic Extension block. | Completed; see FPDAM6 in document set <a href="#">N3576</a> . |
| <b>d.</b>      | <b>M53.04 (Myanmar Extended-A for Khamti Shan):</b> WG2 accepts the 13 additions, 12 moves without renaming, and 2 moves with renaming, of currently encoded characters in Myanmar Extended-A block (detailed in the US ballot comment T.4 in document <a href="#">N3542</a> ), with the glyphs and rearranged charts as shown in document <a href="#">N3492</a> .   | Completed; see FPDAM6 in document set <a href="#">N3576</a> . |
| <b>e.</b>      | <b>M53.05 (Old South Arabian):</b> WG2 accepts the renaming of all the Old South Arabian characters using the North Western Semitic names, showing the Arabic-based names as aliases, and moving the Latin transliterations as annotations – as shown in disposition of comments for Ireland T10 in document <a href="#">N3542</a> :   | Completed; see FPDAM6 in document set <a href="#">N3576</a> . |
| <b>f.</b>      | <b>M53.06 (Kaithi punctuation marks):</b> WG2 accepts the addition of the following Kaithi characters with their glyphs as shown in document <a href="#">N3546</a> :<br>110BD KAITHI NUMBER SIGN<br>110C0 KAITHI DANDA<br>110C1 KAITHI DOUBLE DANDA  | Completed; see FPDAM6 in document set <a href="#">N3576</a> . |
| <b>g.</b>      | <b>M53.07 (Additions from HKSCS):</b> WG2 accepts to encode 5 ideographs from post HKSCS-2004 at positions 9FC7: H-87C2, 9FC8: H-87D2, 9FC9: H-87D6, 9FCA: H-87DA and 9FCB: H-87DF in the existing CJK Unified Ideographs block, with their glyphs, and source references from document <a href="#">N3513</a> .  | Completed; see FPDAM6 in document set <a href="#">N3576</a> . |

|    |   |   |
|----|---|---|
| h. | <p><b>M53.08 (Soccer ball symbol):</b> WG2 accepts to:</p> <ol style="list-style-type: none"> <li>move characters at 26BD and 26BE down by one position to 26BE and 26BF respectively, and</li> <li>to encode 26BD SOCCER BALL with its glyph from document <a href="#">N3514</a>.</li> </ol>   | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| i. | <p><b>M53.09 (Old Turkic):</b> WG2 accepts the following changes to Old Turkic encoding:</p> <ol style="list-style-type: none"> <li>Insert a new character and move down the rest by one:<br/>10C1C – OLD TURKIC LETTER ORKHON OEK</li> <li>Rename (the moved) OLD TURKIC LETTER ORKHON OK to<br/>10C1D - OLD TURKIC LETTER YENISEI OEK</li> <li>Rename (the moved) OLD TURKIC LETTER YENISEI ENG to<br/>10C2E - OLD TURKIC LETTER YENISEI AENG</li> <li>Insert a new character moving the rest down by one<br/>10C27 – OLD TURKIC LETTER YENISEI ENT</li> </ol> <p>with the glyphs and rearranged charts as shown in document <a href="#">N3546</a>.</p> | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| j. | <p><b>M53.10 (Tangut):</b> WG2 accepts the ad hoc report on Tangut in document <a href="#">N3541</a>, and</p> <ol style="list-style-type: none"> <li>resolves to remove encoding of Tangut from Amendment 6</li> <li>to add it to Amendment 7 (to be started at this meeting), and</li> <li>invites experts from the national bodies of China, Ireland, UK, USA and any other interested experts to work together and propose a documented common position on Tangut for the next WG2 meeting.</li> </ol>   | Completed; see FPDAM6 in document set <a href="#">N3576</a> , and PDAM7 in document set <a href="#">N3557</a> . |
| k. | <p><b>M53.11 (Cyrillic letters for Abkhazian):</b> WG2 accepts to encode the two characters:<br/>0524 CYRILLIC CAPITAL LETTER PE WITH DESCENDER<br/>0525 CYRILLIC SMALL LETTER PE WITH DESCENDER<br/>in the Cyrillic Supplement block with their glyphs from document <a href="#">N3435</a>.</p>  | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| l. | <p><b>M53.12 (Tai Lue):</b> WG2 accepts to encode the two characters:<br/>19AA NEW TAI LUE LETTER HIGH SUA<br/>19AB NEW TAI LUE LETTER LOW SUA<br/>with their glyphs as shown in document <a href="#">N3546</a>.</p>  | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| m. | <p><b>M53.13 (Renaming of characters):</b> WG2 accepts to rename:</p> <ol style="list-style-type: none"> <li>Several symbols as detailed in document <a href="#">N3542</a> for US comment T.6.</li> <li>Four Tibetan characters as detailed in document <a href="#">N3542</a> for Irish comment T5.</li> </ol>  | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| n. | <p><b>M53.14 (UCAS changes):</b> WG2 accepts to change the encoding of UCAS in Amendment 6 as follows:</p> <ol style="list-style-type: none"> <li>Create a new block named Unified Canadian Aboriginal Syllabics Extended in the range 18B0 to 18FF</li> <li>Move the current 29 UCAS characters encoded in A9E0 to A9FC to the range 18E0 to 18FC.</li> <li>Delete the block named Unified (corrected from United) Canadian Aboriginal Syllabics Extended-A in the range A9E0 to A9FF.</li> </ol> <p>See document <a href="#">N3546</a>.</p>   | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| o. | <p><b>M53.15 (Modern Bamum):</b> WG2 accepts to encode in a new block named Bamum in the range A6A0 to A6FF, and populate it with 88 characters with their code positions, names and glyphs as shown in document <a href="#">N3522</a>. WG2 notes that this script had passed one round of balloting as part of Amd. 5 earlier, but was held back for further input from the user community.</p>  | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| p. | <p><b>M53.16 (Disposition of PDAM6.2 ballot comments):</b> WG2 accepts the disposition of ballot comments on PDAM6 in document <a href="#">N3542</a> and instructs its editor to prepare the final text of Amendment 6 incorporating the dispositions, including all the changes and additions accepted in resolutions M53.01 to M53.15 above.</p>  | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| q. | <p><b>M53.17 (Progression of Amendment 6):</b><br/>WG2 instructs its project editor to forward the final text of Amendment 6 along with the disposition of comments document <a href="#">N3542</a> to the SC2 secretariat for an FPDAM ballot. The final set of charts and names lists are in document <a href="#">N3546</a>. The unchanged target starting dates are FPDAM 2008-11 and FDAM 2009-06.</p>   | Completed; see FPDAM6 in document set <a href="#">N3576</a> .   |
| r. | <p><b>M53.18 (JIS X0213 named sequences):</b> WG2 accepts to include in the standard the 23 JIS X0213 named sequences proposed in document <a href="#">N3529</a>, with the name RISING SYMBOL replaced with MODIFIER LETTER EXTRA-LOW EXTRA-HIGH CONTOUR TONE BAR.</p>  | Completed; see PDAM7 in document set <a href="#">N3557</a> .  |
| s. | <p><b>M53.19 (Arabic pedagogical symbols):</b> WG2 accepts to encode in the standard 16 Arabic pedagogical symbols (requested in document <a href="#">N3460</a>) at code positions FBB2 to FBC1 in the Arabic Presentation Forms-A block, with their glyphs, names and code positions as shown in document <a href="#">N3547</a>.</p>   | Completed; see PDAM7 in document set <a href="#">N3557</a> .  |



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| t.             | <b>M53.20 (Mandaic script):</b> WG2 accepts to encode in the standard 29 characters (a subset of the proposal in document <a href="#">N3485</a> ) in code positions 0840 to 085B and 085E in a new block 0840 to 085F named Mandaic, with their names, code positions and glyphs as shown in document <a href="#">N3547</a> .   | Completed; see PDAM7 in document set <a href="#">N3557</a> .                                    |
| u.             | <b>M53.21 (Batak script):</b> WG2 accepts to encode in the standard 58 characters (proposed in document <a href="#">N3320</a> ) in code positions 1BC0 to 1BF3 and 1BFA to 1BFF in a new block 1BC0 to 1BFF named Batak, with their names, code positions and glyphs as shown in document <a href="#">N3547</a> .   | Completed; see PDAM7 in document set <a href="#">N3557</a> .                                    |
| v.             | <b>M53.22 (Brahmi script):</b> WG2 accepts to encode in the standard 108 characters in code positions 11000 to 1104D and 11052 to 1106F, in a new block 11000 to 1107F in the SMP, named Brahmi, with their names, code positions and glyphs as shown in document <a href="#">N3490</a> .   | Completed; see PDAM7 in document set <a href="#">N3557</a> .                                    |
| w.             | <b>M53.23 (More UCAS characters):</b> WG2 accepts to encode in the standard 41 characters in code positions 18B0 to 18D1, 18D3 to 18D7, and 18D9 to 18DA in UCAS Extended block, with their names, code positions and glyphs as shown in document <a href="#">N3507</a> .   | Completed; see PDAM7 in document set <a href="#">N3557</a> .                                    |
| x.             | <b>M53.24 (Miscellaneous character additions):</b> WG2 accepts to encode in the standard the following:<br>a. four characters with their glyphs as shown in document <a href="#">N3481</a> :<br>A78D LATIN CAPITAL LETTER TURNED H<br>A78E LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT<br>0526 CYRILLIC CAPITAL LETTER SHHA WITH DESCENDER<br>0527 CYRILLIC SMALL LETTER SHHA WITH DESCENDER<br>b. two Tifinagh characters with their glyphs as shown in document <a href="#">N3482</a> :<br>2D70 TIFINAGH SEPARATOR MARK<br>2D7F TIFINAGH CONSONANT JOINER<br>c. two Malayalam characters with their glyphs as shown in document <a href="#">N3494</a> :<br>0D29 MALAYALAM LETTER NNNA<br>0D3A MALAYALAM LETTER TTTA<br>d. six Oriya fractions with their glyphs as shown in document <a href="#">N3471</a> :<br>0B72 ORIYA FRACTION ONE QUARTER<br>0B73 ORIYA FRACTION ONE HALF<br>0B74 ORIYA FRACTION THREE QUARTERS<br>0B75 ORIYA FRACTION ONE SIXTEENTH<br>0B76 ORIYA FRACTION ONE EIGHTH<br>0B77 ORIYA FRACTION THREE SIXTEENTHS<br>e. 3097 HIRAGANA LETTER YE with its glyph as shown in document <a href="#">N3388</a> (relegating KATAKANA LETTER ORIGINAL E for further study). | Completed; see PDAM7 in document set <a href="#">N3557</a> .                                    |
| y.             | <b>M53.25 (Amendment 7 – subdivision and PDAM text):</b> WG2 instructs its project editor and convener to prepare a project sub division proposal (see document <a href="#">N3545</a> ) and PDAM text based on resolutions M53.10 and M53.18 to M53.24 above, and forward them to the SC2 secretariat for ballot. The proposed start dates for the progression of this work item are: PDAM 2008-11, FPDAM 2009-06, and FDAM 2009-11.  | Completed; see document <a href="#">N3545</a> and PDAM7 in document set <a href="#">N3557</a> . |
| z.             | <b>M53.28 (Working Draft of next edition):</b> WG2 instructs its project editor to prepare an updated Working Draft for the next edition of the standard by 2009-03, based on documents <a href="#">N3508</a> , <a href="#">N3509</a> and <a href="#">N3510</a> , reflecting the feedback from this meeting, and changes resulting from resolutions M53.17 on Amendment 6, M53.25 on Amendment 7 and M53.27 on multiple-column formats for CJK, above. WG2 notes that the scope of the next edition is extended to include the additions in Amendment 7. The updated start dates for the next edition of standard are: FCD: 2009-05 and FDIS: 2009-11.  | Completed; see PDAM7 in document set <a href="#">N3593</a> .                                    |
| <b>AI-53-4</b> | <b>IRG Convenor and IRG Editor (Dr. Lu Qin)</b>   |   |
|                | <i>To take note of and act upon the following items:</i>  |   |
| a.             | <b>M53.30 (Access to CJK Ext. B glyphs):</b> The IRG is requested to make the CJK Ext. B glyphs from the current single-column format available from the IRG website to facilitate their future referencing, after the multiple-column format for CJK Extension B is published.   | In progress.  |
| b.             | <b>M53.31 (IVSs for compatibility ideographs):</b> The IRG, and all national bodies and liaison organizations, are requested to review and provide feedback on document <a href="#">N3525</a> on using IVSs as the solution for representing additional compatibility ideographs.   | Completed; no feedback.   |
| c.             | <b>M53.32 (Japanese compatibility ideographs):</b> The IRG, and all national bodies and liaison organizations, are requested to review and provide feedback on the request for additional compatibility ideographs in document <a href="#">N3530</a> from Japan.  | In progress.  |
| <b>AI-53-5</b> | <b>Ad hoc group on roadmap (Mr. Michael Everson)</b>  |   |

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|                 | <i>To take note of and act upon the following items.</i>   |  |
| a.              | <b>M53.29 (Roadmap snapshot):</b> WG2 instructs its convener to post the updated snapshot of the roadmaps (in document <a href="#">N3518</a> ) to the WG2 web site and communicate the same to SC2 secretariat. The roadmap ad hoc is to remove Old Hanzi, and add Bronze (about 4000) and Small Seal (about 10000) in the Tertiary Ideographic Plane for the next version of the roadmap.   | Completed.<br>Document <a href="#">N3608</a> has updates.                                |
| b.              | To update the roadmaps reflecting changes to block allocations through the various resolutions at this meeting 53.   | Completed.   |
| <b>AI-53-6</b>  | <b>Ireland (Mr. Michael Everson)</b>   |  |
|                 | <i>To take note of and act upon the following items.</i>   |  |
| a.              | To provide the collation information related to the two Tai Lue characters in resolution <b>M53.12 (Tai Lue):</b> WG2 accepts to encode the two characters:<br>19AA NEW TAI LUE LETTER HIGH SUA<br>19AB NEW TAI LUE LETTER LOW SUA<br>with their glyphs as shown in document <a href="#">N3546</a> .   | In progress.   |
| b.              | With reference to the proposal for four Devanagari characters for Kashmiri in document <a href="#">N3480</a> , to work with India (Ms. Swaran Lata) to prepare a revised proposal to WG2 by end of Feb 2009  | In progress.   |
| <b>AI-53-7</b>  | <b>India (Ms. Swaran Lata)</b>   |  |
|                 | <i>To take note of and act upon the following items.</i>   |  |
| a.              | With reference to the proposal for four Devanagari characters for Kashmiri in document <a href="#">N3480</a> , to work with Ireland (Mr. Michael Everson) to prepare a revised proposal to WG2 by end of Feb 2009.   | In progress.   |
| <b>AI-53-8</b>  | <b>China (Mr. Chen Zhuang)</b>   |  |
|                 | <i>To take note of and act upon the following items.</i>   |  |
| a.              | <b>M53.01 (Nüshu script):</b> WG2 resolves to remove the Nüshu script currently encoded in Amendment 6.2 for further study. Chinese national body is invited to provide a revised contribution including considerations for Nüshu related comments in the draft disposition of PDAM 6.2 ballot comments in document <a href="#">N3516</a> .  | Completed;<br>see document <a href="#">N3598</a> .                                       |
| <b>AI-53-9</b>  | <b>Korea (Republic of) (Prof. Kyongsok Kim)</b>  |  |
|                 | <i>To take note of and act upon the following items.</i>   |  |
| a.              | Korea is invited to take note of the feedback in document <a href="#">N3536</a> and coordinate with the US national body and the Unicode consortium in addressing the concerns expressed therein regarding KS X1026-1 standard.  | Completed;<br>see documents <a href="#">N3611</a> and <a href="#">N3633</a> .            |
| b.              | With reference to document <a href="#">N3535</a> , Korea (Republic of) is invited to prepare a contribution identifying the changes needed for 10646 or Unicode or both to remove any differences in the encoding of Jamos between the two standards by end of 2008. National bodies and liaison organizations are invited to feedback on that document by end of Feb 2009.  | Completed;<br>see documents <a href="#">N3611</a> and <a href="#">N3633</a> .            |
| <b>AI-53-10</b> | <b>USA (Ms. Deborah Anderson)</b>  |  |
|                 | <i>To take note of and act upon the following items.</i>   |  |
| a.              | Korea is invited to take note of the feedback in document <a href="#">N3536</a> and coordinate with the US national body and the Unicode consortium in addressing the concerns expressed therein regarding KS X1026-1 standard.  | Completed;<br>see documents <a href="#">N3611</a> and <a href="#">N3633</a> .            |
| <b>AI-53-11</b> | <b>All national bodies and liaison organizations</b>   |  |
|                 | <i>To take note of and act upon the following items.</i>   |  |
| a.              | <b>M53.10 (Tangut):</b> WG2 accepts the ad hoc report on Tangut in document <a href="#">N3541</a> , and <ul style="list-style-type: none"> <li>a. resolves to remove encoding of Tangut from Amendment 6</li> <li>b. to add it to Amendment 7 (to be started at this meeting), and</li> <li>c. invites experts from the national bodies of China, Ireland, UK, USA and any other interested experts to work together and propose a documented common position on Tangut for the next WG2 meeting.</li> </ul> | Completed;<br>see documents <a href="#">N3586</a> , document set <a href="#">N3577</a> . |
| b.              | <b>M53.26 (Co-location of chart and nameslist):</b> In response to comment E.2 from Japan (see document <a href="#">N3542</a> ) WG2 asserts that the project editor has the choice of formatting a code chart and its associated nameslist on the same page where it is considered to be space-saving and convenient.  | Noted.   |

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| c. | <b>M53.27 (Multiple-column formats for CJK in next edition):</b> WG2 notes that the production of multiple-column format for CJK charts is dependent on timely availability of the requisite fonts from IRG member bodies. WG2 also takes note of a similar dependency on availability of fonts for the Unicode standard described in document <a href="#">N3524</a> . IRG member bodies are requested to send the requisite fonts for non-CJK Extension B charts before 2008-12-31 and for CJK Extension B charts before 2009-10-15, to the project editor. The IRG convener is instructed to seek the cooperation of the IRG member bodies to meet the above dates.   | Noted; see document <a href="#">N3612</a> from Japan.   |
| d. | <b>M53.31 (IVSs for compatibility ideographs):</b> The IRG, and all national bodies and liaison organizations, are requested to review and provide feedback on document <a href="#">N3525</a> on using IVSs as the solution for representing additional compatibility ideographs.   | No feedback.  |
| e. | <b>M53.32 (Japanese compatibility ideographs):</b> The IRG, and all national bodies and liaison organizations, are requested to review and provide feedback on the request for additional compatibility ideographs in document <a href="#">N3530</a> from Japan.  | Some feedback; see documents <a href="#">N3590</a> and <a href="#">N3591</a> .  |
| f. | With reference to document <a href="#">N3535</a> , Korea (Republic of) is invited to prepare a contribution identifying the changes needed for 10646 or Unicode or both to remove any differences in the encoding of Jamos between the two standards by end of 2008. National bodies and liaison organizations are invited to feedback on that document by end of Feb 2009.   | Some feedback; see documents <a href="#">N3611</a> and <a href="#">N3633</a> .  |
| g. | <b>M53.33 (Future meetings):</b> WG2 endorses the following schedule for future meetings of WG2 and of IRG:<br>WG 2 meetings:<br>Meeting 54 - 2009-04-20/24, Dublin, Ireland (host: Dublin City University)<br>Meeting 55 - 2009-10-26/30, Tokushima, Japan (with SC2 plenary)<br>Meeting 56 - 2010-04-19/23, Mountain View, CA. USA (pending confirmation); Canada (backup).<br>Meeting 57 - Fall 2010, Korea (Republic of) (pending confirmation of date and location)<br>Meeting 58 - Spring 2011, Finland (pending confirmation) (with SC2 plenary)<br>Meeting 59 – Fall 2011, Mountain View, CA, USA (pending confirmation)<br>IRG meetings:<br>IRG 31 in Kunming, China, 2008-11-10/14  | Noted.  |
| h. | To review and feedback the following proposals for consideration at the next meeting M53:<br>a. Manichaeian script proposal with reference to document <a href="#">N3486</a><br>b. Sorang Sompeng script with reference to documents <a href="#">N1957</a> and <a href="#">N3410</a><br>c. Varang Kshiti script with reference to documents <a href="#">N1958</a> and <a href="#">N3411</a><br>d. Last resort pictures in plane 14 with reference to document <a href="#">N3412</a><br>e. Naxi Dongba pictograph with reference to documents <a href="#">N3425</a> , <a href="#">N3442</a> and <a href="#">N3543</a><br>f. Chakma script with reference to document <a href="#">N3428</a><br>g. Old Yi script with reference to document <a href="#">N3288</a><br>h. Old Bamum script with reference to document <a href="#">N3472</a><br>i. Meroitic script with reference to document <a href="#">N3484</a><br>j. Tangut radicals and CJK strokes with reference to document <a href="#">N3495</a><br>k. Old Hungarian script with reference to documents <a href="#">N3483</a> , <a href="#">N3526</a> and <a href="#">N3527</a> | Revised old Bamum for item h, revised Tangut radicals for item j, and item k on Old Hungarian are on the agenda for M54. Drop item d. Others to be carried forward. |

## 5 JTC1 and ITTF matters

### 5.1 Amendment 5 Publication 2008-12-01

Mr. Mike Ksar: Amendment 5 has been published by ITTF. It is available from the ITTF web site as part of the freely available collection of standards - see:  
[http://standards.iso.org/ittf/PubliclyAvailableStandards/c046577\\_ISO\\_IEC\\_10646\\_2003\\_Amd\\_5\\_2008\(E\).zip](http://standards.iso.org/ittf/PubliclyAvailableStandards/c046577_ISO_IEC_10646_2003_Amd_5_2008(E).zip)

### 5.2 Complaint to ISO about Hieroglyphs publication in Amendment 5

Mr. Mike Ksar: There was a letter sent to ITTF by an Egyptologist Dr. Ramses Seleem who lives in UK, stating that he was an expert and he did not get a chance to review the Egyptian Hieroglyphs in Amendment 5, or was consulted etc. I responded to ITTF with the rationale explaining that SC2/WG2 has consulted top technical and linguistic experts including ones in Egypt; that there was a thorough

review before the amendment was published; and that ISO/IEC procedures and processes were followed.

Discussion:

- a. Mr. Andrew West: The person complained to BSI and it was brought to my attention. We looked at his document and found that there was no merit to his complaint. We have responded to him. He was complaining about the glyphs in the Amd. He had his own font. We assured him that he can make his font available to others. The other complaint was that the set was not complete; so we explained to him about the current set the Hieroglyphs were taken from.
- b. Mr. Michael Everson: The set we were using was Gardiner's set that was digitized. He can use his own font as he pleases.
- c. Mr. Mike Ksar: Mr. Ola El Aguizy, an Egyptian professor of Egyptology in University of Cairo also had reviewed the content of what went into Amd. 5.

## **6 SC2 matters**

### **6.1 SC2 Program of Work**

Input documents:

[SC2-POW](#) JTC1/SC2 Program of Work - <http://www.dkuug.dk/JTC1/SC2/open/pow.htm>

The latest SC2 program of work is available from the SC2 web site. There was no discussion.

### **6.2 Ballot results – Amendments 6 and 7**

Input documents:

[3599](#) Summary of Voting on SC 2 N4049, ISO/IEC 10646: 2003/FPDAM 6; SC2 02n4065; sc2 n3404; SC2 Secretariat; 2009-03-30

[3592](#) Summary of Voting on SC 2 N4052, ISO/IEC 10646: 2003/PDAM 7; SC2 Secretariat; 2009-03-12

FPDAM6 ballot had 20 national body votes and 9 national bodies did not vote. There were 5 abstentions, 2 disapprovals, 10 approvals as written and 5 approvals with comments. Section 11.1 on page 38 has the discussion and disposition of comments at this meeting.

PDAM7 ballot had 20 national body votes and 9 did not vote. There were 5 abstentions, 5 disapprovals, 8 approvals as written and 2 approvals with comments. Section 11.2 on page 46 has the discussion and disposition of comments at this meeting.

### **6.3 Information on Ideographic Variation Data Base**

Input document:

[3591](#) Information on the Unicode Ideographic Variation Database – Letter to SC2; Unicode Consortium; 2009-03-12

For information of WG2 experts, national bodies and liaisons. There was no discussion.

### **6.4 Handling glyph shapes for Government use in Japan**

Input document:

[3530](#) Proposal to Add a Set of Compatibility Ideographs for Government Use; Japan – NB; 2008-10-10

[3590](#) Handling Glyph Shapes for Government Use in WG2/N3530 via Variation Sequences; Unicode Technical Committee and US National Body; 2009-02-09

Mr. Mike Ksar: This document is for information of WG2 experts, national bodies and liaisons.

Dr. Ken Whistler: Document N[3590](#) has some answers to questions that were raised by Japan at the last meeting. Japanese national body should take a look at this document.

### **6.5 Feedback from SEI regarding African languages**

Input document:

[3641](#) SC2 letter on African languages; Debbie Anderson; 2009-04-23

Mr. Tatsuo Kobayashi: At the last plenary JTC1 had a discussion regarding African languages. Ms. Debbie Anderson has prepared a report for SC2 to take forward. I would like WG2 to review this before we take it forward.

- a. Ms. Debbie Anderson: Document N[3641](#) has a brief background about African languages and a summary of the current status of information toward their encoding.
- b. Mr. Mike Ksar: Do we have an idea about how many characters?

- c. Dr. Ken Whistler: As stated in this document it seems to be addressing the sub-Sahara that use primarily the Latin based scripts. There are also languages using Arabic script. Both these will need a few additions of characters to existing Latin and Arabic sets. There are also other scripts like Tifinagh and N'Ko etc.
- d. Ms. Debbie Anderson: There will be an attachment to this report and it will include these.
- e. Mr. Peter Constable: Do the supplementary scripts include outstanding characters that are under study for Tifinagh etc.?
- f. Dr. Ken Whistler: We have to specifically mention Ethiopic script also. There may be other minority scripts from Ethiopia as well as Eritrea.
- g. Mr. Mike Ksar: I request Ms. Debbie Anderson update the report including all the feedback.

**Relevant resolution:**

**M54.23 (Response on African languages):**

**Unanimous**

WG2 thanks Ms. Deborah Anderson for the report on African languages in document [N3641](#), and instructs its convener to send it to the SC2 secretariat for forwarding to JTC1 in response to Resolution 34 from JTC1 plenary in November 2008.

## **7 WG2 matters**

### **7.1 Ad hoc meetings**

Ad hoc groups to discuss Hungarian, Emoji, Nüshu, Tangut and other contributions met at different times during the meeting. The ad hoc reports and the resulting resolutions are included under the corresponding agenda items.

### **7.2 Roadmap**

**Input document:**

[3608](#) Roadmap snapshot; Uma; 2009-04-09

Dr. Umamaheswaran presented the latest update to the roadmaps in document [N3608](#). He pointed to the history of changes to show the differences from the previous version. He also mentioned that the SMP may be modified to include additional space for RTL scripts.

Dr. Gábor Hosszú sent an email with some feedback re: RTL rows in SMP. This has been forwarded to the roadmap ad hoc for information.

**Relevant resolution:**

**M54.24 (Roadmap snapshot):**

**Unanimous**

WG2 instructs its convener to post the updated snapshot of the roadmaps (in document [N3608](#)) to the WG2 web site and communicate the same to SC2 secretariat.

### **7.3 Working draft of next edition of ISO/IEC 10646**

**Input documents:**

[3593](#) Next edition WD with all charts and text; Michel Suignard; 2009-03-25

[3612](#) Comments on code charts in WD 10646 (WG2 N3593); Japan NB; 2009-04-10

[3627](#) Summary of WD 3593; Michel Suignard; 2009-04-22

Mr. Mike Ksar: The working draft of the next edition was posted as document [N3593](#). Japan has some feedback in document [N3612](#). Document [N3627](#) contains a short description of the new working draft.

Mr. Michel Suignard: The next edition draft contains about 2200 pages. The document is posted as multiple .pdf files. The files should be in the same directory so that the various charts can be linked from the main section on page 54. I changed the multiple-column format a little bit. It is very similar to what we discussed at the last meeting. We were planning to have four columns for CJK Ext. A; it is reduced to three columns now. I did not include all the appended files in the current collection. There are several .txt files that are part of previous amendments and these will be included in the CD. The only thing that could have been included in the WD was the full names list. Consolidated CJK source reference files were included in the WD. A description of these sources - what is and what is not included in the WD is described in [N3627](#). Now that I have the fonts from different sources the CD will include the missing glyphs. We talked about the G-source earlier. When the fonts from IRG members are not made available, the fonts used will be the latest available commercial fonts. There is some missing source information for five ideographs -- these are called out in document [N3627](#). Radical stroke info is missing for three ARIB characters. I seek assistance of Japan to get that information. I seek input from all the IRG members for the CJK content.



KP font information is missing. If attempts to contact DPRK are not successful we can remove this column in the future.

Discussion:

- a. Dr. Lu Qin: DPRK in the past sent mappings of their standards to ISO/IEC 10646. They never sent any fonts etc. The KP column has only the mappings in the standard. The multiple-column is to show the images. If there are no images, then there is no need to have a separate column. The mapping table contains the mapping data. IRG has not discussed it -- but the KP column can possibly be removed. DPRK had come to China IRG meeting for the Ext. C work and had sent the fonts. But they have not attended since then.
- b. Dr. Umamaheswaran: Summarizing - the mapping information will be kept as .txt file. Ext. C will have the glyphs for DPRK. The KP column will be removed if no fonts are supplied.
- c. Mr. Michel Suignard: It is quite a bit of work to remove the column from CD. They have sent the fonts for Compatibility DPRK ideographs etc. They do exist somewhere.
- d. Dr. Lu Qin: I tried to reach DPRK directly and through Mr. Chen Zhuang, but have not received any responses.
- e. Mr. Tatsuo Kobayashi: You can try to contact the SC2 secretariat to reach DPRK through the ISO channels.
- f. Dr. Lu Qin: I will contact the SC2 secretariat also.
- g. Dr. Ken Whistler: If the editor's position is to keep the KP column in the CD, would it be possible to insert an editorial note to indicate that the KP column will disappear if we don't receive the fonts from DPRK.

**Relevant resolution:**

**M54.22 (Fonts for DPRK ideographs):**

**Unanimous**

The IRG rapporteur is requested to contact the SC2 secretariat to reach DPRK for getting the fonts suitable to print the DPRK ideographs in the multi-column CJK charts in the standard. All IRG members are also requested to assist the IRG rapporteur in this effort.

Mr. Michel Suignard: I would like to include Amd. 8 also if I can into the CD ballot. The CD will certainly include up to Amd. 7.

Discussion:

- a. Dr. Ken Whistler: I assume that you are planning to include up to Amd. 8, and all the updates to Amd. 6 and Amd. 7 at this meeting.
- b. Mr. Michel Suignard: Yes. It will reflect the decisions at this meeting. Amd. 6 and Amd. 7 will go through the normal process.
- c. Mr. Alain LaBonté: We could also not progress Amd. 8 and proceed only with CD ballot.
- d. Mr. Michel Suignard: If we want to include Amd. 8 and progress only the CD -- there are some production related problems associated with it. There will be an extra ballot.
- e. Mr. Mike Ksar: We should proceed with Amd. 8 independently, possibly in parallel with the CD.
- f. Mr. Alain LaBonté: The ISO/IEC 14651 synchronization with amendments is to be reviewed.
- g. Dr. Ken Whistler: The next major version of Unicode should be in synch with next 10646 edition.
- h. Mr. Masahiro Sekiguchi: The CD for next edition will contain Amd. 8 content. My understanding was CD will contain up to Amd. 7 and the new amendment will be Amd. 1 to CD.
- i. Mr. Michel Suignard: From a practical point of view content of Amd. 8 will be within CD. From the process point of view, proceeding only with CD ballot including Amd. 8 content will be a bit complicated. I would prefer to keep the discussions on the Amd. 8 content separate from the consolidation in CD.
- j. Mr. Masahiro Sekiguchi: I appreciate the hard work and tough job being done by the project editor. From Japanese national body point of view I would like to have some direction statement or roadmap of what the plan is for the CD versus Amd. 8.
- k. Mr. Mike Ksar: We can provide some description of the relationship and some timeline information in the description about the CD.

An ad hoc discussion took place on the various options regarding the CD and Amd. 8. The resulting recommendation was:

- a. To process CD on the second edition with its current scope -- to include content of the standard up to the end of Amd. 7.
- b. Process a new Amd. 8 for the various scripts that are accepted at this meeting.
- c. Revisit the question on whether to merge the processing of Amd. 7 and Amd. 8 with the next edition processing at the next WG2 meeting.

### **Japan's comments on the WD**

Mr. Masahiro Sekiguchi: Japanese national body reviewed the WD and found several problems. These are in document N3612.

Item 1: Replace 'based on JIS X0208' with 'based on JIS X0213' for some Hiragana and Katakana characters in the names list.

Item 2: Change sub-header 'vertical digraphs' to 'digraphs', or remove the subheadings and move the characters into Katakana and Hiragana blocks.

Item 3: The controls are titled C0 and xxx. As far as 10646 is concerned we do not have assignments for controls in C0 and C1. The names were added later to satisfy ITU-T.

Discussion:

- a. Mr. Michel Suignard: The control characters are part of ISO/IEC 10646, except that they don't have names. We did add the names as informative note to C0 and C1 ranges. A note can be added to clarify that the C0 and C1 ranges have no assigned names.
- b. Mr. Masahiro Sekiguchi: We have concern about C0 in the name of the block. C0 space was not included earlier.
- c. Dr. Ken Whistler: This is a synchronization issue. Unicode have for ease of use always shown the basic Latin plus the ASCII controls in the space 0 to 7F. I much prefer the new presentation.
- d. Mr. Michel Suignard: I would be happy to explain that the blocks 'Basic Latin' and 'Latin-1 supplement' have C0 and C1 in them. They are only shown as convenience.
- e. Mr. Masahiro Sekiguchi: I understand the usefulness of showing the chart including the C0. The JP NB is concerned with the block name.
- f. Dr. Ken Whistler: The US position is that the header of the chart is not a normative part -- and it should be up to the editor to make the document useful. The editor can make such exceptions that in the chart containing C0 and C1 if it is the best way to present these for the user convenience.
- g. Mr. Masahiro Sekiguchi: I agree that the code chart header is not a normative part of the standards. The C0 and C1 can be included in the chart. I agree with that too. We did not have the C0 in the previous charts. Why did we change it?
- h. Dr. Ken Whistler: The production of charts earlier - allowed us to do the separate charts. Sometime ago we agreed that the charts in Unicode and 10646 will be synchronized so that we will have identical charts in both the standards. Part of that exercise was to remove the difference in the headers between the two standards. The current WD is the result of that decision we made. Because the charts for 0 to 7F and 10 to FF include the C0 and C1 collections in them, the chart header should reflect that.
- i. Mr. Andrew West: Is C0 part of the Block? I think it is confusing that the header in Unicode versus 10646.
- j. Mr. Mike Ksar: We can leave the header as is to be in synch with the Unicode standard. A note can be added to indicate the exception to the rules for naming of the blocks for these two -- that the charts show C0 and C1.
- k. Mr. Masahiro Sekiguchi: The reader of the standard may lead to the misunderstanding that the basic Latin includes C0.
- l. Mr. Michel Suignard: I can add a sentence or two to explain the presentation of the block headers in clause 30 ... this is missing now. I can add the notes to explain the C0 and C1 special cases.
- m. Mr. Masahiro Sekiguchi: You are proposing the current heading be kept, and add explanatory notes. (Yes).

**Disposition:** The editor will add explanatory / clarification notes regarding charts containing C0 and C1 and the block headers.

Item 4: Japan prefers to have single column chart for Ext. B in light of the fonts not being available.

Mr. Michel Suignard: With the fonts being available from China and Taiwan we are in the position to go ahead with multiple-column charts. It is true that we can go with a single column chart; we had problems earlier with China and Taiwan fonts.

Discussion:

- a. Mr. Masahiro Sekiguchi: We are very much afraid of going ahead with possibility of errors in the fonts. If they are not checked properly totally wrong characters may end up in the

standard or at the wrong position etc. Errors in glyphs created by font designers can creep in. Japan believes that we need very careful review of unified CJK charts before the fonts can be used. Producing charts by getting a font is not just enough. A six month ballot review of checking the fonts is insufficient to catch the glyph errors in the fonts.

- b. Mr. Michel Suignard: In my opinion, the single column Ext. B is close to useless for implementers. I was basing my timeline based on availability of final fonts from China and Taiwan. I was assuming the fonts will be finalized at the next IRG. You are telling us that we do not have good enough charts for two of the main sets of ideographs in CJK Ext. B. Implementers are using the fonts.
- c. Dr. Lu Qin: We were planning to verify the fonts at the next IRG.
- d. Mr. Masahiro Sekiguchi: It is a tough job to verify the fonts. My guess is that the Chinese and Taiwanese do have correct ideographs in the tables, but the font production part can introduce errors and I am afraid of that possibility.
- e. Mr. Mike Ksar: No one is saying that it should not be reviewed.
- f. Mr. Michel Suignard: I understand that the correctness of glyphs in CJK is very important. I don't think the next edition CD will be perfect. We have to trust China and Taiwan to review internally their own fonts. We have the tools to produce the charts quickly with the fonts.
- g. Dr. Lu Qin: I talked to both China and Taiwan. China's font for Ext. B has never changed. There is unlikely to have any changes in China. Taiwan is reviewing within the government. And if they discover any changes they can point to the specific changes. I would suggest that we produce Ext. B multiple-column chart for IRG 32 meeting to review.
- h. Mr. Michel Suignard: Today G-source is produced using the fonts we have for Ext. B. The TCA's font may have some questions. I propose to use the Ming Yu font now. I don't have anything from TCA. The concern could be on the T-source, but not on the G source for Ext. B since that is what we are using today.
- i. Dr. Lu Qin: You can have concern about the reform in fonts in China. Taiwan says they have about 100 or so ideographs under review.
- j. Mr. Michel Suignard: There are multiple versions of Ming Yu. The Microsoft Vista version is closer to what TCA wants and that is what I am planning to use.
- k. Mr. Mike Ksar: Your concern is that we will have only one technical cycle to review the TCA ideograph glyphs, and T source is not available to issue the CD. If Taiwan changes are small and are pointed out to us will it still be a concern to Japan?
- l. Mr. Masahiro Sekiguchi: We have already started reviewing the charts using the WD, we will review the CD charts; and if the differences and changes are small we can probably deal with it. We are strongly supporting multiple-column charts and our concern was not to have wrong multiple-column charts versus correct single-column charts.
- m. Mr. Mike Ksar: We can fix errors if we do find them.

**Disposition:** No action from WG2.

Mr. Michel Suignard: I would like to have an option of working on the WD -- if we look at the standard today we have duplicated descriptions etc. If I can merge clause 23 and 24 -- I should be able to do it. There are items dedicated to compatibility and unified ideographs, and these will be kept separate.

Discussion:

- a. Mr. Masahiro Sekiguchi: I think it is a good idea.
- b. Prof. Kyongsok Kim: Can you explain? Are the sources subsets or intersection? Is compatibility source not in unified source?
- c. Mr. Michel Suignard: No.
- d. Prof. Kyongsok Kim: You can put a mark on the compatibility source if it is also in Unified.
- e. Dr. Ken Whistler: The source references for all ideographs etc. can be defined once. The section on compatibility could be simply point to the unified source list rather than describing each.

Mr. Michel Suignard: The last point I have is about the name of the sources. Some of these are a little bit too long to put in the multiple-column charts. We have a note stating the sources in the charts are probably shorter than the one in the tables. The second one is related to ARIB. Similar reduction in naming is needed to deal with formatting problems for the multiple-column charts.

Dr. Umamaheswaran: Any such changes that may have impact on applications dependant on the format or keywords in the .txt files should be mentioned in the Changes from Previous Edition section.

**Disposition:** The project editor is to update the working draft based on above discussion and progress the updated text to CD balloting.

**Relevant resolution:**

**M54.16 (CD of 2nd edition):**

**Unanimous**

WG2 instructs its project editor to prepare text for the next edition of the standard, based on documents N3593 and N3627 and the feedback from this meeting, and changes resulting from resolutions M54.02 on Amendment 6, M54.06 on Amendment 7, M54.15 on Jamo fillers, and other changes to glyphs and annotations requested of the names lists in the ballot feedbacks, and to forward it for processing as a CD to SC2 secretariat. The editor is to take note of additional glyph changes per sections 4 in document N3623. The updated start dates for the next edition of standard are: CD: 2009-06, FCD: 2009-12 and FDIS: 2010-06.

*(Note: At the end of this meeting the total number of characters is 107517 in CD of 2nd edition - till end of FPDAM7.)*

**7.4 Korean Jamo in clause 26.1**

**Input documents:**

- [3422](#) An introduction of Korean Standard KS X 1026-1:2007, Hangul processing guide for information interchange; Rep. of Korea NB; 2008-04-07
- [3611](#) Response to AI 52-11 - Clause 26.1 Feedback – re N3422; NB R.O.Korea; 2009-04-04
- [3624](#) Clarification Regarding Use of Jamo Filler Characters; US NB and Unicode Consortium; 2009-04-19
- [3633](#) US / Unicode Consortium Comments on 3611; Peter Constable; 2009-04-21

Prof. Kyongsok Kim: The revised document N3611R is a response to action items M53-9a and b. Korea proposes some text to be inserted into clause 26.1. Also KS X1026-2 containing 'Hangul Conformance Test for Information Interchange' has been published 2008-12-13. Part 1 was published in 2007-12-31.

**Discussion:**

- a. Mr. Peter Constable: Document N3633 contains the US and Unicode input. The US and Unicode recognize the desire from Korea regarding correct representation for Hangul. However, we have strong reservation in making the suggested change in clause 26.1 at this time. By making the reference to the Korean Standard (KS) suggests that all aspects of the KS must be satisfied. There are specific issues with respect to KS part 1. It seems to be redefining normalization and it seems to be in conflict with ISO/IEC 10646. We recognize the intent is not to do that, but there are some concerns. We have to resolve the issues related to normalization in KS part 1 or make it clear that the recommendation does not cause problems with the normalization in ISO/IEC 10646. Also, the suggested wording like 'must' in the proposed text is not appropriate for ISO/IEC 10646.
- b. Mr. Mike Ksar: I will just add that we have to resolve this Korean issue. We cannot push this from meeting to meeting. The words like 'must' is not used in standards. The word like 'shall' is used for normative aspects. We have to modify the proposed text to something agreeable to everyone.
- c. Dr. Ken Whistler: If the wording is crafted to say 'KS provides information re: implementation', as an informative note, rather than being a normative text etc. we can probably live with it.

**Proposed new note 3:**

"NOTE 3 - Hangul text can be represented in several different ways in this standard. Korean Standard KS X 1026-1 (Information Technology - Universal Multiple-Octet Coded Character Set (UCS) - Hangul - Part 1 Hangul processing guide for information interchange) provides guidelines on how to ensure interoperability in information interchange."

- d. Dr. Dae Hyuk Ahn: We would like to see the above as part of the clause and not as a note.
- e. Dr. Umamaheswaran: That would end up in making the Korean Standard as a normative reference from ISO/IEC 10646 --- due to differences in the normalization aspects between the two standards it would not be acceptable.
- f. Mr. Mike Ksar: If the intent is to make KS as normative reference then it would be out of scope.
- g. Prof. Kyongsok Kim: Since there is a difference regarding normalization between ISO/IEC 10646 and some parts of KS we cannot make it normative referencing.
- h. Mr. Michel Suignard: If there was no difference there is no need for referencing a national standard. The best way for Korea would have been to eliminate the differences in KS from ISO/IEC 10646. You can add text in KS that 'if you are using normalization you have to be careful'. You can provide implementation guidelines in KS.
- i. Mr. Mike Ksar: Notes or guideline to handle the differences between ISO/IEC 10646 and KS could be incorporated in KS.

- j. Mr. Peter Constable: Did you mean to say that ISO/IEC 10646 can be amended later?
- k. Mr. Michel Suignard: No. ISO/IEC 10646 is self contained in most items with the exception of two items which we normatively reference the Unicode Standard.
- l. Dr. Umamaheswaran: It is the national standard that normally references ISO standard normatively or adopts it, rather than an ISO standard
- m. Prof. Kyongsok Kim: We agree to add the note with revised text.

**Disposition:** Add the accepted note for clause 26.1 in Amd. 6.

**Relevant resolution:**

**M54.02 (Note re: KS X 1026-1):**

**Unanimous**

With reference to document N3611 from Korea (republic of) regarding KS X 1026-1, WG2 accepts to add the following note in clause 26.1 of the standard and include it in Amendment 6.

"NOTE 3 - Hangul text can be represented in several different ways in this standard. Korean Standard KS X 1026-1: Information Technology - Universal Multiple-Octet Coded Character set (UCS) - Hangul - Part 1, Hangul processing guide for information interchange, provides guidelines on how to ensure interoperability in information interchange."

## 8 IRG related

### 8.1 Report from IRG 31

Input documents:

- [3558](#) IRG meeting 31 Resolutions; IRG Rapporteur; 2008-11-14
- [3559](#) IRG meeting 31 Summary Report; IRG Rapporteur; 2009-03-31
- [3561](#) Annex S Revision 5 (and [attachment -A](#)); IRG Rapporteur; 2009-04-21
- [3562](#) IRG Principles & Procedures – Draft version 2; IRG Rapporteur; 2009-03-31

Dr. Lu Qin: I have submitted a number of documents. The resolutions from IRG 31 are in document N3558; they are for your information. A summary is in document N3559, which I will go through here.

#### Item 1 - future IRG meetings

Dr. Lu Qin: IRG 32 has been approved at last meeting. We need endorsement for IRG 33 in Danang, Vietnam, Nov 23-27 2009. IRG meetings 34, 35 and 36 are lined up but they are tentative. (Note: IRG 31 in HKSAR of 2009-06-15/19 is also added for endorsement; it was NOT endorsed in M53).

Discussion:

- a. Mr. Mike Ksar: Could you please check if the November 2009 date clashes with the US Thanksgiving weekend.
- b. Dr. Lu Qin: We did check with Mr. John Jenkins of US delegation and he was OK with that date.
- c. Prof. Kyongsok Kim: If I remember correctly the Thanksgiving was mentioned at the IRG meeting and Mr. John Jenkins was OK with it.

See relevant resolution **M54.25** on page 52.

#### Item 2 - Multiple-column charts

Dr. Lu Qin: The IRG has accepted the formats - use of three columns with four sub columns for CJK Ext. A.

Discussion:

- a. Mr. Michel Suignard: The latest WD has a new format for multiple-column charts.
- b. Dr. Lu Qin: The IRG members will take note.

#### Item 3 - i. Fonts for CD

Dr. Lu Qin: Regarding True Type Fonts to be sent to the editor the IRG members had no objections.

Discussion:

- a. Mr. Mike Ksar: Only Korea (Republic of) responded before the date set by the resolution. I did not see any reporting by end of December.
- b. Dr. Lu Qin: The resolution was sent to the project editor -- but I did act after the query from the convener.
- c. Mr. Michel Suignard: We are in much better shape than at the beginning of the meeting. There is no source from Taiwan for the main CJK block and for CJK Ext. A. We understand the situation for CJK Ext. B. We don't have anything from DPRK - except for CJK Ext. C. We have commercial fonts from Vietnam -- though it is not official. I do have complete report on the WD which we can discuss later. When I could not get the official font, I am using commercial fonts -- for example, Ming Yu font for Taiwan is used for the WD charts.
- d. Mr. Mike Ksar: What is the input from Taiwan?



- e. Mr. Bear Tseng: We cannot supply the font right now. Not before October 2009.
- f. Mr. Michel Suignard: You are 10 months behind schedule. We cannot delay the WD any more.
- g. Dr. Lu Qin: In principle, because Taiwan is not supplying an official font, for producing the CD we have no alternative but to use a currently acceptable font for the end users. I don't think Taiwan has any choice but to go along.
- h. Mr. Michel Suignard: Official CJK Ext. B font is expected by October 2009 from China and Taiwan. Korea and HKSAR have supplied the official fonts.
- i. Mr. Mike Ksar: The CD will go out using available fonts -- some improvements from the fonts used for the WD -- many are official. Commercially available fonts will be used for the missing official fonts.

**Item 3- ii. Licensing of fonts**

Dr. Lu Qin: The licenses for Unicode publication have to be individually handled.

Discussion:

- a. Mr. Michel Suignard: I have received the fonts without explicit licensing terms. I would like to be able to share with the entire Unicode committee - if the terms are bit more liberal it will be better. We do respect the restrictions provided by the national bodies. I do not share the fonts with anyone else at this time.
- b. Dr. Lu Qin: All members agreed to submit the fonts to the project editor. For the Unicode part every member has different view points. HKSAR and Vietnam have no restrictions on use of their fonts. The only agreement we have is that individual agreements will be needed with Unicode. I am willing to be in the loop if any help is needed.
- c. Mr. Michel Suignard: I did send you a default licensing terms. By not sending me the conditions, the default licensing term is understood to be accepted.
- d. Dr. Lu Qin: I have sent the default licensing to the members.

**Item 4 - CJK Ext. D**

Dr. Lu Qin: The M set has some 6000+ characters. The fonts are already in place. The font supplied to IRG work is viewed differently from submission to WG2. The IRG members want to check it out before it is considered as official. Otherwise we do have the draft fonts for these.

Discussion:

- a. Mr. Michel Suignard: The fonts must be made available by the time the charts have to be produced.
- b. Dr. Lu Qin: All the IRG members are aware of it.
- c. Mr. Mike Ksar: When will the Ext. D be ready?
- d. Dr. Lu Qin: We still have a lot of discussion - and will not be ready by next IRG meeting.

**Item 5 - Urgently Needed Characters**

Dr. Lu Qin: A total of 223 characters are proposed in document [N3560](#) to WG2 for review and acceptance.

Discussion:

- a. Mr. Mike Ksar: The contributions you sent were a little bit confusing -- I had assigned a suffix to the individual contributions / annexes. It was not clear to me whether it was an update or not. China has three documents - C, C2 and C3. It was not obvious if the later documents were updates to the previous ones or not. Japan had two; Unicode had U and U2 etc. I wished you had consolidated these into a single document. Please review them before you send them to me.
- b. Dr. Lu Qin: I will come back to these later. These files may need to be cleaned. IRG had requested the project editor to consolidate these. Mr. John Jenkins had given a huge file - I had requested a reduced file from him.

*See section 8.2 on page 20 for further discussion and disposition on the IRG Urgently Needed Characters.*

**Item 6 - Annex S**

Dr. Lu Qin: There was huge delay in getting Annex S. The ad hoc chair and others tried to contact the person who is preparing the Annex. The files are here - the main document [N3561](#) arrived this morning. [N3561-A](#) was available earlier. Because of the late submission, IRG members are requested to review and input by next IRG meeting. I request the WG2 members to review and feedback by April 30th 2009.

Discussion:

- a. Mr. Michel Suignard: The text of the CD should be modified based on the input from IRG -- the proposed text can be incorporated into the CD draft.
- b. Dr. Umamaheswaran: I suggest we can include it in the CD and the ballot responses can make any comments.
- c. Dr. Ken Whistler: The IRG members at this meeting can take a look at the text and if it is not terribly wrong, we could include it in CD.
- d. Mr. Masahiro Sekiguchi: My understanding is that there is no agreement to the current content by IRG bodies. I don't think it is ready at this time.
- e. Mr. Mike Ksar: Does Japan think it is not suitable for the CD?
- f. Mr. Masahiro Sekiguchi: The input I received from IRG participants from Japan is that there are some more items to be discussed before finalizing the Annex S. Our preference is not to use the revised text for Annex S in the CD. Use the current text in the standard.
- g. Dr. Lu Qin: From HKSAR point of view it is not quite ready. For example a diagram that is important for this annex is missing. I would agree with Japan. The IRG members were not comfortable with the current content of the revision for Annex S.
- h. Dr. Ken Whistler: I would like to see the participants in IRG cooperate on it and if the ballot comments comes back stating that changes are to be made in multiple ways then it won't be productive. If the feedback is a single coordinated national body comment from the IRG members then it will be good.'
- i. Mr. Mike Ksar: the next IRG meeting is in June 2009. If Mr. John Jenkins is busy we have to get another coordinator for this work.
- j. Mr. Michel Suignard: The proposed changes to Annex S are trivial. It can be done right away and the countries can comment on it. I don't want to be in the same situation at the next meeting.

**Relevant resolution:**

**M54.21 (Annex S revision):**

**Unanimous**

The IRG is instructed to review and finalize the content of revised text for Annex S by 2009-07-17. All IRG members are requested to assist the IRG rapporteur in this effort. The outcome can be input as national body comments to the ballot on CD for the next edition of ISO/IEC 10646.

**Item 7 - IRG P&P**

Dr. Lu Qin: As pointed out by Dr. Umamaheswaran, the term PnP will not be used. I received several comments from IRG members and also from Dr. Umamaheswaran. Meanwhile the document is for WG2 members to review. I will try to consolidate it. The deadline is May 15th 2009.

**Relevant resolution:**

**M54.20 (IRG Principles and Procedures):**

**Unanimous**

WG2 takes note of the IRG Principles and Procedures in document N3562, and invites all national bodies and liaison organizations to review and provide feedback to the IRG rapporteur by 2009-05-15 in time for the next IRG meeting.

**Item 8 - Old Hanzi work**

The last batch of Oracle Bone inscription will be consolidated at the next IRG meeting.

**Item 9 - Japan Compatibility characters**

IRG has provided feedback to Japan. A revised document will be prepared by Japan for submission to WG2 and IRG.

**8.2 IRG - urgently needed characters**

**Input document:**

[3560](#) Submission of urgently needed character repertoire 4 - (contains several files); IRG Rapporteur; 2008-12-24

Dr. Lu Qin: Document N3560 contains the mapping tables - in an Excel spreadsheet. Backup information is in attached files. It is the IRG Urgent Version 4 M set. 223 ideographs are proposed as urgently needed characters. If these are reasonable for acceptance we should go ahead and include these in the standard.

Discussion:

- a. Mr. Michel Suignard: We have to look at the space allocation for the ideographs. We can add these 223 following Extension C.

- b. Dr. Lu Qin: We talked about the name for this set of ideographs - the suggestion was Ext. D at the last meeting.
- c. Mr. Mike Ksar: We will call this set as Ext. D. The IRG's current Ext. D will become Ext. E.
- d. Mr. Michel Suignard: What about the fonts?
- e. Dr. Lu Qin: The fonts are available with the IRG editor. By the end of the day it will be sent to the project editor. The evidences are provided from each IRG member. These are also attached.
- f. Mr. Michel Suignard: It cannot go into Amd. 6. Do we need two technical rounds of review or one?
- g. Dr. Umamaheswaran: If these are urgently needed we can put these in Amd. 7.
- h. Mr. Mike Ksar: What do other members think?
- i. Dr. Ken Whistler: The US national body feels that any ideographic additions need two technical rounds. The intent of Unicode consortium would be that anything that starts balloting at this meeting would be probably in Unicode V6. The intent is for Unicode V5.2 to be out by this fall to be synched with up to end of Amd. 6.
- j. Mr. Andrew West: We agree that we need two rounds.
- k. Mr. Masahiro Sekiguchi: We agree.
- l. Dr. Ken Whistler: If we are going to start an Amendment at this meeting we should roll all the characters we accept for 'future amendment' into it.

**Disposition:** Accept the 223 for Amd. 8.

**Relevant resolution:**

**M54.08 (CJK Extension D):**

**Unanimous**

WG2 accepts to create a new block named CJK Unified Ideographs Extension D in the range 2B740 to 2B81F in the SIP, and populate it with 223 CJK unified ideographs in code positions 2B740 to 2B81E, with their glyphs and code positions in the order presented in document [N3560](#) on 'urgently needed characters' from the IRG.

See also relevant resolution **M54.14** on page 52.

**Action item:** The roadmap ad hoc is to add Ext. D in the range 2B740-2B81F.

## 9 Contributions related to current ballots FPDAM6 and PDAM7

Several contributions in support of ballot comments were listed in this part of the agenda. They were all taken up during discussion of draft dispositions of ballot comments. See relevant discussions and dispositions in section 11.1 on page 38 for FPDAM6 and section 11.2 on page 46 for PDAM7.

### 9.1 Glyph corrections

**Input document:**

[3623](#) **Glyph corrections for PDAM 7, FPDAM 6, 3580, and Current Code Charts; Deborah Anderson, SEI, UC Berkeley; 2009-04-17**

Ms. Debbie Anderson introduced the document. Document [N3623](#) has four sections.

**Disposition:**

Accept corrections from sections 1 and 3 for Amd. 7. See relevant resolution **M54.06** on page 51.

Accept corrections from section 2 items a through for Amd. 6. See relevant resolution **M54.03** on page 45.

Accept corrections from section 4 while preparing the next CD charts. See relevant resolution **M54.16** on page 17.

## 10 New scripts and characters

### 10.1 Enclosed alphanumeric supplement additions

**Input document:**

[3599-1](#) **Irish ballot comments - attachment to Summary of Voting on SC 2 N 4049, ISO/IEC 10646: 2003/FPDAM 6; SC2 02n4065; SC2 Secretariat; 2009-03-30**

Ireland ballot comment T.9 in document [N3599](#) requests that a set of enclosed alphanumeric characters be added to Amd. 6. During the discussion of draft disposition of comments on Amd. 6, this request was considered to be out of scope for Amd. 6 and was taken up as a separate item.

Mr. Michael Everson: From time to time we add characters to ISO/IEC 10646 to form a coherent set. An example is the Coptic letters which were added even though we did not have specific evidences. In the case of alphanumeric supplements several characters with circles etc. were arranged. Only some were included in the proposals. There is also a set of circled alphabetic characters in the Emoji

symbols proposals. We have seen similar characters creeping up over time. The Irish national body feels that it is monumentally stupid for us not to fill in the set into the holes - such as if we have circled I, we will not put something else on either side of that letter. The proposal is to complete the set of A to Z. Use of some of these proposed characters are also shown in our proposal. Some of these are map symbols to show distances -- see page 5 of [N3599-I](#). We do not believe that it is sensible that for each one of these we should have a contribution to justify it. We should encode these and be done with it -- and this is our proposal. We would be satisfied that these going to another Amd. We understand that they do not belong in Amd. 6.

Discussion:

- a. Mr. Michel Suignard: I cannot accept to including these in Amd. 6.
- b. Dr. Ken Whistler: I have the same issue - the symbols cannot go into FDAM6. A large set like this needs a technical review. There are some questions on some of these.
- c. Mr. Masahiro Sekiguchi: Some examples shown in the proposal do not indicate to me that these are for use in text. They seem to be graphic overlays in maps. Use of such characters on map overlays does not show that these are used in plain text.
- d. Mr. Michael Everson: I understand that - it is OK with me. These characters are from some font. They exist as elements of a font.
- e. Mr. Masahiro Sekiguchi: As to the font technology - I do not want to add all elements appearing in a font to be encoded as characters. The examples don't show their use in text. Graphic overlays should not be candidates for plain text.
- f. Mr. Michael Everson: I understand that these are not the best examples for use as text. The example shows D E F and G circled -- the next one is H. H is part of the Emoji symbols in the standard. The proposal is to complete the set.
- g. Dr. Ken Whistler: You are cherry picking to filling the various symbols. A negative circle P etc. are shown. You are showing evidences of iconic uses. The kind of evidence is very marginal. A clear use of these in text is missing.
- h. Mr. Michael Everson: We looked for some examples - we did not look for exhaustive use of these in plain text. Use of circled 1s and 2s etc. are scattered throughout UCS. It is not good use of contributor's time to go looking for these ... while we can just fill in the alphabet and be done with it. The point is no one should have to go through a large effort to see the set completed. I don't mind if this set be going through two rounds of ballot if needed. I don't want it to be thrown out.
- i. Mr. André Szabolcs Szelp: There is a proposal to include negative WZ.
- j. Mr. Michael Everson: It is there - one can take it out if it is a problem.
- k. Mr. Mike Ksar: This set is for the A to Z letters of Latin alphabet. What happens if we need similar stuff for other scripts and alphabets etc? This seems to be only the beginning of a direction of similar circled etc. for other scripts such as Greek, Cyrillic etc. These seem to be iconic representations. Will we be dragged into characters beyond A to Z?
- l. Mr. Michael Everson: The door has been opened up for several for years. The difference is that these are coming in smaller sets. No one has proposed so far the Cyrillic or Greek etc. I understand your concern.
- m. Dr. Ken Whistler: What my esteemed colleague from Ireland is missing is that every such character that has been encoded so far is based on compatibility with some existing encoding set for plain text. The proposal made here is not based on such use -- it does open the door for circled Greek Alphas etc. from some other iconic usage. The usage is not demonstrated to be clearly textual -- needing characters in plain text. Whether other character encodings are wise or not, the requirement in UCS has been based on compatibility mapping requirements. The argument presented is to logically completing the set, but is not based on use as plain text.
- n. Mr. Peter Constable: Some of the evidence provided, along the concerns expressed by Japan, example on page 6, is a number of elements set inside a square box. There is a real concern on the kind of evidence being presented for plain text usage; and communicating this as evidence poses an issue.
- o. Mr. Masahiro Sekiguchi: For the map example, the symbols used on maps are picked up at random by the editor of maps.
- p. Mr. Michael Everson: The ARIB set was created similarly at random.
- q. Mr. Masahiro Sekiguchi: It may be so originally -- but at present these are used with meanings behind these symbols. There is a common understanding for the use of these in the users of ARIB set for example. Of course we can put any character to an open circle, negative circle etc. But it does not convey any meaning.

- r. Mr. Michael Everson: On page 3 we have noted some of these symbols do have meanings behind them.
- s. Mr. Masahiro Sekiguchi: I have no objection to adding some characters that do have meanings -- but the examples you have provided like on maps are iconic.
- t. Mr. Michael Everson: We would propose that these go on a ballot for one or two rounds of ballots. The editors have allocated space for the complete set and these having been filled in as the requirements have come up. I do understand the UCS may have other similar characters from other scripts.
- u. Dr. Ken Whistler: I would like to see these proceed by normal process - in the form of a proper proposal. Not as part of a ballot comment like Ireland has done it. Several of these are symbols, which many of us do recognize as existing. Rather than talking about delay, false economies etc. present these as a collection of symbols such as German Underground etc. which are quite legitimate. Examples like map overlays etc. are causing the concerns.
- v. Mr. Michael Everson: Do we want some evidence for each and every one of these or just show use of many of these and extend the logic to fill in the set.
- w. Dr. Umamaheswaran: I find Ireland is totally out of order from WG2 process point of view. A proposal has to have a proper summary form irrespective of the merits of the proposed additions, and the ballot comments should have been pointing to a separate contribution.
- x. Mr. Mike Ksar: The ballot comments should focus on the Amd's content. One can have additional contributions with a request to add these into an existing Amd. We can add new things to some script or character repertoire under ballot but pointing to a separate proposal.

**Disposition:** Not accepted as is presented.

**Action item:** Ireland is requested to prepare a contribution containing the proposed additions with a proposal summary form taking into account the discussion at the meeting.

## 10.2 Two Cyrillic characters

**Input document:**

[3563](#) Proposal to encode two Cyrillic characters in BMP; Ralph Cleminson and Michael Everson; 2009-01-26

[3578](#) Proposed additions to ISO/IEC 10646:2003; US National Body; 2009-03-03

Mr. Michael Everson: This proposal from Mr. Ralph Cleminson. He found Cyrillic characters which are reverse of Cyrillic characters in today's use. These were on Birch-Bark letters. Reversed TSE characters in Slavonic style are proposed.

Discussion:

- a. Dr. Ken Whistler: The US national body has reviewed this proposal and we agree with proceeding with it. (See item 3 in document N[3578](#).)
- b. Mr. André Szabolcs Szelp: We have some concerns about these and I would like to check back with the experts.
- c. Mr. Mike Ksar: You can provide the comments in the ballot response if you find there are concerns. We can include this in Amd. 8.

**Disposition:** Accept for Amd. 8; A660 CYRILLIC CAPITAL LETTER REVERSED TSE, A661 CYRILLIC SMALL LETTER REVERSED TSE, in the Cyrillic Extended-B block, with glyphs from document N[3563R](#).

See item 'a' in the relevant resolution M54.13 on page 32.

## 10.3 Additional Bamum characters

**Input documents:**

[3523](#) Bamum Scripts and Archives Project in the Palace of Bamum Kings; Michael Everson; 2009-03-28

[3597](#) Proposal for encoding additional Bamum characters in the SMP of the UCS; Michael Everson, Charles Riley, Konrad Tuchscherer; 2009-03-28

Mr. Michael Everson: At the last meeting we added Modern Bamum characters in Amd. 7. The script itself was practically hieroglyph, and went through stages of simplification to what is in current state. There are several documents in the palace of Bamum kings. It is not possible to represent these texts with the modernized characters. One can translate them but not represent them. Additional characters are proposed to be able to represent the older text in the SMP. The proposed names are based on the last phase they were used in and avoiding duplicate character names. There is a complete list of all the characters, their original phonetic names, their appropriate names in English and French of the standard. Also shows in the last column the page from the source document and



phase of script development. A proposal summary form is also included. There are 569 characters (typo in proposal summary form which shows 596) proposed along with names, glyphs etc.

Discussion:

- a. Ms. Debbie Anderson: One of the coauthors has been working with the user community and has verified the names, glyphs etc.
- b. Dr. Ken Whistler: The US national body has seen a previous version of the document. It was felt that the proposal was fairly complete. I would not have objection moving this forward as part of Amd. 8. The additional data is appreciated.
- c. Mr. Mike Ksar: Are the fonts available? Yes, with Mr. Michael Everson.

**Disposition:** Accept for Amd. 8; create a new block Bamum Supplement of 36 columns, 16800-16A3F; populate with 569 characters in 16800 to 16A38 from document N[3597](#).

**Relevant resolution:**

**M54.09 (Bamum supplement):**

**Unanimous**

WG2 accepts to create a new block named Bamum Supplement in the range 16800 to 16A3F in the SMP, and populate it with **569** characters with their code positions, names and glyphs as shown in document N[3597](#).

#### **10.4 Two heavy low quotes for German**

**Input document:**

[3565](#) Proposal to encode two heavy low quotes for German in the UCS Dingbats block; Germany NB; 2009-01-15

Mr. Karl Pentzlin: Two heavy low quotation marks needed in German are proposed to be added to the Dingbat block.

Discussion:

- a. Mr. Peter Constable: Unicode experts have reviewed these and the UTC is in favour of encoding these characters.
- b. Mr. Andreas Stötzner: DIN has reviewed these and it is sensible to include these.
- c. Mr. Michael Everson: Ireland doesn't like the heavy quotations but we don't object to encoding these to fill the set.

**Disposition:** Accept for Amd. 8; 275F and 2760; names and glyphs from document N[3565](#).

See item 'b' in the relevant resolution M54.13 on page 32.

#### **10.5 Middle dot letter for Phags-pa**

**Input document:**

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

Mr. Andrew West: Document N[3567](#) proposes a single character a Latin Letter Middle Dot - which occurs in the middle position, used primarily in transliterating or transcription of A856 - Phags-Pa Letter Small A by various authors and Tangutologists. It may be used in transliterating for other languages. The UTC was concerned about why an existing middle dot in the standard cannot be used. A list of existing dots is provided - these are punctuation marks etc. and do not serve the purpose.

Discussion:

- a. Dr. Ken Whistler: The UTC was concerned about this. The problem starts from assumption that 00B7 is Punctuation. It is in fact poly-functional. Using an existing middle dot - the generic one - 00B7 is the right solution for the problem. It is used in many other orthographies; used for length marks for vowels as well as for consonants. The Phags-pa transliteration can also use this. There is no requirement I can see that a non-00B7 is needed for transliteration the Phags-pa. It is punctuation in some contexts and not in other contexts. The General Category property of Unicode is not capable of expressing multivalent usage of the character. There are several other examples where letters are used as punctuation and vice versa. We cannot depend on the General Category for making such determination. We should follow the current practice and it will satisfy the requirement.
- b. Mr. Andrew West: Firstly there is precedence -- there is precedent for letter forms of punctuation marks. They look like punctuation marks but used as letters. I don't agree with Dr. Ken Whistler that we can use the current middle dot. I don't know much about the North American usage. The Canadian Syllabic Middle Dot is a letter.
- c. Mr. Peter Constable: I don't think Dr. Ken Whistler was saying that when a punctuation that gets used as a letter one should use the punctuation in every case. In this particular case there is an existing character like the Catalan middle dot.

- d. Mr. Michael Everson: It is not an independent letter in Catalan. It is inappropriate in context with I etc. The font implementations of I with following middle dot etc. need special treatment. It is different from being an independent letter. I have used the middle dot on its own right in many circumstances. It does not serve the function of a standalone transliteration character.
- e. Mr. Andrew West: The Catalan usage is different. Besides Catalan, whether they use 00B7 or not, a mark is required and they are forced to use 00B7 in the absence of another appropriate character.
- f. Mr. Michael Everson: The use of Middle dot in Catalan case in typography can interfere with the presentation.
- g. Mr. Mike Ksar: I would like to know why the 00B7 will not work for Phags-pa transliteration.
- h. Mr. Andrew West: Selection, sorting, searching etc. will not work properly -- for example punctuation marks can be ignored by some search engines.
- i. Mr. Mike Ksar: Where will the new character be in collation sequence? What are known issues?
- j. Mr. Michael Everson: If I try ALLA versus ALL-middle dot-A etc. for searching, the middle dot gets ignored.
- k. Mr. Peter Constable: I don't know of specific issues on using 00B7 as a middle dot.
- l. Dr. Ken Whistler: 00B7 is in Latin-1. Mr. Andrew West's concern about searching for punctuation is valid. The same behaviour is valid for all other orthographies as well. By introducing another middle dot one will end up in fragmenting the existing use of middle dot -- existing orthographies may end up in using the new middle dot and will end up in surprising results. I am not sure that this should be driven that everyone else can distinguish this middle dot versus the others.
- m. Mr. Andrew West: There are already multitudes of middle dots. As to people not knowing which character to use the same argument applies to several other characters like modifier letters, comma etc. The situation will be similar to those.
- n. Dr. Ken Whistler: Any new characters such as the middle dot - will not be easily enterable from the current Latin-1 keyboards which will continue to enter 00B7; it will be available only by Unicode V6 time frame; and an alternate method to enter will only confuse the user.
- o. Mr. Mike Ksar: The middle dot in Katakana, is it used for sorting searching etc.?
- p. Mr. Masahiro Sekiguchi: I don't know about Google search engine. The Katakana middle dot is optional - we use Katakana for English origin words. We use the middle dot to separate the English-generated versus other sources. Recently Microsoft introduced another method of using middle dot. It is not used for distinguishing meanings.
- q. Mr. Peter Constable: Concerns have been expressed that searching will not work as expected; text display will not work as expected etc. I have checked at least one implementation and 00B7 is not a problem at least in that implementation.
- r. Mr. Michael Everson: I have searched for several middle dots in the Google Search engine - each one of them fails. The text with middle dot cannot be found. For the Canadian Syllabics Middle Dot - I get about 6000 hits. The linguistic requirement for the Phags-pa transliteration is to be able to find the transliterated word containing this middle dot. I do not favour using the Canadian Syllabics Middle Dot which seems to work for transliterating Phags-pa.
- s. Mr. Masahiro Sekiguchi: I don't understand why the question about Katakana is to Japan? Japanese national body has no concerns about this proposal neither an opinion. We do have same concerns as Dr. Ken Whistler has expressed from end user perspective. I don't think we will have a separate keyboard for transliterating and entering the middle dot.
- t. Dr. Umamaheswaran: Is the transliteration for Phags-pa using just the English letters or Latin letters?
- u. Mr. Andrew West: IPA. I am astounded that the WG2 experts are expressing that one should not encode a character based on not being able to enter a character.
- v. Dr. Ken Whistler: I have no doubt that Mr. Andrew West is perfectly capable of producing the right input method etc. and be able to enter these correctly. I am concerned that the various Native American communities, who don't have such expertise as Mr. Andrew West, will end up in using the wrong middle dot and inconsistently. Furthermore it is an inappropriate response by this committee to encode a new character based on not finding a character in a search engine. It should be the other way - the complaint should be to the search engine provider - and not encode a new character.
- w. Ms. Debbie Anderson: The user community in the linguistics when they look for a middle dot are confused about which middle dot to use. Adding another one which is identical in appearance to 00B7 will be confusing to them.

- x. Mr. Michael Everson: The Native Americans are using the middle dot - they are happy with it and will continue to do whatever they are doing. They look at Mr. Chris Harvey in Canada for implementation guidance. The addition of the new character will not be used by them. What I am hearing is that the Sinologists and Mongolianists don't have a particular solution. If we go to the search engine people, the preference of Catalan is to ignore it and they are not likely to change. The use of the middle dot for the Phags-pa transliteration is not the same as the use of middle dot in the sense of current Latin-1 use of 00B7.
- y. Mr. Andrew West: I don't think Google will listen to us if we go and tell them to be able search for a punctuation mark.
- z. Mr. Mike Ksar: We develop standards in this committee - we don't consider implementation specific difficulties. We should not be mentioning specific implementation or vendors etc.
- aa. Mr. Andrew West: I would like to restate that we encode this new character on the principle that the existing characters do not fulfil the requirement.
- bb. Mr. Michael Everson: I support that.
- cc. Mr. Mike Ksar: I would suggest that we add this character to a new amendment and let the ballot comments reflect what we do with it.

**Disposition:** Accept for Amd. 8; A78F LATIN LETTER MIDDLE DOT with a glyph similar to but slightly larger than the one proposed in document N[3567](#).  
See item 'c' in the relevant resolution M54.13 on page 32.

### 10.6 Four Tibetan-Sanskrit letters

**Input document:**

[3568](#) Proposal to encode four Tibetan-Sanskrit letters used in Kalacakra texts; Andrew West and Christopher Fynn; 2009-01-24

[3578](#) Proposed additions to ISO/IEC 10646:2003; US National Body; 2009-03-03

Mr. Andrew West: People working on rules for transliterating Sanskrit text in Tibetan to Manchu and Mongolian etc. have encountered some new characters that are not satisfied by currently encoded characters in Tibetan. An inverted 'mchu can', and three subjoined Tibetan combining marks are proposed. Evidences are provided for three of the four. The fourth one is proposed as an extension to complete the set.

Discussion:

- a. Dr. Ken Whistler: The US national body is happy to see this proposal. (See item 4a in document N[3578](#).)
- b. Mr. Andrew West: We appreciate the US support.
- c. Mr. Peter Constable: The combining marks will be positioned with respect to others?
- d. Mr. Michel Suignard: We need the appropriate font.
- e. Mr. Chen Zhuang: Our experts have reviewed and we have no problem.

**Disposition:** Accept for Amd. 8; 0F8C-0F8F; with names and glyphs from N[3568](#). Three are combining marks.

See item 'd' in the relevant resolution M54.13 on page 32.

### 10.7 Two Tibetan annotation marks

**Input document:**

[3569](#) Proposal to encode two Tibetan annotation marks; Andrew West and Christopher Fynn; 2009-01-24

[3578](#) Proposed additions to ISO/IEC 10646:2003; US National Body; 2009-03-03

Mr. Andrew West: Two Tibetan annotation marks are proposed. It has been discussed in the Tibetan discussions list. They are used in many books and are used in pre-Unicode word processing systems and while upgrading these they don't know what to do with these marks. There are variations in shapes but are requesting two nominal shapes.

Discussion:

- a. Dr. Ken Whistler: The US national body enthusiastically endorses the encoding of these two characters. (See item 4b in document N[3578](#).)
- b. Mr. Chen Zhuang: We have reviewed these with our experts and we agree to encode these.

**Disposition:** Accept for Amd. 8; 0FD9 and 0FDA; with names and glyphs from N[3569](#).

See item 'e' in the relevant resolution M54.13 on page 32.

## 10.8 Jamo fillers

### Input document:

- [3624](#) Clarification Regarding Use of Jamo Filler Characters; US NB and Unicode Consortium; 2009-04-19  
[3638](#) A response to AI-52-8-a and AI-53-9-b - Fillers; Response to 3624; R.O.Korea NB; 2009-04-22

Mr. Peter Constable: In Redmond meeting the Korean national body introduced KS X1026-1 and the national bodies had an action item to provide feedback. They had raised specific items related to Jamo fillers. They pointed out an apparent discrepancy between ISO/IEC 10646 and Unicode regarding use of Jamo fillers in the trailing context. Two fillers for initial consonant and vowel. Document N[3624](#) discusses this and makes a recommendation to revise the clause 26.1 with some clarification text. This is consistent with the schema used by KS. If you use only one filler it is another schema. The proposed clarification is in line with the KS X1026-1. It will not be a note, but in the main body of the text.

### Discussion:

- a. Dr. Dae Hyuk Ahn: If a filler and final consonant are encountered can we exclude these in the definition?
- b. Mr. Peter Constable: I am open to revising to exclude the sequences. We have the option of putting the text to ballot as is or to invite comments in the ballot.
- c. Prof. Kyongsok Kim: I have some suggested text to address the issue - in document N[3638](#).
- d. The proposal is to split a sentence in the current clause 26.1.
- e. Mr. Mike Ksar: Can we put the proposed change into the earliest amendment.
- f. Dr. Ken Whistler: The CD is the only document which has the latest collection of all the changes that have been made to this clause 26.1 through various amendments.
- g. Mr. Michel Suignard: To some extent what Dr. Ken Whistler says is correct. The CD will contain the final text that you want. It is better to put it in CD.
- h. Prof. Kyongsok Kim: I agree.

**Disposition:** Accept the replacement text from document N[3638](#) -- for Clause 26.1 of current standard; it is Clause 22.1 in the WD for 2nd edition, 2nd paragraph, 2nd sentence.

### Relevant resolution:

| M54.15 (Jamo fillers):   | Unanimous |
|--|-----------|
| With reference to document N <a href="#">3638</a> , WG2 accepts the following change in clause 22.1 in the working draft for the second edition (document N <a href="#">3593</a> ):<br>Replace the sentence:<br>"An incomplete syllable which starts with a Jungseong or a Jongseong shall be preceded by a CHOSEONG FILLER (0000 115F)."<br>with the following two sentences:<br>"An incomplete syllable which starts with a Jungseong shall be preceded by a CHOSEONG FILLER (0000 115F)."<br>An incomplete syllable composed of a Jongseong alone shall be preceded by a CHOSEONG FILLER (0000 115F) and JUNGSEONG FILLER (0000 1160)." |           |

## 10.9 Three additional Bopomofo letters

### Input document:

- [3570](#) Proposal to encode three Bopomofo letters for Hmu and Ge; Andrew West; 2009-01-25  
[3578](#) Proposed additions to ISO/IEC 10646:2003; US National Body; 2009-03-03

Mr. Andrew West: The Australian missionary Maurice C Hutton's work needs some additional Bopomofo letters to represent three special sounds.

### Discussion:

- a. Dr. Ken Whistler: The US national body has reviewed these and are in favour of encoding these. However we prefer other names - see item 5 in document N[3578](#).
- b. Mr. Andrew West: We can accept the names.

**Disposition:** Accept for Amd. 8; three characters - 31B8, 31B9 and 31BA; glyphs from document N[3570](#) and names from item 5 in document N[3578](#) -- BOPOMOFO LETTERS GH, LH and ZY. See item 'f' in the relevant resolution M54.13 on page 32.

## 10.10 Additional Uralic phonetic characters

Input document:

[3571](#) Proposal to encode additional characters for the Uralic Phonetic Alphabet; Klaas Ruppel, Tero Aalto, Michael Everson; 2009-01-27

Mr. Tero Aalto: Based on further study of the Uralic Phonetic Alphabet we have discovered the need for 11 more characters.

Discussion:

- a. Dr. Umamaheswaran: Just for clarification - are two of these combining and remaining nine subscript Latin letters?
- b. Mr. Peter Constable: The glyphs presented on page 1 - it is not clear that these are subscripts. They look like lowercase letters. I am assuming different glyphs are intended.
- c. Mr. Michael Everson: The glyphs in the charts will clearly reflect that these are subscripts.
- d. Mr. Mike Ksar: Are there examples?
- e. Mr. Peter Constable: On page 3 Figure 4 has several. My second comment is related to double and triple width combining marks. We had looked at the triple width one and earlier decision was made at UTC to not go beyond double-width combining marks. Other mechanisms should be used for longer than double-width. The combinatorial metrics get quite complicated. At some point in time we have to say that there are better mechanisms to represent such text elements from implementation point of view.
- f. Mr. Andrew West: I need to know what that mechanism is.
- g. Ms. Debbie Anderson: Mr. Murray Sargent had a mechanism that he demonstrated -- and I can forward the reference to you if you want.
- h. Mr. Peter Constable: In MS word we do have the means to do that -- at some point we have to say such multiple-width characters have other means to achieve this.
- i. Mr. Karl Pentzlin: We are not talking about arbitrary lengths. We only talk about triple length. In German and some other European languages-- they have this definitive quality in the linguistic sense with definite meaning and have to be stored in linguistic databases -- along with the other plain text. There are some four or five - like inverted breve, or breve under, spanning three characters. It is marking special sounds for these characters. It is needed and is inappropriate to use higher level protocols.
- j. Mr. Michel Suignard: One needs a layout engine to render these - we have many characters in the standard.
- k. Mr. Andrew West: I agree with much of what Mr. Karl Pentzlin has said. These are not arbitrary length combining marks - these are only for three.
- l. Dr. Ken Whistler: The assertion among other things that there are a few more of these four or five - leads to the suggestion to have a proposal for the need for a set of these and the implementation aspects on these. What would be the default representations in the situation one may not have fonts for these? If one has a dumb text representation then one needs a layout engine. If the font has the valid combinations of all the needed glyphs then that is an implementation. One example that is in the current proposal will get a strong push back from implementers in UTC because of the rendering aspects. What are the equivalences between arbitrary braces and such three character spans? If we have a brace over three characters in prosodic text -- what is the relationship to these marks? It opens up a number of implementation issues and they have to be addressed. Personally I don't have any problem with everything else in the proposal.
- m. Mr. Michael Everson: I have seen others like these in other situations. This particular character and others like these - such as under the character etc., should be looked at along with other uses of such characters as well. I agree with Dr. Ken Whistler in that that triple character needs more study addressing other similar characters as well. In Coptic for example we have half marks that could be extended over strings etc. I would propose that we do not accept 1DFB at this time but go ahead with the remainder.
- n. Mr. Tero Aalto: I can accept that it is a good idea that the triple mark needs further study and I am sure Uralic experts in Finland will understand.
- o. Mr. Mike Ksar: The concern here is not to encode variable length marks.
- p. Mr. Michel Suignard: In prosody we need spans of multiple characters. A solution like what Mr. Michael Everson suggested could be used.



- q. Mr. Peter Constable: One can have implementations that could span multiple-length strings. In the plain text we need to have some indication of the length of the span etc. for the layout to do the right thing.
- r. Mr. Mike Ksar: Except for 1DFB we can proceed with others.
- s. Mr. Masahiro Sekiguchi: Is the proposed set useful without the triple-length mark? If it is not useful without it, we may have to postpone till we address the triple mark.
- t. Mr. Tero Aalto: We would like to proceed with the set even without the triple mark.
- u. Dr. Ken Whistler: This is part of the Uralic Phonetic Alphabet -- this small set is itself is not the complete set. It is part of much larger set that is already in the standard.
- v. Mr. Peter Constable: The proposal summary form says 12 -- should be corrected to 11. Also, a correction - 1DFA and 1DFB are swapped in the properties table on page 1.

Note: New code position for 1DFA is 1DFC (decided by ad hoc of editors).

**Disposition:** Accept for Amd. 8; 10 characters - 1DFC (combining mark), and A7F2 to A7FA. Fonts will be supplied by Mr. Michael Everson.

See items 'g' and 'h' in the relevant resolution M54.13 on page 32.

### 10.11 Additional Ethiopic characters

Input document:

- [3572](#) Proposal to Encode Additional Ethiopic Characters; Lorna Priest; 2009-02-05
- [3578](#) Proposed additions to ISO/IEC 10646:2003; US National Body; 2009-03-03

Mr. Michael Everson: In Ethiopia they have several minority languages with different phonologies. As literatures spread about 1.2 million people speak Gamo-Gofa-Dawro language in Ethiopia, and Basketo language is spoken by about 57k people. The proposed 34 characters, two of which are combining marks, are in support of these languages written in Ethiopic.

Dr. Ken Whistler: The US national body has reviewed this proposal and it is acceptable to us; we would like that this proposal goes forward. (See item 2 in document N[3578](#).)

**Disposition:** Accepted for Amd. 8.

**Relevant resolution:**

#### M54.11 (Ethiopic Extended-A):

**Unanimous**

WG2 accepts to create a new block named Ethiopic Extended-A in the range AB00 to AB2F in the BMP, and populate it with **32** characters in code positions in the ranges AB01-AB06, AB09-AB0E, AB11-AB16, AB20-AB26, and AB28-AB2E, and an additional **2** combining marks at code positions 135D and 135E in the Ethiopic block, with their code positions, names and glyphs as shown on page 3 of document N[3572](#).

### 10.12 Alchemical symbols

Input document:

- [3578](#) Proposed additions to ISO/IEC 10646:2003; US National Body; 2009-03-03
- [3584](#) Proposal for Alchemical Symbols in Unicode; William R. Newman, John A. Walsh, Stacy Kowalczyk, Wallace E. Hooper; 2009-03-31

Ms. Tamarah Lopez: We have been working with a few others on the set of Alchemical symbols. I am primarily a technical person and not a historian on Alchemical symbols. A little bit of the historical background -- these symbols were used by Greek and Syriacs in CE. They were adopted by Arabic and other chemists who developed several parallel symbols and some of their own. Text books of symbols were compiled and published. The nomenclature developed into something we use today. People studying the literature, hobbyists etc. use these symbols. Modern study of these symbols started in 19th century and into 20th century. There are several books published on these symbols. See document N[3584](#) for information.

The basic strategy for the encoding proposal is to focus on period between 1620 and 1720 -- on the use of these symbols by Arabic and Syriacs. 36 of the symbols are already in the standard. To these we are suggesting annotations / aliases -- example for Mercury symbol, which is quick silver for the Alchemists to make the connection. Another 114 symbols are proposed to cover the rest of the current period. These are organized into categories such as substances or with subcategories such as important solvents.

There are also composite symbols, such as Mercury Sublimate to distinguish between specific processes. There was discussion as to whether these should be combining characters or not. These symbols are not to be used outside the context of Alchemical use. The symbols also move around.

There are about 20 such symbols of which 4 were considered as variants. Aliases are given for the parts and are indicated along with cross references to other symbols. For example, mercury in mercury sublimate.

Discussion:

- a. Mr. Peter Constable: experts from the UTC interacted with the experts who have prepared the proposal. We have made many suggestions to them and they have incorporated many of our input. They have recorded the refinements in the proposal in this document. We feel that this proposal is mature enough to go into a ballot. Further refinements could be made through ballot comments. (See item 7 in document N3578).
- b. Mr. Michel Suignard: The content is reflected in document N3580 charts. The only thing we may do is to move the repertoire after the Emoji discussions. The annotations and cross references are editorial and we may alter them or move them around.
- c. Ms. Tamara Lopez: The contributors have asked that these aliases be kept.
- d. Mr. Michel Suignard: For now we will keep all these.
- e. Mr. Mike Ksar: Based on the national body comments things may get modified. It will go through two rounds of ballot.
- f. Dr. Umamaheswaran: Just wanted a clarification that the characters are all combined -- the proposal contains no combining character.
- g. Mr. Peter Constable: There were 116 characters in earlier proposal.
- h. Ms. Tamara Lopez: The count may not be accurate.
- i. Dr. Ken Whistler: There are 116 in the proposal.
- j. Mr. André Szabolcs Szelp: Two symbols are proposed for Iron Ore and Iron Ore-2. The little circle was missing on my screen ... I withdraw my comment.
- k. Mr. Michel Suignard: There is a possibility to change the cross references etc. They are referencing several other characters -- we would like to ensure that these are complete and consistent.
- l. Ms. Tamara Lopez: We looked at the standard - in our initial analysis based on glyph similarities. The principal investigator did careful analysis before selecting a particular symbol as the alias.
- m. Mr. Andreas Stötzner: On page 19 - the two measures characters - these seem to be a composition of existing drachma and uncial. The semis - termed as double S - has any annotation to other such characters been considered?
- n. Mr. Michael Everson: The half dram etc. look like some the Latin characters.
- o. Dr. Ken Whistler: An explanation about the origin of these symbols would address Mr. Andreas Stötzner's concern. Document N3580 charts show these symbols in a much refined font.
- p. Mr. Michael Everson: The font used is splendid. One of the things I would like to see eventually we may want to substitute the glyphs for other encoded characters that are more harmonized with those in the alchemical glyphs.
- q. Mr. Mike Ksar: There will be at least two ballots on these and one could make the refinements.

**Disposition:** Accept for Amd. 8.

**Relevant resolution:**

**M54.10 (Alchemical symbols):**

**Unanimous**

With reference to document N3584, WG2 accepts to create a new block named Alchemical Symbols in the range 1F700 to 1F77F in the SMP, and populate it with 116 characters in the range 1F700 to 1F773 with their code positions, names and glyphs as shown on pages 62 to 65 in document N3580.

### **10.13 Emoji symbols**

**Input documents:**

- [3582](#) Proposal for encoding Emoji symbols (includes proposal summary form); Markus Scherer, Mark Davis, Kat Momoi, Darick Tong, Yasuo Kida, Peter Edberg; 2009-03-05
- [3578](#) Proposed additions to ISO/IEC 10646:2003; US National Body; 2009-03-03
- [3583](#) Emoji Symbols Proposed for New Encoding For the Proposal for Encoding Emoji Symbols; Markus Scherer, Mark Davis, Kat Momoi, Darick Tong, Yasuo Kida, Peter Edberg; 2009-02-06
- [3585](#) Emoji Sources; Markus Scherer; 2009-02-06
- [3607](#) Towards an encoding of symbol characters used as emoji; Irish NB & German NB; 2009-04-06
- [3614](#) Response to Concerns Raised in N3607 About Encoding Emoji Characters; Mark Davis, Markus Scherer, Kat Momoi, Darick Tong, Yasuo Kida, Peter Edberg; 2009-04-09
- [3636](#) Emoji ad hoc report; Ad hoc – Peter Constable; 2009-04-24

An ad hoc group met and discussed the various contributions on Emoji symbols. Document N[3636](#) is the ad hoc report and was summarized by Mr. Peter Constable.

Mr. Peter Constable: I appreciate the time and commitment given by a number of WG2 experts present. A lot of progress was made. A consensus repertoire is ready to progress. From the original proposal in document N[3583](#), 76 characters were controversial and these will be taken out for further study. Several name changes were accepted. Other proposed changes were not accepted due to reasons of affecting the semantics of the characters. Additional characters from document N[3607](#) were also discussed and many were added to the repertoire. Four new blocks are proposed. See the ad hoc report in document N[3636](#) for details. If WG2 accepts these, the final repertoire will be included in the charts being prepared by the editor for Amd. 8.

Discussion:

- a. Mr. Masahiro Sekiguchi: Are we putting Emoji in Amd 8?
- b. Mr. Mike Ksar: Yes, but not in Amd.7. I would like to thank the ad hoc participants, and to Mr. Peter Constable for chairing the ad hoc and providing the report.

**Disposition:** Accept ad hoc recommendations for Amd. 8.

**Relevant resolution:**

**M54.12 (Emoji symbols):**

**Unanimous**

WG2 accepts the ad hoc report on Emoji symbols in document N[3636](#), and its recommendation for encoding a selection of **748** characters in several existing blocks and in the four new blocks named Playing Cards in the range 1F0A0-1F0FF, Miscellaneous Pictographic Symbols in the range 1F300-1F5FF, Emoticons in the range 1F600-1F64F and Transport and Map Symbols in the range 1F680-1F6FF. The names, glyphs and code positions for these characters and the ranges for the new blocks are as shown in document N[3626](#).

### **10.14 Latin letter additions for Janalif**

**Input document:**

- [3578](#) Proposed additions to ISO/IEC 10646:2003; US National Body; 2009-03-03  
[3581](#) Latin Letter Additions for Janalif; Karl Pentzlin & Ilya Yevlampiey; 2009-03-16

Mr. Karl Pentzlin: Janalif alphabet in Latin - requires some characters that look like Cyrillic characters. They are used in Tatar language - as official script of Tatarstan.

Discussion:

- a. Mr. Peter Constable: The UTC has reviewed the proposal. We are in favour of supporting the two Ns with descenders. As to the Yeru we don't believe these should be encoded. As to the collation this can be handled by the tailoring. (See item 1 in document N[3578](#).)
- b. Mr. Andreas Stötzner: The alphabet is based on Latin writing system. The characters asked for are part of the Latin text for Tatar language. The Yeru uses the same glyph as the Cyrillic character - but is a Latin letter. It is derived from Cyrillic. Ex: Latin A is not same A in Cyrillic.
- c. Mr. Michael Everson: We have borrowed letters across scripts. In some cases the disunification happened for use of two scripts for the same language -- like Q and W into Cyrillic from Latin. The Cyrillic Soft Sign was borrowed into the Latin alphabet for Tatar. Tatar is written in both Cyrillic and Latin. The disunification of soft sign in the two scripts is needed. I prefer the name is YERI.
- d. Mr. Karl Pentzlin: We can take any alternate suggestion for the name - Yeru is the current Cyrillic name.
- e. Mr. Michael Everson: The argument can be made to unify these - but the simultaneous use of the two scripts for the same language will be the issue. I would favour encoding these characters - understanding the history with appropriate cross references.
- f. Mr. André Szabolcs Szelp: There are Latin letters in Ext. B, 0184 and 0185 that are derived from the Cyrillic Soft Sign - they do not have the serifs. These are the Capital and Small Letter Tone Six.
- g. Mr. Andreas Stötzner: The similarity with these forms is not quite the same.
- h. Mr. Karl Pentzlin: The tones have the same height but change in the boldness of the bowl. The soft signs from Cyrillic have different heights.
- i. Mr. Andrew West: You are making observations about fonts or of text?
- j. Mr. Karl Pentzlin: Based on Tatar text.
- k. Dr. Ken Whistler: The Dwang tone letters and Tatar cases are similar. Bad typography ended up being used. It ends up in poor argument in support of different such adaptations. We need to do some investigation - If the adaptation is different from Tatar then we have different letters. If they are the same, then we have to adjust the glyphs for the tones as well.

- l. Mr. Peter Constable: You indicate current text uses existing characters from Cyrillic. By introducing new characters will you be introducing problems for current users? Will they be better off?
- m. Mr. Mike Ksar: Germany will do further investigation on the Yerus.
- n. Mr. André Szabolcs Szelp: Will there be a cross reference to 014A for Capital Letter NG. Yes. The editor can add it.

**Action item:**

Germany to take note of the above discussion in any revised proposal for the Yeru characters.

**Disposition:** Accept for Amd. 8; A790 and A791 Latin Capital and Small N with Descenders. See item 'i' in the relevant resolution **M54.13** below.

**Relevant resolution:**

|  |                  |
|--|------------------|
| <b>M54.13 (Miscellaneous character additions):</b> | <b>Unanimous</b> |
|--|------------------|

WG2 accepts to encode in the standard the following:

- a. Two (2) Cyrillic letters for Birch-Bark writing with their glyphs from document [N3563](#), in the Cyrillic Extended-B block:  
A660 CYRILLIC CAPITAL LETTER REVERSED TSE  
A661 CYRILLIC SMALL LETTER REVERSED TSE
- b. Two (2) heavy low quotes for German with their glyphs from document [N3565](#), in the Dingbats block:  
275F HEAVY LOW SINGLE COMMA QUOTATION MARK ORNAMENT  
2760 HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT
- c. One (1) middle dot letter for Phags-pa transliteration with its glyph slightly larger than the one shown in document [N3567](#):  
A78F LATIN LETTER MIDDLE DOT
- d. Four (4) Tibetan letters for Sanskrit transliteration with their glyphs from document [N3568](#), in the Tibetan block:  
0F8C TIBETAN SIGN INVERTED MCHU CAN  
0F8D TIBETAN SUBJOINED SIGN LCE TSA CAN  
0F8E TIBETAN SUBJOINED SIGN MCHU CAN  
0F8F TIBETAN SUBJOINED SIGN INVERTED MCHU CAN  
The last three of these are combining marks.
- e. Two (2) Tibetan annotation marks with their glyphs from document [N3569](#), in the Tibetan block:  
0FD9 TIBETAN MARK LEADING MCHAN RTAGS  
0FDA TIBETAN MARK TRAILING MCHAN RTAGS
- f. Three (3) Bopomofo letters for representing Hmu and Ge languages, with the glyphs of XX for GH, of LL for LH, and of ZZ for ZY, from document [N3570](#) in the Bopomofo Extended block:  
31B8 BOPOMOFO LETTER GH  
31B9 BOPOMOFO LETTER LH  
31BA BOPOMOFO LETTER ZY  
(Note: the names are changed from those in document [N3570](#))
- g. One (1) combining mark for use in Uralic Phonetic Alphabet with the glyph shown for 1DFA in document N3571 in the Combining Diacritical Marks Supplement block with its glyph from document N3571:  
1DFC COMBINING DOUBLE INVERTED BREVE BELOW
- h. Nine (9) additional Uralic Phonetic characters with their glyphs from document [N3571](#) in the Latin Extended-D block:  
A7F2 LATIN SUBSCRIPT SMALL LETTER H  
A7F3 LATIN SUBSCRIPT SMALL LETTER K  
A7F4 LATIN SUBSCRIPT SMALL LETTER L  
A7F5 LATIN SUBSCRIPT SMALL LETTER M  
A7F6 LATIN SUBSCRIPT SMALL LETTER N  
A7F7 LATIN SUBSCRIPT SMALL LETTER P  
A7F8 LATIN SUBSCRIPT SMALL LETTER S  
A7F9 LATIN SUBSCRIPT SMALL LETTER T  
A7FA LATIN LETTER SMALL CAPITAL TURNED M
- i. Two (2) Latin letters for Janalif with their glyphs from document [N3581](#):  
A790 LATIN CAPITAL LETTER N WITH DESCENDER

(with an additional cross reference to Capital letter NG at 014A)  
A791 LATIN SMALL LETTER N WITH DESCENDER

### 10.15 Ten Latin letters for pre-1921 Latvian orthography

Input document:

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

Mr. Karl Pentzlin: There are some Latin letters in Latvian, which went through some orthography reforms in 1921. All these letters do have an oblique stroke ... some time they correspond to cedilla accents sometime to another, but not always one to one. Most of the printing was done by using variants of these. They are specially needed to print the 19th century European Latin letters correctly. This is the last major gap for the major European languages to print the 19th century document. Stroke S is also used in a minority German language - Sorbian - used in church documents. After I submitted this proposal I have evidence of modern use of these as well. The requirement is for the whole European community.

Discussion:

- a. Dr. Ken Whistler: One of these - the small s already exists.
- b. Mr. Karl Pentzlin: The uppercase S with oblique stroke is requested.
- c. Dr. Ken Whistler: 1E9C - exists. Annotations are requested. This is not a problem. The request for the change in casing property is a problem. The case property is maintained by the UTC.
- d. Mr. Karl Pentzlin: If we add an upper case my understanding is that the case change also goes along with it. If this is a problem then we can drop the case pairing.
- e. Mr. Mike Ksar: The properties are maintained by Unicode. We can communicate the request to the UTC. The feedback you are hearing is that the case conversion is a problem.
- f. Mr. Andr  Szabolcs Szelp: The expectation was the behaviour is similar to stroke-less S.
- g. Dr. Ken Whistler: The UTC will take a look at this case pairing and get back to Mr. Karl Pentzlin.
- h. Mr. Andrew West: The only difference is that the compatibility mapping of Long S to s.
- i. Dr. Ken Whistler: The UTC has seen this contribution. There is a separate concern from that discussion. My understanding from this contribution is that the 10 characters in antique form is an interpretation from the Fraktur form.
- j. Mr. Karl Pentzlin: There are other scripts than Fraktur -- that have the same feature. It is not unique to Fraktur.
- k. Mr. Andreas St tzner: The rendering in Roman style is secondary to the original Fraktur form.
- l. Dr. Ken Whistler: It looks like a reinterpretation of the use in Fraktur form. What is the significance of markings -- was it independent of the Roman orthography? Or is it a Fraktur interpretation of the existing orthography? Fraktur does not coexist comfortably with lots of diacritics on it. Use of accents in Fraktur is not done. Was there an accented orthography that existed before?
- m. Mr. Andreas St tzner: No, this is independent.
- n. Dr. Ken Whistler: If they were simply interpretation of existing letters -- like marking differently -- then the existence of these characters will be questionable.
- o. Dr. Ken Whistler: I would prefer the glyphs be based as much as possible on the older forms with flatter strokes than with Fraktur.
- p. Mr. Andreas St tzner: We used Oblique stroke versus Diagonal stroke to make a distinction.
- q. Mr. Karl Pentzlin: We added more examples in this contribution to answer some of the UTC feedback.
- r. Mr. Peter Constable: The UTC has to review the revised document.
- s. Dr. Ken Whistler: I think this revised document needs to be reviewed by UTC.
- t. Mr. Andrew West: Diagonal versus Oblique - is the stroke angle somehow different. The stroke shown on page 1 is almost at 45 degrees. It has to be flatter not to confuse with 45 deg stroke.
- u. Mr. Andreas St tzner: The very issue raised by Dr. Ken Whistler, the stroke is to have a very flat angle; these glyphs are to be distinguished from others with more upright strokes. We also have other characters encoded with horizontal stroke and we have to distinguish from them also.
- v. Dr. Ken Whistler: For example, 2366 Latin small letter t with diagonal stroke, I want to make sure that these oblique stroke characters are distinguished. I was mistaken with the casing issue. But the decomposition issue will come up. It is not addressed here. Roman s with stroke will have relationship with long s with stroke etc. You are introducing a pair for an



existing character. It will come up in the UTC discussion. S and long s have compatibility decompositions. The S with stroke is a non-long relationship with the long s with stroke. For normalization stability the equivalence could be a problem.

- w. Mr. Andreas Stötzner: Will you then consider a lowercase long s with a diagonal stroke?
- x. Dr. Ken Whistler: It will end up in another normalization problem for the new Sorbian. The current encoded character was also for Sorbian.
- y. Mr. André Szabolcs Szelp: It may be logical to establish the equivalence proposed by Mr. Andreas Stötzner.
- z. Dr. Ken Whistler: The existing characters were before the systematic distinction on stroked versus non-stroked characters.
- aa. Mr. Peter Constable: Explained the effect of having the decomposition versus not having the decomposition equivalences in use of these characters in identifiers.
- bb. Mr. Mike Ksar: I would suggest German experts can revise the proposal to address the questions raised, improving the glyphs, and addressing the decomposition questions etc. I think you should send it to the UTC also and get their feedback related to properties, decomposition etc. We can consider the revised document at our next meeting.

**Action item:**

Germany is to revise the document for consideration at the next WG2 meeting.

### **10.16 Florin currency symbol**

**Input document:**

[3588](#) **Proposal to encode a Florin currency symbol; German NB; 2009-04-06**

Mr. Karl Pentzlin: An outstanding issue is a letter that is used in ordinary orthographies is also used as a currency sign. This use is not compatible in its property. Latin f with hook is used. Because of the annotations it is polyvalent as used for currency sign and for its use in African languages. The difference between Florin sign and f with hook is that one is slanted and other is not. The proposal is for a new Florin currency symbol differentiating it from the f with hook. The compatibility issue and relationship to use with existing f etc. is also discussed.

**Discussion:**

- a. Dr. Ken Whistler: Because of all the compatibility issue with this, and the problem involved with decoupling current use with an existing character from almost 20 years ago -- Germany is asking for a disunification of a character that exists for a long time. We cannot come to a conclusion immediately. The US national body will need to have the technical issues looked at.
- b. Dr. Umamaheswaran: I would like to raise the concern about the impact of conversion tables to the legacy sets. Someone may use the new sign in a future conversion resource etc. This is another hit due to disunification. The character will end up in potential loss of the data. Use of the sign in locales etc. for currency sign should also be looked at, for example see CLDR data.
- c. Mr. Andreas Stötzner: There are other examples where similar use of another letter is not quite acceptable.
- d. Dr. Ken Whistler: I fully agree with you that some of these may not be quite acceptable. For example, Pound sign and Polish L have never been unified. There are about 16 years of legacy practice. It predates even the definition of 10646. From a typographical point of view there is an analogy. Actual implementation impact is different.
- e. Mr. Karl Pentzlin: I have addressed the conversion related issue. F with a hook is already a bad typographical variant - it is still recognizable.
- f. Mr. Mike Ksar: Can a rendering engine deal with the correct character?
- g. Mr. Peter Constable: Not in plain text.
- h. Mr. Michael Everson: The users of this currency sign - for example in the Caribbean - are they even aware of it? Have they even been consulted?
- i. Mr. Karl Pentzlin: No one expects a language to specify for a currency sign. This is the only letter that needs to be treated that way.
- j. Mr. Peter Constable: If you want to disunify, why do you want to create a currency sign?
- k. Mr. Karl Pentzlin: Due the stability policy.
- l. Mr. Peter Constable: A software product that will be available in near future will have a font used for African orthography with upright glyphs.
- m. Mr. Mike Ksar: I request Germany to take into consideration the feedback, and submit a revised contribution.

**Action item:**

Germany is to consider the feedback from the meeting and submit a revised proposal addressing the concerns.

**10.17 Mro script****Input document:**

[3589](#) Proposal for encoding the Mro script in the SMP of the UCS; Martin Hosken & Michael Everson; 2009-03-24

Mr. Michael Everson: This is a first time proposal to WG2. We have some feedback from some of the users with some open questions. There are about 100,000 speakers using it. It is a simple alphabetic script.

**Action item:**

For review and feedback by national bodies and liaison organizations before next meeting.

**10.18 Sharada script****Input document:**

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

Ms. Debbie Anderson: This is the first time the full proposal is presented to WG2. Earlier proposal had some indications about the script for the roadmap purposes.

Dr. Ken Whistler: This is an example of fairly complete proposal even though it has not been reviewed by the US NB.

**Action item:**

For review and feedback by national bodies and liaison organizations before next meeting.

**10.19 Khojki script****Input document:**

[3596](#) Proposal to Encode the Khojki Script in ISO/IEC 10646; Anshuman Pandey; 2009-03-25

Ms. Debbie Anderson: This is the first time proposal to WG2. The script is used by Ismaili community. It is a Brahmi-based script. It is used in South Asia.

**Action item:**

The proposal is for review and feedback from WG2 experts before next meeting.

**10.20 Nüshu script****Input documents:**

[3449](#) Feedback on Nüshu; UK - Andrew West; 2008-09-15

[3598](#) Proposal for encoding Nüshu in the SMP – 2nd Revision; China NB; 2009-03-18

[3635](#) Nüshu ad hoc report; Ad hoc- Chen Zhuang; 2009-04-22

An ad hoc group met to review the revised proposal from China.

Mr. Chen Zhuang: The current proposal in document N[3598](#) has answered all the questions from Ms. Deborah Anderson and from Mr. John Knightley. Some characters can be replaced with their alternatives. The UK proposal for more characters will not be included in Nüshu. The fonts will be updated. A new list of differences between the new and old will be compiled.

Mr. Andrew West: The UK comments in document N[3449](#) have been answered. The Nüshu iteration mark is proposed to be added. There may be candidates for future addition. We are satisfied with the current draft and the ad hoc discussion.

**Disposition:** Expect a revised proposal reflecting ad hoc report recommendations by 2009-07-31. The starting point for the Nüshu script block is 1B100.

**Relevant resolution:****M54.18 (Nüshu script):****Unanimous**

WG2 accepts the ad hoc report in document N[3635](#) on Nüshu script and invites the Chinese national body to provide a revised contribution by 2009-07-31, including considerations for items in the ad hoc report.

## 10.21 Old Hungarian script

Input documents:

- [3526](#) Hungarian Native Writing Draft Proposal; Gábor BAKONYI; 2008-09-30
- [3527](#) Proposal for encoding the Szekler-Hungarian Rovas in the BMP and the SMP (10.6Mbytes); Gábor Hosszú; 2008-10-04
- [3531](#) Revised proposal for encoding the Old Hungarian script in the UCS; Michael Everson & André Szabolcs Szelp; 2008-10-12
- [3532](#) Mapping between two Old Hungarian proposals; Michael Everson and André Szabolcs Szelp; 2008-10-12
- [3566](#) Hungarian Native Writing Proposal - Revised; BAKONYI, Gábor; 2009-02-05
- [3615](#) Second revised proposal for encoding the Old Hungarian script in the UCS; Michael Everson & André Szabolcs Szelp; 2009-04-16
- [3634](#) Towards an Encoding of Old Hungarian – Comments on 3527 and 3615; Karl Pentzlin; 2009-04-21
- [3637](#) Old Hungarian ad hoc outline; Ad hoc – Debbie Anderson; 2009-04-22
- [3640](#) Hungarian ad hoc report; Ad hoc – Debbie Anderson; 2009-04-23

An ad hoc group met and discussed the various contributions on Old Hungarian script. The ad hoc report in document N[3640](#) was introduced by Ms. Debbie Anderson. This was preceded by an overview presentation on Rovas script(s) by Dr. Gábor Hosszú.

Dr. Gábor Hosszú: I will give you a high level short out line of Rovas script. Details will be discussed in the ad hoc group. The first book in Rovas in written form was in 16th century in Hungary. There is another book Alive Rovas book. The Szekeler Hungarian is becoming popular. Examples of books, journals etc. are available from the web. The Rovas forms part of Hungarian culture and is also heritage of the global community. The Alive Rovas book is translated to English etc. Examples of use of Rovas script in road sign in a town in Romania (previously in Hungary) and other examples were shown. Three different groups of Rovas scripts - Khazar, Carpathian Basin Hungarian; and Szekler Hungarian Rovas -- these are now completed and are available on the web. Interrelationship between these different scripts was shown. The Khazar Rovas is LTR. The Hungarian Rovas is RTL. References to web sites are also provided.

Ms. Debbie Anderson: The ad hoc went through a number of issues outlined in document N[3627](#). See the ad hoc report for details. Authors of document N[3615](#) will revise the proposal based on the ad hoc consensus.

Discussion:

- a. Mr. Mike Ksar: If we don't have an agreement on name of the script how can we proceed?
- b. Mr. Michael Everson: The number 50 is missing in one of the paragraphs in the report. There was no discussion of encoding two punctuation characters. There will be some Emoji characters going in that block.
- c. Dr. Gábor Hosszú: I regret to say that I cannot agree to every point in this ad hoc report. We do not agree to not including the '500' symbol. I have another concern about the bug characters and the ligatures.
- d. Mr. Michael Everson: I want to remind that in WG2 consensus does not mean unanimity.
- e. Mr. Mike Ksar: The report will be modified to take into account Hungary's concern on three items. I would like to thank the ad hoc participants, and to Ms. Deborah Anderson for chairing the ad hoc and providing the report.

**Disposition:** Needs revised proposal based on ad hoc report.

**Relevant resolution:**

**M54.17 (Hungarian Runic script):**

**Unanimous**

WG2 accepts the ad hoc report in document N[3640](#) on the Hungarian Runic, with revisions made during the discussions on it, and invites the authors to provide a revised contribution including considerations for items in the ad hoc report.

## 10.22 Germanicist, Nordicist, and other phonetic characters

Input document:

- [3555](#) Exploratory proposal to encode Germanicist, Nordicist, and other phonetic characters; Everson; 2008-11-27

Mr. Michael Everson: The document is an exploratory proposal for feedback from experts, national bodies etc.

**Action item:** National bodies and liaison organizations to review and feedback for consideration at the next meeting.

### 10.23 Pahawh Hmong script

Input document:

[3616](#) Preliminary proposal to encode the Pahawh Hmong script in the UCS; Michael Everson; 2009-04-16

Mr. Michael Everson: This is the first time proposal to WG2. The script is a messianic script for Hmong language in Laos devised around 1959. Because of Laos's politics it is not used in Laos -- but used in Australia and US by émigrés. There is some complexity in the script. Users enter the script as they see and sort as they write etc. More than one orthographies use them -- using different diacritics for phonetic distinction. The usage in Australia and US differs and are trying to get mutually agreed upon solution.

**Action item:** National bodies and liaison organizations are to review and provide feedback for consideration at the next meeting.

### 10.24 Meetei Mayek additions

Input document:

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

Mr. Michael Everson: Characters in this document were accepted by the UTC and WG2 and were originally in PDAM5. Because of concerns raised by the user community to avoid confusion with current set of characters in use, that they should not be included at that time, and that they not appear in the same block as the modern Meetei Mayek, they were taken out. But the scholarly use need for the other characters is still there. One of the scholars has created a font, keyboard etc.

Discussion:

- a. Dr. Ken Whistler: The full set for Meetei Mayek script was originally in Amd. 5. It was moved to Amd. 6 with a subset of modern Meetei Mayek characters being into it. The historic subset proposed in document [N3478](#) was taken out.
- b. Dr. Umamaheswaran: There was concern raised by India at that time, has the political situation improved now? I think we should be sensitive to that.
- c. Ms. Debbie Anderson: The situation has not changed from the political point of view.
- d. Dr. Ken Whistler: We should delay inclusion of this until at least the current Amd. 6 is published. We have reviewed the content of this document technically. It is just a process question.
- e. Mr. Peter Constable: The Unicode Consortium would prefer to wait on this.
- f. Mr. Michael Everson: Ireland would not like this contribution to be lost. The scholarly use still exists.

**Action item:** This contribution is carried forward to the next meeting.

### 10.25 Jurchen script

Input documents:

[3618](#) Jurchen Character Repertoire; Jason Glavy via Debbie Anderson; 2009-04-17

[3628](#) China Feedback on Jurchen contribution (3618); China NB; 2009-04-20

[3639](#) Jurchen ad hoc report; Ad hoc – Debbie Anderson; 2009-04-23

Ms. Debbie Anderson presented the ad hoc report in document [N3639](#). China has requested to put these characters into a ballot at this meeting. There are two action items on China arising out of the ad hoc.

Discussion:

- a. Mr. Mike Ksar: There are still some outstanding action items. Can we progress it into an Amd? Do we have the fonts?
- b. Mr. Andrew West: The action items are for supporting auxiliary data. The changes required are editorial.
- c. Mr. Michael Everson: Font will be available to the project editor. China will send it.
- d. Mr. Andrew West: This proposal has not been looked at by UTC. But UTC is aware of the effort behind this. Mr. Jason Gravy's proposed repertoire is same as the Chinese proposed repertoire. I don't think there is any controversy. So the UK would support going into a ballot.
- e. Dr. Ken Whistler: I would not support going into a ballot at this time. Our experience with Tangut should make us take it slow.
- f. Mr. Andrew West: There are 1425 characters, in two blocks. The roadmap will need adjustment.

- g. Ms. Debbie Anderson: It would be helpful to know why there is a discrepancy between the Mr. Jason Gravy's and the Chinese fonts.
- h. Mr. Andrew West: There are about 20 characters in question. We will review and compare the charts before the next meeting.
- i. Mr. Mike Ksar: Thanks to the ad hoc participants and to Ms. Deborah Anderson for chairing the ad hoc and the report.

**Disposition:** Needs a revised contribution based on ad hoc report.

**Relevant resolution:**

**M54.19 (Jurchen script):**

**Unanimous**

WG2 accepts the ad hoc report in document N3639 on Jurchen script and invites the Chinese national body to provide a revised contribution, including considerations for items in the ad hoc report.

## 11 Amendments - disposition of ballot comments and progression

### 11.1 FPDAM 6

**Input documents:**

- [3576](#) FPDAM6 – all -pdf, AMD6names.txt; Project Editor Michel Suignard; 2008-11-24
- [3580](#) Pre-meeting 54 charts showing characters in the pipeline; Michel Suignard; 2009-03-04
- [3599](#) Summary of Voting on SC 2 N 4049, ISO/IEC 10646: 2003/FPDAM 6 (includes NB feedback as attachments); SC2 02n4065; SC2 Secretariat; 2009-03-30
- [3609](#) Proposed Disposition of Comments FPDAM6 Project Editor; Michel Suignard; 2009-04-16
- [3613](#) Name correction for FPDAM 6; Javanese A9C0 JAVANESE PANGKON; Deborah Anderson SEI UC Berkeley; 2009-04-10

**Contributions in support of ballot comments:**

- [3533](#) Canadian Syllabics; Everson; 2009-01-26
- [3574](#) Proposal to Encode Section Marks for Kaithi; Anshuman Pandey; 2009-02-10
- [3579](#) Proposal to encode a German trademark symbol in the UCS; Karl Pentzlin; 2009-02-27
- [3594](#) Proposal for encoding one additional Myanmar character for Pa'o Karen in the UCS; Michael Everson and Martin Hosken; 2009-04-09

**Output documents:**

- [3625](#) Amd 6 Charts; Michel Suignard; 2009-04-17
- [3631](#) Disposition of Comments – FPDAM6; Michel Suignard; 2009-04-24

Document N3576 (and its attachment) contains the text of FPDAM6 that was balloted. Document N3599 (SC2 N4049) contains the results of the ballot with the national body comments as attachments. Document N3609 contains the proposed disposition of comments; the comments from the national bodies are embedded in this document followed by editor's proposed disposition. Document N3580 is a set of charts for use as reference during the discussions of the disposition of comments as well as in discussions on other topics during the meeting.

Comments were received from Germany, Indonesia, Ireland, Japan, UK, and USA. The comments were taken in the reverse alphabetical order of member bodies, since many of the US comments were cross referenced by other member bodies.

### **USA - Comments with Approval**

*Technical comments:*

*T.1 - change name for 1DC4 from VEDIC SIGN KASHMIRI SVARITA to VEDIC SIGN MIDCHARACTER SVARITA.*

Mr. Michel Suignard: Germany T.1 and Ireland T.4 also request a name change for 1DC4. Germany's request is same as the US. Ireland proposes the new name as VEDIC SIGN YAJURVEDIC MIDLINE SVARITA. My preference is to use the Ireland proposal.

**Discussion:**

- a. Ms. Debbie Anderson: I checked with India and they agreed with the Irish proposed name.
- b. Dr. Ken Whistler: If India has agreed with it there is no need for any other annotation or change.

**Disposition:** Accepted in principle. Use new name for 1DC4 VEDIC SIGN YAJURVEDIC MIDLINE SVARITA.

*T.2 a - change 'white on black' to 'negative' for ten symbols in Enclosed Alphanumeric Supplement block*

Mr. Michel Suignard: Ireland T.9b and Germany T.2a are the same. I propose acceptance.

**Disposition:** Accepted. Use 'negative' in the name for the ten symbols.



*T.2 b - move SQUARE DJ from 1F14F to 1F190; since the 1F14x block is for Latin letters contained in a square.*

Mr. Michel Suignard: Germany T.2b is the same. I propose acceptance.  
Disposition: Accepted.

*T.3 - addition of circled WZ*

Also supported by comment T.3 from Germany.

Document [N3579](#) contains a proposal for German Trademark symbol; the justification, examples, a proposed name and glyph are detailed in the document.

Dr. Ken Whistler: The US national body already reviewed this document. It is relevant - and we feel it is an appropriate character to add as requested by Germany.

**Disposition:** Accepted - add new character 1F12E CIRCLED WZ.

*T4 - Unified Canadian Aboriginal Syllabics Extended block - reordering*

Also supported by comment T.4 from Germany and by comment T.3 from Ireland. Justification is provided in Irish contribution in document [N3533](#).

Mr. Michel Suignard: Document [N3533](#) from Ireland proposes reordering the Unified Canadian Syllabics Extended block. Part of it is in Amd. 6 and another part is in Amd. 7. Because they are separated the order of the characters is not optimized. The idea is to move what is in Amd. 7 to Amd. 6 and reorder the combination. We did not have any comments in Amd. 7. It would be wise to move into a single block into Amd. 6.

Discussion:

a. Dr. Ken Whistler: The US national body comment is asking for reordering only the characters in Amd. 6.

b. Dr. Umamaheswaran: Another option is to move the whole thing into Amd. 7.

c. Mr. Michel Suignard: We will revisit the combination of Amd. 6 and Amd. 7 contents to later.

(During the associated Amd. 7 disposition of comment discussions it was decided to move the reordered set from Amd. 7 to Amd. 6)

**Disposition:** Accepted in principle. Merge and reorder the content of Canadian Syllabics Extended from Amd. 6 and Amd. 7, and process as part of Amd. 6.

**Relevant resolution:**

**M54.01 (Canadian Aboriginal Syllabics Extended):**

**Unanimous**

With reference to ballot comments regarding Canadian Aboriginal Syllabic characters in FPDAM6 (in document [N3609](#)) and in PDAM7 (in document [N3610](#)) WG2 resolves to combine, reorder and consolidate the set of 29 characters encoded in 18E0 to 18FC in Amd. 6 and the set of 41 characters encoded in 18B0 to 18D1, 18D3 to 18D7, 18D9 and 18DA in Amd. 7, and include the combined set in Amd. 6. The new code positions, the corresponding character glyphs and names are as shown in pages 2 and 3 of document [N3533](#).

*T.5 - request to add 110BE KAITHI SECTION MARK and 110BF KAITHI DOUBLE SECTION MARK*

Also supported by comment T.5 from Germany and T.8 from Ireland.

Mr. Michel Suignard: Document [N3574](#) has the proposal with justification and examples in support of this request for two characters to be added to Amd. 6. Do we do it now or in Amd. 7?

Discussion:

a. Dr. Ken Whistler: The US requested for it in the first place is because Kaithi script is in Amd. 6. This is to request completion of repertoire.

b. Dr. Umamaheswaran: These two characters are for completing the repertoire; so the urgency to add these in Amd 6 is justified.

**Disposition:** Accepted. Add 110BE KAITHI SECTION MARK and 110BF KAITHI DOUBLE SECTION MARK to Kaithi script in Amd. 6.

*Editorial comments:*

E.1 - add an annotation to A8FA DEVANAGARI CARET. Accepted.

E.2 - Annotations to South Arabian characters; since Ireland had a technical comment on the same topic the US (Dr. Ken Whistler) withdrew this editorial comment.

E.3 - glyph correction 26DF BLACK TRUCK. Accepted.

## **UK - Comments with Approval**

*Editorial comments:*

*E.1 - change cross-reference for 0FCC to 0FD6 instead of to 534D.*

Mr. Michel Suignard: The comment is not related to Amd. 6 content. It is to existing text in the standard.

**Disposition:** Accept the correction and include in Amd. 6.

*E.2 - expand header for 0FD5 - 0FD8 to include other religions or use simply "Religious Symbols"*

Mr. Michel Suignard: The request is to change the sub-header in the nameslist in the Tibetan block.

Discussion:

Mr. Michael Everson: I would prefer the suggested longer alternative.

Dr. Ken Whistler: Using "Religious Symbols" is OK. We can add annotations if needed later. We can go with the short header.

**Disposition:** Accepted to use "Religious Symbols" for the sub-header in the nameslist. No annotations at this time.

*E.3 - change annotations - for 1F243 to "safe", and for 1F248 to "steal".*

(Ireland comment E.8 is on the same topic).

**Disposition:** Accepted. Change the annotations.

## **Japan - Comments with Disapproval**

*Technical comments*

*JPT1 - move 32FF - Katakana De Enclosed in a Square (ARIB-9056) to Ideographic Supplement Block*

Mr. Michel Suignard: See also JPT3 comment. Based on 'enclosed' being the name of the block, we could add it in the current block. Based on other comments we can accept moving it out of current block.

**Disposition:** Accepted in principle. See JPT3.

*JPT2 - Concern about round trip integrity with ARIB STD-B24.*

ARIB STD-B24 has two similar symbols ARIB-9058 and ARIB-9330 that have shapes "an ideograph two enclosed in a square". FPDAM6 has only one encoded at 1F213.

Mr. Michel Suignard: ARIB has not used source separation rule. Similar looking characters are used with two different meanings. This is related to Unification. In ARIB we have two characters -- one for football and the other for broadcasting. At best we could move one of these to the compatibility zone. The strict source separation was not asked for. There were two annotations to capture the unification -- to some extent you will lose the source separation due to this. I would like not to disunify these.

Discussion:

- a. Mr. Masahiro Sekiguchi: Japan is not proposing two separate characters. I want WG2 to discuss the concern raised. These two characters were in the proposal from the beginning. Japanese national body agreed that we should agree on some policy of unification. We have no objection to the explanation you just gave. There was wider review of the Amd. 6 draft. We received several comments asking about the unification. Japanese national body wanted to have another discussion in WG2. I know Mr. Michel Suignard is not in favour of disunification. I want to hear the opinion from others.
- b. Dr. Ken Whistler: The US national body is in favour of leaving it as unified. If the round-tripping is more important for us, we would have asked for a compatibility symbol separately.
- c. Mr. Michael Everson: We agree.
- d. Mr. Andrew West: We agree.
- e. Prof. Kyongsok Kim: Japan is clearly concerned. There is no CJK compatibility character shown. It could be in another compatibility character block if needed. I am not strongly in favour of disunification.
- f. Mr. Michel Suignard: The characters still look exactly the same, even if you disunify them. Unless there is a strong rationale to keep the semantics separate, I prefer to keep the single code point with dual annotation. I would like dispose as 'Accept in Principle'. Per Japanese request, WG2 has discussed the matter and the group as a whole decided to keep it unified as it is in the Amd.
- g. Mr. Mike Ksar: I thank the experts who have commented. It is the decision of WG2 and not just the editor.

**Disposition:** Accepted in principle. WG2 discussed and decided on no change.

*JPT3 - Rearrange the characters in Enclosed Ideographic Supplement block following the order in ARIB STD-B24.*

Mr. Michel Suignard: There is merit in this request. The ordering will be the sequence used in broadcasting first and the remaining later. Consequence of these would be to have a square Katakana DE in the middle of the list. We could accept that. The new order is proposed in document [N3809](#) under JPT3 disposition. The old numbers are also kept to show where they were. The shell bracketed characters are also reordered. I would like to have others review these. Comment JPT1 is answered by 1F213 as the new location for Katakana DE.

Dr. Ken Whistler: This starts with 1F210, and does not impact others. The US national body would be fine with the proposed reordering.

**Disposition:** Accepted. Characters are reordered as shown in document [N3631](#).

*JPT4 - requests to revisit the name of the block 'Enclosed Ideographic Supplement' since there is no block named 'Enclosed Ideographic'.*

Mr. Michel Suignard: It is true that there is no Enclosed Ideographics block. We are not clean in the naming of these blocks. I have given several examples in document [N3809](#). KangXi is the worst of the lot. My suggestion is to keep it as it is. Or, change to CJK letters etc to be more consistent. I am open to either.

Discussion:

- a. Mr. Michael Everson: The preceding block is CJK Alphanumeric ...
- b. Dr. Ken Whistler: One has to say "CJK Letters and Ideographics Supplement". It is fine to leave things alone; the explanation can describe what is in each block. The blocks don't describe what is in the block precisely; it is just a rough description anyway.
- c. Mr. Michel Suignard: Does Japan have any other suggestion?
- d. Mr. Masahiro Sekiguchi: Japan's comment is based on something being either in or out. We have no problem in leaving it alone. The Japan proposal was not to change the name from CJK Ideographic; it is to say 'something' and then 'something supplement'. After hearing the discussion it is OK to accept the current name.

**Disposition:** Japan agreed to withdraw based on the above discussion.

*JPT5: Concerns regarding Clause 3 Normative reference to Unicode 5.2*

Mr. Michel Suignard: Japan's comment is about normative referencing of Unicode 5.2 -- which does not exist yet. This is not the first time Japan has made similar comments. We have to find a way to address this issue. We have normative reference from 10646 to Bidi algorithm etc. to Unicode 5.2. Every time you are adding to the repertoire -- there is a change in the normative referencing. There are drafts of the specific documents online currently -- they did not exist at the time FPDAM 6 ballot was sent out. I would like to encourage the Unicode consortium to put out such normative texts or a pointer to it at the earliest opportunity. The alternative is to reference to a back-level spec. and we can easily get out of synchronization.

Discussion:

- a. Dr. Ken Whistler: Both of the particular UAXs normatively referenced are themselves not sensitive to the repertoire. One is for Bidi algorithm and the other one is to normalization. They are not sensitive to repertoire. If one wants to be conformant to a specific version of normalization etc. we may be sensitive to the repertoire in either character being included or not. Even though the algorithms themselves do not change from one version to another there is some implication due to the repertoire.
- b. Mr. Peter Constable: I will take this item as an item to report back to Unicode Consortium and see how they can manage the synchronization issue. The properties data is managed by Unicode. There is no immediate solution that can be provided at this meeting or for Amd. 6.
- c. Mr. Mike Ksar: Will option 1 - referencing the published Unicode versions - be the direction for Amd. 6?
- d. Mr. Masahiro Sekiguchi: Japan would prefer to reference to older version. Our main concern is referencing to a document that is NOT available yet. As Mr. Michel Suignard said that, if a draft of Unicode 5.2 is available that could be referenced, it would satisfy Japan's comment.
- e. Mr. Peter Constable: Is it sufficient that we link to the drafts or do you want the docs to be submitted to WG2?
- f. Mr. Masahiro Sekiguchi: From the approval process, it would be OK to note it for the disposition of comments. In the FDAM6 text, the reference should be to an available document. For future amendments a better solution can be sought.

- g. Mr. Michel Suignard: For the FDAM there is no technical vote. We can refer to the UTS. Before the final publication of Amd. 6 we can update the reference to Unicode 5.2, which should be ready by then.
- h. Mr. Mike Ksar: I thought Japan was asking for a WG2 doc number also. No?
- i. Dr. Ken Whistler: Because there is synchronization between two standards, the issue will be there. Unicode 5.2 cannot finalize till Amd. 6 is finalized. The UTC is finalizing the V5.2 while Amd. 6 is being balloted. We need to simply find a way to publish these at the same time.
- j. Mr. Masahiro Sekiguchi: We are not asking that V5.2 be finalized. Japan is asking to reference the latest draft for Unicode 5.2.
- k. Mr. Michel Suignard: For Amd. 7 we can certainly do something better.
- l. Dr. Ken Whistler: The final ones will be the two .html files for TR 9-21 and TR 15-31. Meanwhile Unicode consortium liaison will take it back to the consortium towards finalizing these.
- m. Mr. Michel Suignard: We are getting better at this.

**Disposition:** Accepted. Reference to Unicode 5.2 will be replaced with references with pointers to TR 9 for Bidi and TR 15 for normalization.

*Editorial comments:*

*JPE6: Concern about ordering in Clause 29 Named UCS Sequence Identifiers - Tamil*

Mr. Michel Suignard: The current order is consistent.

*Discussion:*

- a. Dr. Ken Whistler: The government of Tamil Nadu (TNG) had provided the order. This would resolve the concerns of TNG. The order for the table for the sequences has no implications whatsoever for implementations. These are simply sequences. The current rationale was following TNG input.
- b. Mr. Masahiro Sekiguchi: Do you know if the user body is following this order. If they have any ordering rules, we should follow their order. If this list was produced at random then I will have concern.
- c. Dr. Ken Whistler: The Tamil collation order users have KSSA and SHRII at the end. I believe the order TNG presented is not at random.

**Disposition:** Accepted in principle. The order is consistent in some way. It is in the order proposed by Tamil Nadu Government.

*JPE7 - correct the glyph for 1F12D - enclosing looks like an ellipse instead of a circle around CD.*

Germany comment T.7 is also on this item.

**Disposition:** Accepted in principle. For the 'enclosed CD' it was a circle in ARIB set.

Mr. Masahiro Sekiguchi: Based on the above dispositions we change our ballot response to *Approval*.

***Ireland - Comments with Disapproval***

*Technical comments:*

*T.1, T.2 and T.3 - requesting merging and reordering the Canadian Syllabic Characters from Amd. 6 and Amd. 7 in a single block - Canadian Syllabics Extended.*

US comment T.4 supports the rearrangement for Amd. 6 content.

Germany comment T.4 supports the merge and reordering of both Amd. 6 and Amd. 7 content. Germany has similar comment T.2 in its PDAM7 ballot response.

**Disposition:** Accepted per disposition of US disposition to US comment T4 (on page 39) and later discussion in Amd. 7 to merge the content of Amd. 6 and Amd. 7.

*T.4 - change name for 1CD4 from VEDIC SIGN YAJURVEDIC KASHMIRI SVARITA to VEDIC SIGN YAJUR VEDIC MIDLINE SVARITA.*

Same as US comment T.1 and related to Germany comment T.1.

**Disposition:** Accepted.

*T.5 - add a new character AA7B MYANMAR SIGN PAO KAREN TONE*

Mr. Michael Everson - presented document N3594R. A reverse comma with a hole inside the top of the comma named *MYANMAR SIGN PAO KAREN TONE* at AA7B - is proposed. It is to be added to the Myanmar extended block. Evidence of use of this character is provided.

*Discussion:*

- a. Mr. Mike Ksar: Any objection to accepting this?
- b. Mr. Michel Suignard: This is a request for a new single character. It looks fine to accept this - similar to Kaithi character we accepted, it could be accepted in Amd. 6.
- c. Dr. Ken Whistler: The glyph that goes with the chart is not shown with the dotted circle; it is a combining mark.
- d. Mr. Peter Constable: I would like a revised document with the corrected glyph be provided.

**Disposition:** Accept for Amd. 6, AA7B MYANMAR SIGN PAO KAREN TONE with glyph from document [N3594R](#) but with a dotted circle to indicate it is a combining mark.

*T.6 - add Meetei Mayek Extensions block starting AAEO per contribution [N3478](#).*

The extension to Meetei Mayek is not part of Amd. 6. The topic was taken up as a separate discussion - see section 10.24 on page 37. The ballot comment was withdrawn by Mr. Michael Everson for Ireland.

*T.7 - on names and annotations for Old South Arabian characters*

Discusses the proposed annotation from US and provides rationale for changing the names of a few characters.

Also related to US comment E.2, which was withdrawn by the US. The editor has corrected some typos in the comment from Ireland. An ad hoc group of experts (from US, Ireland and Germany) met and discussed the comment and recommended:

No change to 10A66.

10A6A to OLD SOUTH ARABIAN LETTER SAT

10A6F to OLD SOUTH ARABIAN LETTER SAMEKH

No annotations are needed.

**Disposition:** Noted the Irish comment. Accept the name changes for 10A6A and 10A6F per ad hoc recommendation above.

*T.8 - add two Kaithi section marks*

Same as US comment T.5 and Germany comment T.5.

**Disposition:** Accepted per disposition of US comment T.5 - see page 39.

*T.9 a - proposes to add several potentially anticipated characters to the Enclosed Alphanumeric Supplement block.*

Mr. Michel Suignard: While Ireland is correct in its anticipation it is not clear if we can entertain this without a proper supporting proposal. Irish ballot comment document [N3599-I](#) has a list of the proposed characters.

Discussion:

- a. Dr. Umamaheswaran: If we accept these, I would prefer to move them to Amd. 7 rather than in Amd. 6.
- b. Dr. Ken Whistler: US national body may not have objections to it. Personally I am uncomfortable in including such a large set of symbols without adequate rationale being included. If Ireland would propose to have the national bodies have another balloting opportunity then we could entertain that.
- c. Mr. Michel Suignard: There is a bunch of related characters coming along. It is fair enough to have another technical round.
- d. Mr. Michael Everson: It is as though we do not know what the holes are for.
- e. Mr. Michel Suignard: We are not giving other national bodies a chance to have a technical round.

**Disposition:** A new agenda item to discuss these is proposed. See discussion and disposition under section 10.1 on page 21.

*T9 b - change 'white on black' to 'negative' in character names for circled and squared Latin letters*

Same comment as T.2a from US and T.2 from Germany.

**Disposition:** Accepted. See disposition of US comment T.2 a on page 38.

*T.2 c - informative annotations is proposed for several Enclosed Alphanumeric characters*

Mr. Michel Suignard: Only one character in the above list 1F131 is in Amd. 6 and has already annotations that should be preserved. 1F12E was accepted as new character per US comment T.3



(also German comment T.3). All the others are new and depend on what is decided regarding Irish comment T.2 a above.

**Disposition:** Partially accepted. Annotations are included only for those characters that will be in the FDAM6 list of characters.

*Editorial Comments:*

*E.1 - proposes consistent use of "Page, Clause name" format, pointing out some inconsistencies.*

Mr. Michel Suignard: This comment is related to changes in the way we indicate Notes. ITTF was OK with what we had. About 90% was without comma and rest was with comma. Either way I need one style recommendation.

Dr. Umamaheswaran: I would suggest looking up ITTF styles.

Mr. Michel Suignard: It will be consistent either way.

**Disposition:** Partially accepted. There will be no major change to the current format; the inconsistencies will be corrected.

*E.2 - remove leading space before the word MYANMAR at 109A, 109B, 109C in list of combining characters.*

**Disposition:** Accepted.

*E.3 - proposes annotations and header entries for some Cyrillic supplement characters in names list for consistency*

**Disposition:** Accepted in principle. Editor will work with Ireland and Unicode editor to arrive at a consistent solution.

*E.4 - glyph for 0955 - Devanagari Chandra Long A should be more centred like 0945*

**Disposition:** Accepted in principle. Needs a new font.

*E.5 - fix the annotation and cross referencing of 0FCC to 0FD6*

**Disposition:** Accepted in principle; also UK comment E.1. 'Svasti sign' will be used instead of Svastika.

*E.6 - glyph for 26DF BLACK TRUCK be made larger and add an annotation to equate to 'lorry'.*

**Disposition:** Accepted; also US comment E.3.

*E.7 - proposes to replace Lisu chart using a new font from Mr. David Morse, the original submitter of the Lisu proposal.*

Mr. Michel Suignard: The new font is to be supplied by Ireland from David Morse.

Discussion:

- a. Mr. Michael Everson: There is no license issue - it is provided by David Morse under 'SIL open font license'.
- b. Mr. Chen Zhuang: China does not have any objection to the new font.
- c. Mr. Peter Constable: The font license has liberal terms by SIL that permits the use of it.

**Disposition:** Accepted. Ireland to send the new font to the editor.

*E.8 - proposes annotation to 1F243 be changed to "safe" and that the annotation to 1F248 be changed to "steal".*

**Disposition:** Accepted; similar to comment E.3 from UK.

Mr. Michael Everson: Based on the above dispositions, Ireland changes its ballot to *Approval*.

### **Indonesia - Comments with Approval**

*T.1 - correct the name for A9C0 from JAVANESE PANGKONG to JAVANESEPANGKON.*

Mr. Michel Suignard: This comment came after the close of the ballot; it came through SC2.

Indonesia did vote positive. Reference also document [N3623](#) (discussed in section 9.1 on page 21) for glyph corrections related to Javanese.

**Disposition:** Accepted.

### **Germany - Comments with Approval**

*T.1 - supports comment T.1 from the US regarding renaming of 1DC4.*

T.2 a - supports comment T.2 a from the US on changing 'white on black' to 'negative' in the names of some Enclosed Alphanumeric Supplement characters  
 T.2 b - supports comment T.2 b from the US - on moving SQUARE DJ characters  
 T.3 - supports comment T.3 from the US on adding CIRCLED WZ  
 T.4 - supports comment T.4 from the US on reordering of Canadian Syllabics in Amd. 6  
 T.5 - supports comment T.5 from the US on adding two Kaithi section marks

**Dispositions:** See dispositions for the above comments under the disposition of US comments starting on page38.

T.6 - proposes moving of several symbols in Miscellaneous Symbols block for more logical groupings  
 Mr. Michel Suignard: We had WG2 discussion in previous meetings related to moving symbols based on shapes. Some of Germany's proposed moves make sense. I want WG2 input.  
 Mr. Mike Ksar: Any comments from the experts here?

There was an ad hoc of editors (project editor and contributing editor) to discuss the German proposal. The following moves were recommended by the ad hoc:

|                                      |         |
|--------------------------------------|---------|
| 26CE HEAVY EXCLAMATION MARK SYMBOL   | to 2757 |
| 26E2 HEAVY LARGE CIRCLE              | to 2B55 |
| 26E4 HEAVY OVAL WITH OVAL INSIDE     | to 2B56 |
| 26E5 HEAVY CIRCLE WITH CIRCLE INSIDE | to 2B57 |
| 26E6 HEAVY CIRCLE                    | to 2B58 |
| 26E7 HEAVY CIRCLED SALTIRE           | to 2B59 |

No other moves as requested.

Mr. Andreas STÖTZNER: Germany is OK with the above recommendation.

**Disposition:** Partially accepted. Move only the characters per list above.

T.7 - improve the glyphs for 26EA Mountain to have a more rounded peak, and for 1F12D CIRCLED CD to have the enclosing to be circular

**Disposition:** Accepted - subject to availability of improved glyphs to the editor.  
 (Document N3625 - final charts for Amd. 6 will show the corrected glyphs.)

*Editorial comments:*

E.8, E.9 and E.10 were in support of US editorial comments E.1, E.2 and E.3.

Since US E.2 was withdrawn in favour of Ireland comment T.7, Germany withdrew comment E.9.

**Dispositions:** See dispositions for the above comments under the disposition of US comments starting on page38.

**Relevant resolutions:**

**M54.03 (Disposition of FPDAM6 ballot comments):**

**Unanimous**

WG2 accepts the disposition of ballot comments on FPDAM6 in document N3631 and instructs its editor to prepare the final text of Amendment 6 incorporating the dispositions, including all the changes accepted in resolutions M54.01 and M54.02 above. The editor is to take note of additional glyph changes per section 2, items a through f in document N3623. The significant accepted changes are noted below:

- a. 14 name changes:
  - 1CD4 to VEDIC SIGN YAJURVEDIC MIDLINE SVARITA
  - A9C0 to JAVANESE PANGKON
  - 10A6A to OLD SOUTH ARABIAN LETTER SAT
  - 10A6F to OLD SOUTH ARABIAN LETTER SAMEKH
  - 1F157 to NEGATIVE CIRCLED LATIN CAPITAL LETTER H
  - 1F15F to NEGATIVE CIRCLED LATIN CAPITAL LETTER P
  - 1F179 to NEGATIVE SQUARED LATIN CAPITAL LETTER J
  - 1F17B to NEGATIVE SQUARED LATIN CAPITAL LETTER L
  - 1F17C to NEGATIVE SQUARED LATIN CAPITAL LETTER M
  - 1F17F to NEGATIVE SQUARED LATIN CAPITAL LETTER P
  - 1F18A to CROSSED NEGATIVE SQUARED LATIN CAPITAL LETTER P
  - 1F18B to NEGATIVE SQUARED IC
  - 1F18C to NEGATIVE SQUARED PA

- 1F18D to NEGATIVE SQUARED SA
- b. 51 code position changes:
  - 1F14F SQUARE DJ is moved to 1F190
  - 1F200 to 1F2FF block; and 32FF The 43 enclosed ideographs added in Amd. 6 in this block and KATAKANA DE ENCLOSED IN SQUARE from 32FF are rearranged to follow the order in ARIB STD-B24; into two groups (see final charts in document N[3625](#))
  - 26CE HEAVY EXCLAMATION MARK SYMBOL is moved to 2757
  - 26E2 HEAVY LARGE CIRCLE is moved to 2B55
  - 26E4 HEAVY OVAL WITH OVAL INSIDE is moved to 2B56
  - 26E5 HEAVY CIRCLE WITH CIRCLE INSIDE is moved to 2B57
  - 26E6 HEAVY CIRCLE is moved to 2B58
  - 26E7 HEAVY CIRCLED SALTIRE is moved to 2B59
- c. 4 character additions:
  - 1F12E CIRCLED WZ with its glyph from document N[3579](#)
  - 110BE-110BF 110BE - KAITHI SECTION MARK  
110BF - KAITHI DOUBLE SECTION MARK, with their glyphs from document N3574
  - AA7B MYANMAR SIGN PAO KAREN TONE as shown in document N[3625](#)

#### **M54.04 (Progression of Amendment 6):**

**Unanimous**

WG2 instructs its project editor to forward the final text of Amendment 6 along with the disposition of comments document N[3631](#) to the SC2 secretariat for an FDAM ballot. The final set of charts and names lists are in document N[3625](#). The unchanged target starting date for FDAM6 is 2009-06.

There is a net of 1037 character additions in Amd. 6.

## **11.2 PDAM 7**

### **Input documents:**

- [3557](#) Pdam 7 files; Amd7names.txt; Suignard; 2008-12-10
- [3580](#) Pre-meeting 54 charts showing characters in the pipeline; Michel Suignard; 2009-03-04
- [3592](#) Summary of Voting on SC 2N 4052, ISO/IEC 10646: 2003/PDAM 7 (attached national body comments); SC2 Secretariat; 2009-03-12
- [3610](#) Proposed Disposition of Comments PDAM7; Project Editor - Michel Suignard; 2009-04-16

### **Contributions in support of ballot comments:**

- [3388](#) Proposal to encode two Kana characters concerning YE; Nozomu Kato – via UTC; 2008-02-13
- [3527](#) Proposal for encoding the Szekler-Hungarian Rovas in the BMP and the SMP (10.6Mbytes); Gábor Hosszú; 2008-10-04
- [3531](#) Revised proposal for encoding the Old Hungarian script in the UCS; Michael Everson & André Szabolcs Szelp; 2008-10-12
- [3533](#) Canadian Syllabics; Everson; 2009-01-26
- [3565](#) Proposal to encode two heavy low quotes for German in the UCS Dingbats block; Germany NB; 2009-01-15
- [3575](#) Proposal for consistent naming of “Arabic Pedagogical Symbols” in PDAM 7 (N3557); Roozbeh Pournader; 2009-03-31
- [3577](#) Proposal for a revised Tangut character set for encoding in the SMP of the UCS (and attachments A and B); Michael Everson, Nathan Hill, Guillaume Jacques, Andrew West, Viacheslav Zaytsev; 2009-04-08
- [3581](#) Latin Letter Additions for Janalif; Karl Pentzlin & Ilya Yevlampiey; 2009-03-16
- [3586](#) Request for Tangut font and mappings from N3577 to Amendment 7 repertoire; Deborah Anderson and Richard Cook; 2009-03-04
- [3587](#) Proposal to encode 10 Latin letters for pre-1921 Latvian orthography; German NB; 2009-03-26
- [3606](#) Proposal to Advance the Renaming of Arabic Pedagogical Symbols; Anshuman Pandey; 2009-03-30

### **Output documents:**

- [3626](#) Summary of repertoire for FPDAM7 and PDAM8; Michel Suignard; 2009-04-24
- [3629](#) Ad hoc report on Tangut; Ad hoc chair – Peter Constable; 2009-04-20
- [3632](#) Disposition of Comments – PDAM7; Michel Suignard; 2009-04-24

Document N[3557](#) (and its attachment) contains the text of PDAM7 that was balloted. Document N[3592](#) contains the results of the ballot with the national body comments as attachments. Document N[3610](#) contains the proposed disposition of comments. Document N[3580](#) is a set of charts for use as reference during the discussions of the disposition of comments as well as in discussions on other topics during the meeting.

### **China - Comments with Disapproval**

*T.1 - China insists the font that was given originally be used to produce the charts for Tangut and add some missing Tangut radicals and characters to the repertoire.*

Mr. Michel Suignard: We need agreement from all parties before we proceed. There was an ad hoc. There is a proposal to postpone encoding of Tangut to a future amendment.

**Disposition:** Accepted in principle. Remove Tangut from Amd. 7 per recommendation of ad hoc in document N[3629](#).

#### **Relevant resolution:**

**M54.05 (Tangut script):**

**Unanimous**

WG2 accepts the recommendation to remove Tangut script currently encoded in code positions 17000 to 18715 from Amd. 7, and accepts the action items towards further refining its repertoire, contained in the Tangut ad hoc report in document N[3629](#).

Mr. Chen Zhuang: We reverse our position to *Approval*.

### **Finland: Comment accompanying Disapproval**

*Technical comment*

*T.1 - the Tangut issue has to be solved before approving the text.*

**Disposition:** Approved in principle - assuming the comment means a consensus between interested parties with conflicting statements (China, Ireland, UK, and USA). Remove Tangut from Amd. 7 per recommendation of ad hoc in document N[3629](#). See *disposition under China T.1 on page 47*.

Mr. Tero Aalto: Finland changes our vote to *Approval*.

### **Germany - Comments with Approval**

*Technical comments*

*T.1 - recommends adding 1B000 KATAKANA LETTER ARCHAIC E in a new block Historic Kana. References proposal in document N[3388](#). Similar to comment T.1 from US.*

Mr. Michel Suignard: We had a long discussion on this character in a previous meeting. At that time Japan was concerned about encoding this character. Since then several national bodies have restudied the topic and are of the opinion that it should be encoded but in another block and not the existing Katana block. I propose we accept the German request.

Discussion:

- a. Mr. Masahiro Sekiguchi: We are not in favour of accepting this character at this time. At the same time we are not objecting strongly to its addition. Regarding the German comment -- you referenced some Japanese contribution. I am hearing that there is some confusion about that particular character. It appears before Japanese orthography was formalized, so we are not sure it is needed in the context of Japanese orthography. The name of the character is proposed to be different KATAKANA LETTER ARCHAIC E; it is a better than the previous KATAKANA LETTER ORIGINAL E.
- b. Mr. Mike Ksar: You prefer the name with ARCHAIC in it?
- c. Dr. Ken Whistler: As Mr. Michel Suignard has noted it is roughly the same as in Japan.

**Disposition:** Accepted in principle. Create a new block 1B000 to 1B0FFF named Historic Kana and encode 1B000 KATAKANA LETTER ARCHAIC E in it. The font is with the editor.

*T.2 - recommends merging and reordering Canadian Syllabics in Amd. 7 with those in Amd. 6 and move all to Amd. 6*

Same as US comment T.2, Ireland comments T.2 and T.4 on PDAM7. Ireland had similar comments T.1, T.2 and T.3 under FPDAM6. Document N[3533](#) has the detailed proposal from Ireland.

Mr. Michel Suignard: The first part is to reorder the characters per Amd. 6 agreement. We have agreed to Amd. 6 and hence Amd.7 will also be reordered. The second part is to move to Amd. 6, which means it will have no second technical ballot on it.

Discussion:

- a. Dr. Ken Whistler: The US national body had its done its review and is satisfied with the proposal technically. Consolidation of all these will be beneficial for the implementers of the Canadian Syllabics. In our opinion, this will also be synchronized with Unicode V 5.2; it will be a service to the user community.

- b. Dr. Umamaheswaran: Canada can support the consolidation in light of the benefits to the user community.

**Disposition:** Accepted. See relevant resolution M54.01 on page 39.

*T.3 - Proposes adding Old Hungarian script to Amd. 7.*

References proposals for the script in document N3527 and N3531 with modifications.

Mr. Michel Suignard: This comment is out of scope of Amd. 7.

Proposal for repertoire addition should be made for blocks which are either added or modified by characters already in ballot. Especially, requests for encoding whole new scripts do not belong here. (There is a separate agenda item on the subject of Old Hungarian - see section 10.21 on page 36.)

Mr. Andreas Stötzner: Germany withdraws this comment.

*T.4 Add two characters to Dingbats collection*

References document N3565.

275F HEAVY LOW SINGLE COMMA QUOTATION MARK ORNAMENT

2760 HEAVY LOW DOUBLE COMMA QUOTATION MARK ORNAMENT

**Disposition:** Out of scope of Amd. 7 ballot.

(There is a separate agenda item on the subject of Tow heavy low quotes for German - see section 10.4 on page 24.)

Mr. Andreas Stötzner: Germany withdraws this comment.

*T.5 - addition of four Latin letters needed for Janalif to the "Latin Extended D" block*

References document N3581 with proposed changes to names.

**Disposition:** Noted. The proposed characters are not related to Amd. 7 content.

(There is a separate agenda item on the subject of Latin letter additions for Janalif - see section 10.14 on page 31.)

Mr. Andreas Stötzner: Germany withdraws this comment.

*T.6 - addition of Ten Latin letters with diagonal stroke*

References proposal in document N3587.

**Disposition:** Noted. The proposed characters are not related to Amd. 7 content.

(There is a separate agenda item on the proposed letters - see section 10.15 on page 33.)

Mr. Andreas Stötzner: Germany withdraws this comment.

***Ireland - Comments with Disapproval***

*Technical comments*

*T.1 - insert missing hyphens in clause 28*

Change "using their five hexadecimal digit value" to "using their five-hexadecimal-digit value"

Mr. Michel Suignard: We should accept the hyphens.

Dr. Ken Whistler: As a native English speaker, the hyphens look OK to me.

**Disposition:** Accepted. (This should have been really an editorial comment.)

*T.2 and T.4 - reorder and merge Canadian Syllabics content with Amd. 6 content and move to Amd. 6*

Similar to German comment T.2, and US comment T.2 on Amd. 7 ballot.

**Disposition:** Accepted. See discussion and disposition under German comment T.2 on page 47.

See relevant resolution M54.01 on page 39.

*T.3 and T.5 - Related to Batak script*

Retain the script in Amd. 7 as is, and rename ten characters of Batak script in the combining characters list.

Mr. Michel Suignard: This is for WG2 to discuss. The US comment T.3 asks for removing the script from Amd. 7. Ireland comment T.5 asks that it stays. The US proposes two characters 1BFA and 1BFB be removed; we need more study on these two. They also propose unifying two sets of dialect-specific shapes that are currently disunified.

Discussion:

- a. Mr. Michael Everson: As to the characters being asked to be removed, seems to be based on the fact is that they draw something long on a manuscript. It is part of some Brahmic scripts and there are some complicated traditions. It indicates something at the beginning of text. These were shown as evidences in the original proposal. As to the glyphs, Ireland can



produce better glyphs if needed. As to the names, these are not just decorations. They happen to draw them long. We can put truncated forms in the charts as glyphs.

- b. Mr. Andreas Stötzner: There are some ancient Greek symbols which have similar problems. The fact that its glyph has a long nature is not a factor against its encoding.
- c. Mr. Andrew West: Is it true we can get a better glyph?
- d. Mr. Michael Everson: It is possible to get a better glyph.
- e. Mr. Peter Constable: In the original document, one of the example shows it is surrounding multiple lines of text. These could be interpreted as graphic elements that could be graphic elements and not characters.
- f. Dr. Ken Whistler: I agree with what Peter has said about it. I don't think a case has been made as to whether these should be named Characters. There is some question as to whether the best way to represent these that occur in Batak manuscripts is up to wg2 to decide. The proposal has not an adequate case for these to be individual characters.
- g. Dr. Umamaheswaran: Can we remove the controversial characters and move the rest of the script forward?
- h. Mr. Michael Everson: No -- the user community will not be happy with it. I do not see US input is particularly compelling.
- i. Mr. Peter Constable: Every example in your proposal -- these are all wrapped around multiple lines of characters. If they occur only in these contexts I cannot see how you can justify them being characters.
- j. Mr. Michael Everson: Figure 10 is a handwritten manuscript. The typesetting example shows the elongation.
- k. Mr. Mike Ksar: I invite an ad hoc on the topic.

Dr. Ken Whistler reported on the ad hoc between US and IE national bodies with an agreeable solution for disposition of comments on Batak. The ad hoc recommends that BFA and 1BFB are removed from Amd. 7. This will satisfy the US comment. Ireland was amenable to the above change.

**Disposition:** Ireland comment T.5 and US comment T.3 are both partially accepted. Remove 1BFA BATAK SYMBOL BINDU GODANG and 1BFB BATAK SYMBOL BINDU PINARJOLMA from Batak repertoire in Amd. 7. Accept all of Irish comment T.3, correcting the names in the list of combining characters.

#### *T.6 - Consistent renaming of Arabic Pedagogical symbols*

This comment is in support of contribution in document N[3575](#).

Mr. Michel Suignard: This is a proposal to rename the Arabic Pedagogical Symbols to be more consistent with Arabic naming in general. In principle I agree with the proposal, except TWO DANDAs versus DOUBLE DANDAs.

Mr. Michael Everson: The ballot comment was based on earlier input from experts. There is a later document N[3606](#) which has refined names. The Dandas are now called vertical bars.

Dr. Ken Whistler: Te US NB did not bring forward any comments because the user community of Pakistan had agreed to it. Personally the changes proposed by Ireland would be acceptable. The US national body has no position on these.

**Disposition:** Accept in principle. The new names for the 16 symbols are in second half of document N[3606](#).

#### *T.7 - requests removal of Tangut repertoire from Amd. 7*

Several reasons are given.

See also comments *T1 from China*, *T.1 from Finland*, *T.1 from UK*, and *T.4 from USA*.

**Disposition:** See disposition under China comment T.1 on page 47. Tangut is removed from Amd. 7 for further study per ad hoc recommendation.

#### *Editorial comments:*

*E.1 - update the title of amendment; make comma notations in Page, Clause numbering consistent.*

Mr. Michel Suignard: I will look at ITTF style. The Title change etc. is an editor's task anyway.

**Disposition:** Partially accepted.

#### *E.2 - proposes consistent notes in nameslist for several Cyrillic characters*

**Disposition:** Accepted in principle. Editor will work with the Unicode editor to arrive at mutually acceptable editorial annotations.

*E.3 - requests a new font for Malayalam chart*

**Disposition:** Accepted in principle, for the next edition.

Mr. Michael Everson: Based on the above dispositions, Ireland changes its ballot to *Approval*.

### **Japan - Comments with Disapproval.**

*Technical comments:*

*T.1 - requests alternate name for 'Tertiary Ideographic Plane' for plane 3*

Mr. Michel Suignard: This is for WG2 to discuss. There is no better terminology suggested.

Discussion:

- a. Mr. Michael Everson: We use three letter abbreviations. The word Tertiary meaning third. It should be translatable.
- b. Mr. Mike Ksar: I suggested Additional Ideographic Plane. It has about 65K.
- c. Prof. Kyongsok Kim: There are no two previous two, to use tertiary. For ideographic it is really second. 'Additional plane for Ideographic' is also confusing.
- d. Mr. Masahiro Sekiguchi: I don't like 'Tertiary'; Japan cannot suggest an alternative. As to 'Additional', I cannot distinguish between supplementary in Japanese.
- e. Dr. Ken Whistler: How about Extra Ideographic Plane.
- f. Mr. Masahiro Sekiguchi: The translations into Japanese is quite complex. You can make the observation that it is noted -- but no proposed alternative wording is provided by Japan.
- g. Prof. Kyongsok Kim: Even if there is a four character abbreviation, there is still a problem. The 'tertiary' indicates that there are two additional planes for ideograph. There is only one supplementary ideograph plane.
- h. Mr. Michel Suignard: The term 'Tertiary' is used in several documents. It will be painful to remove it. The more we wait it will be used in many more places. Please come up with a better and mutually accepted name. It is not a precise name.

**Disposition:** Noted. Japan is invited to propose an alternate name.

*T.2 - move Hiragana Letter YE to a separate block possibly in Plane 1*

Mr. Michel Suignard: Japan notes the current location is not acceptable. Is there any opinion as to where to move it? We have a new block for Archaic Kanas.

Discussion:

- a. Dr. Ken Whistler: Even the naming as Katakana versus Hiragana is confusing in history. My suggestion is to encode it at the next available position - at 11B01?
- b. Mr. Masahiro Sekiguchi: Since we decided to name another character Archaic E, Japan would propose the new name as Archaic YE.
- c. Dr. Ken Whistler: The US national body will not object to the proposed name change.

**Disposition:** Accepted in principle. Moved the character from 3097 to 1B001 with a new name HIRAGANA LETTER ARCHAIC YE

Mr. Masahiro Sekiguchi: Based on the above dispositions we change our ballot response to *Approval*.

### **United Kingdom - Comments with Disapproval**

*Technical comment:*

*T.1 - requests removal of Tangut from Amd. 7; proposes reordered encoding for a new amendment.*

Refers to contribution in document N[3577](#). Provides several reasons backing up the request.

See also comments *T1 from China*, *T.1 from Finland*, *T.7 from Ireland*, and *T.4 from USA*.

**Disposition:** See disposition under China comment T.1 on page 47. Tangut is removed from Amd. 7 for further study per ad hoc recommendation.

Mr. Andrew West: Based on the above dispositions we change our ballot response to *Approval*.

### **USA - Comments with Approval**

*Technical comments:*

*T.1 - add a new character 1B000 KATAKANA LETTER ARCHAIC E in a new block Historic Kana, located from 1B000-B0FF*

Refers to contribution in document N[3388](#). Similar to Germany comment T.1.

**Disposition:** See discussion under German comment T.1 on page 47. Accepted in principle.

*T.2 - reorder Canadian Syllabics Extended and move to Amd. 6.*

Refers to document N3563 (should be N3533). Same as comment T.2 from Germany and T.2 and T.4 from Ireland on PDAM7 and comments T.1, T.2 and T.3 from Ireland on FPDAM 6.

**Disposition:** Accepted. See discussion and disposition under German comment T.2 on page 47. See relevant resolution M54.01 on page 39.

*T.3 - requests removal of Batak script identifying some issues*

Irish comments T.3 and T.5 are also on Batak.

**Disposition:** Partially accepted per ad hoc recommendation. See discussion and disposition under Ireland comments T.3 and T.5 on page 48.

*T.4 - reiterates keeping Tangut repertoire in Amd. 7 with revised multi-column chart from Chinese national body.*

Several other national bodies have also commented on Tangut.

It was decided to remove Tangut from Amd. 7 per recommendation of ad hoc in document N3629.

See disposition under China T.1 on page 47.

Dr. Ken Whistler: The US withdraws this comment.

#### **Relevant resolutions:**

##### **M54.06 (Disposition of PDAM7 ballot comments):**

**Unanimous**

WG2 accepts the disposition of ballot comments on PDAM7 in document N3632 and instructs its editor to prepare the final text of Amendment 7 incorporating the dispositions, including moving of Canadian Syllabics accepted in resolution M54.01 and removal of Tangut script accepted in resolution M54.05 above. The editor is to take note of additional glyph changes per sections 1 and 3 in document N3623. The significant accepted changes are noted below:

- a. 16 name changes:
  - FBB2 to ARABIC SYMBOL DOT ABOVE
  - FBB3 to ARABIC SYMBOL DOT BELOW
  - FBB4 to ARABIC SYMBOL TWO DOTS ABOVE
  - FBB5 to ARABIC SYMBOL TWO DOTS BELOW
  - FBB6 to ARABIC SYMBOL THREE DOTS ABOVE
  - FBB7 to ARABIC SYMBOL THREE DOTS BELOW
  - FBB8 to ARABIC SYMBOL THREE DOTS POINTING DOWNWARDS ABOVE
  - FBB9 to ARABIC SYMBOL THREE DOTS POINTING DOWNWARDS BELOW
  - FBBA to ARABIC SYMBOL FOUR DOTS ABOVE
  - FBBB to ARABIC SYMBOL FOUR DOTS BELOW
  - FBBC to ARABIC SYMBOL DOUBLE VERTICAL BAR BELOW
  - FBBD to ARABIC SYMBOL TWO DOTS VERTICALLY ABOVE
  - FBBE to ARABIC SYMBOL TWO DOTS VERTICALLY BELOW
  - FBBF to ARABIC SYMBOL RING
  - FBC0 to ARABIC SYMBOL SMALL TAH ABOVE
  - FBC1 to ARABIC SYMBOL SMALL TAH BELOW
- b. 1 character addition:
  - 1B00 KATAKANA LETTER ARCHAIC E with the glyph (of KATAKANA LETTER ORIGINAL E) from document N3388 in a new block 1B000 to 1B0FFF named Historic Kana.
- c. 1 code position change with name change:
  - 3097 is moved to 1B001 with new name HIRAGANA LETTER ARCHAIC YE
- d. 2 character deletions:
  - 1BFA BATAK SYMBOL BINDU GODANG
  - 1BFB BATAK SYMBOL BINDU PINARJOLMA

##### **M54.07 (Progression of Amendment 7):**

**Unanimous**

WG2 instructs its project editor to forward the final text of Amendment 7 along with the disposition of comments document N3632 to the SC2 secretariat for an FPDAM ballot. The final set of charts and names lists are in document N3626. The unchanged target starting dates are FPDAM 2009-06, and FDAM 2009-11.

**There are 225 character additions in Amd. 7.**

### **11.3 Start of new Amendment 8**

Output document:

[3630](#) SC2/WG2 Proposed Modification to Program of Work; Project Editor/Convener; 2007-09-20

As per discussion under section 8.2 on IRG urgently needed characters - renamed CJK Ext. D - on page 20 it was decided to start a new Amendment 8 to include CJK Ext. D and several other new items accepted at this meeting. There are 1716 characters accepted for addition in Amd. 8.

**Relevant resolution:**

**M54.14 (Amendment 8 – subdivision and PDAM text):**

**Unanimous**

WG2 instructs its project editor and convener to prepare a project sub division proposal (see document N3630) and PDAM text based on resolutions M54.08 to M54.13 above, and forward them to the SC2 secretariat for ballot. The proposed start dates for the progression of this work item are: PDAM 2009-06, FPDAM 2009-12, and FDAM 2010-06.

As per discussion and recommendation by an ad hoc related to the next edition of the standard (see section 7.3 on page 13) it will be decided at the next WG2 meeting whether or not to incorporate Amd. 8 content into the next edition.

## 12 Liaison reports

**Input documents:**

[3642](#) Unicode Liaison Report; Unicode Consortium; 2009-04-24

[3622](#) SEI Liaison Report; Debbie Anderson; 2009-04-17

These reports are for delegates' information. They were not discussed.

## 13 Other business

### 13.1 Web Site Review

There was no discussion at this meeting.

**Relevant resolution:**

**M54.26 (Appreciation to DKUUG for web site support):**

**By Acclamation**

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

### 13.2 Future Meetings

**Meeting 55 – 2009-10-26/30 with SC2 plenary, Tokyo, Japan**

**Input document:**

[3617](#) Logistical Information for the Meetings of SC 2 Plenary, WG 2 and OWG-SORT to be held in Tokyo, Japan, 2009-10-26/30; Japan; 2009-04-17

Mr. Mike Ksar: Next meeting is in Japan. Document N3617 from the Japanese national body has the logistics. The call for the meeting will be sent out in the near future. The meeting in that building will open only at 9am -- we can extend the closing time till about 9 pm if needed. There are also SC2 plenary as well as OWG Sort meeting being held in the same week. We may have to work late every day to get through our agenda.

Mr. Michel Suignard: I am a little concerned. We will have Amd.7, Amd. 8, and the CD. The workload will be heavier.

Mr. Mike Ksar: The resolutions can be adopted Friday morning.

**Meeting 56 –19-23 April 2010, CA, U.S. (pending confirmation)**

Mr. Mike Ksar: We have not received any confirmation. Need a backup.

Mr. Tero Aalto: Finland will come back to you.

Dr. Umamaheswaran: I will get back to you about Canada hosting.

Further meetings are in the relevant resolution below.

**Relevant resolution:**

**M54.25 (Future meetings):**

**Unanimous**

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

WG 2 meetings:

Meeting 55 - 2009-10-26/30, Tokyo, Japan (along with SC2 plenary)

Meeting 56 - 2010-04-19/23, Mountain View, CA. USA (pending confirmation); Canada and Finland (as backups).

Meeting 57 - Fall 2010, Korea (Republic of) (pending confirmation of date and location)

Meeting 58 - Spring 2011, Finland (pending confirmation) (along with SC2 plenary)

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

IRG meetings:

IRG 32 - 2009-06-15/19; Hong Kong SAR

IRG 33 - 2009-11-23/27; Danang, Vietnam

## 14 Closing

### 14.1 Approval of resolutions

Output document:

[3604](#) Resolutions of WG 2 meeting 54; WG2 convener; 2009-04-24

Draft resolutions prepared by the recording secretary with the help of the drafting committee were reviewed and adopted with changes as identified during the review. Approved resolutions are in document N[3604](#).

A revision of the resolutions correcting some counts of characters was posted on 2009-05-12. The updated character counts at the end of the meeting M54 are:

*Character count 106255 (till end of Amd. 5)*

*Addition of 1037 in FDAM6; and addition of 225 in FPDAM7*

*Character count 107517 in CD of 2nd edition (till end of FPDAM7)*

*Addition of 1716 in PDAM8*

**Total count: 109233 (after meeting M54)**

### Appreciation

#### Relevant resolution:

**M54.27 (Appreciation to Host):**

**By Acclamation**

WG 2 thanks the Irish national body, NSAI, and the Centre for Next Generation Localization and its staff, in particular Professor Josef van Genabith, Ms. Cara Greene and Ms. Eithne McCann, and Mr. Michael Everson, for hosting the meeting and for providing excellent meeting facilities.

### 14.2 Adjournment

The meeting was adjourned at approximately 11:15h.

## 15 Action items

All the action items recorded in the minutes of the previous meetings from M25 to M47, M49 and M50, have been either completed or dropped. Status of outstanding action items from earlier meetings M48, M51, M52, M53, and new action items from the last meeting M54 are listed in the tables below.

Meeting 25, 1994-04-18/22, Antalya, Turkey (document N1033)

Meeting 26, 1994-10-10/14, San Francisco, CA, USA (document N1117)

Meeting 27, 1995-04-03/07, Geneva, Switzerland (document N[1203](#))

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

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

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

Meeting 31, 1996-08-12/16, Québec City, Canada (document N[1453](#))

Meeting 32, 1997-01-20/24, Singapore (document N[1503](#))

Meeting 33, 1997-06-30/07-04, Heraklion, Crete, Greece (document N[1603](#))

Meeting 34, 1998-03-16/20, Redmond, WA, USA (document N[1703](#))

Meeting 35, 1998-09-21/25, London, UK (document N[1903](#))

Meeting 36, 1999-03-09/15, Fukuoka, Japan (document N[2003](#))

Meeting 37, 1999-09-17/21, Copenhagen, Denmark (document N[2103](#))

Meeting 38, 2000-07-18/21, Beijing, China (document N[2203](#))

Meeting 39, 2000-10-08/11, Vouliagmeni, Athens, Greece (document N[2253](#))

Meeting 40, 2001-04-02/05, Mountain View, CA, USA (document N[2353](#)), and

Meeting 41, 2001-10-15/18, Singapore (document [2403](#))

Meeting 42, 2002-05-20/23, Dublin, Ireland (document N[2453](#))

Meeting 43, 2003-12-09/12, Tokyo, Japan (document N[2553](#))

Meeting 44, 2003-10-20/23, Mountain View, CA, USA (document N[2653](#))

Meeting 45, 2004-06-21/24, Markham, Ontario, Canada (document N[2753](#))

Meeting 46, 2005-01-24/28, Xiamen, China (document N[2903](#))

Meeting 47, 2005-09-12/15, Sophia Antipolis, France (document N[3103](#))

Meeting 49, 2006-09-25/29, Tokyo, Japan (document N[3153](#))

Meeting 50, 2007-04-23/27, Frankfurt-Am-Main, Germany (document N[3253](#))



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

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

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

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

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

| Item    | Assigned to / action (Reference resolutions in document <a href="#">N3454</a> , and unconfirmed minutes in document <a href="#">N3453</a> for meeting 52 – with any corrections noted in section 3 in the minutes of meeting 53 in document <a href="#">N3553</a> )  | Status |
|---------|--|--------|
| AI-52-4 | <b>IRG Convenor and IRG Editor (Dr. Lu Qin)</b>  |        |
|         | To take note of and act upon the following items:  |        |
| b.      | <b>M52.27 (IRG matters)</b> : WG2 requests IRG <ol style="list-style-type: none"> <li>to prepare and present plans for their work on 'Annex S revision' and 'IRG Principles and Procedures'</li> <li>to study and report on the request regarding Ideographic Description Sequences (IDS) from document <a href="#">N3459</a> (Unicode Liaison Report) towards inclusion in the standard</li> <li>to review and report on request for HKSCS extensions in document <a href="#">N3445</a></li> </ol> for consideration at WG2 meeting 53. M53, M54 (item a. is in progress).    |        |
| AI-52-7 | <b>Ireland (Mr. Michael Everson)</b>   |        |
|         | To take note of and act upon the following items.  |        |
| a.      | <b>M52.5 (Principles for Dandas)</b> : WG2 adopts the principles guiding the encoding of Dandas in Brahmic scripts from document <a href="#">N3457</a> , and instructs its ad hoc group on P&P to incorporate these into its document on Principles and Procedures (along with the additions from resolution M52.4 above). WG2 further invites the Irish national body to investigate and report on the current practice on use of currently encoded Dandas in relevant scripts towards finalizing the list of scripts and their corresponding Dandas. M53, M54 – in progress. |        |

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

| Item    | Assigned to / action (Reference resolutions in document <a href="#">N3454</a> , and unconfirmed minutes in document <a href="#">N3453</a> for meeting 52 – with any corrections noted in section 3 in the minutes of meeting 54 in document <a href="#">N3603</a> ) | Status |
|---------|---|--------|
| AI-53-4 | <b>IRG Convenor and IRG Editor (Dr. Lu Qin)</b>   |        |
|         | To take note of and act upon the following items:   |        |

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| a.   | <b>M53.30 (Access to CJK Ext. B glyphs):</b> The IRG is requested to make the CJK Ext. B glyphs from the current single-column format available from the IRG website to facilitate their future referencing, after the multiple-column format for CJK Extension B is published.<br>M54 - in progress.                      |  |
| c.   | <b>M53.32 (Japanese compatibility ideographs):</b> The IRG, and all national bodies and liaison organizations, are requested to review and provide feedback on the request for additional compatibility ideographs in document <a href="#">N3530</a> from Japan.<br>M54 - in progress.                                     |  |
| <b>AI-53-6 Ireland (Mr. Michael Everson)</b>             |  |  |
| <i>To take note of and act upon the following items.</i> |  |  |
| a.   | To provide the collation information related to the two Tai Lue characters in resolution <b>M53.12 (Tai Lue):</b> WG2 accepts to encode the two characters:<br>19AA NEW TAI LUE LETTER HIGH SUA<br>19AB NEW TAI LUE LETTER LOW SUA<br>with their glyphs as shown in document <a href="#">N3546</a> .<br>M54 - in progress. |  |
| b.   | With reference to the proposal for four Devanagari characters for Kashmiri in document <a href="#">N3480</a> , to work with India (Ms. Swaran Lata) to prepare a revised proposal to WG2 by end of Feb 2009<br>M54 - in progress.  |  |
| <b>AI-53-7 India (Ms. Swaran Lata)</b>                   |  |  |
| <i>To take note of and act upon the following items.</i> |  |  |
| a.   | With reference to the proposal for four Devanagari characters for Kashmiri in document <a href="#">N3480</a> , to work with Ireland (Mr. Michael Everson) to prepare a revised proposal to WG2 by end of Feb 2009.<br>M54 - in progress.   |  |

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

(Status of action items is updated to indicate what is known as of the date of publication of these minutes.)

| Item  | Assigned to / action (Reference resolutions in document <a href="#">N3604</a> , and unconfirmed minutes in document <a href="#">N3603</a> for meeting 54, this document you are reading).   | Status   |
|---|---|--|
| <b>AI-54-1 Recording Secretary - Dr. V.S. UMAheshwaran</b>  |   |  |
| a.  | To finalize the document <a href="#">N3604</a> containing the adopted meeting resolutions and send it to the convener as soon as possible.  | Completed;<br>see document <a href="#">N3604</a> . |
| b.  | To finalize the document <a href="#">N3603</a> containing the unconfirmed meeting minutes and send it to the convener as soon as possible.  | Completed;<br>see document <a href="#">N3603</a> . |
| <b>AI-54-2 Convener - Mr. Mike Ksar</b>   |   |  |
| <i>To take note of and act upon the following items:</i>  |   |  |
| a.  | <b>M54.24 (Roadmap snapshot):</b> WG2 instructs its convener to post the updated snapshot of the roadmaps (in document <a href="#">N3608</a> ) to the WG2 web site and communicate the same to SC2 secretariat.   | Completed.   |
| b.  | <b>M54.23 (Response on African languages):</b> WG2 thanks Ms. Deborah Anderson for the report on African languages in document <a href="#">N3641</a> , and instructs its convener to send it to the SC2 secretariat for forwarding to JTC1 in response to Resolution 34 from JTC1 plenary in November 2008. | Completed.   |
| c.  | To add to the agenda proposals carried over from meeting 54:<br><b>i. Meetei Mayek Extended Block in document <a href="#">N3478</a></b><br><b>ii.</b> Any revised document based on action item AI-54-g on all national bodies later in this table.   |  |
| <b>AI-54-3 Editor of ISO/IEC 10646: (Mr. Michel Suignard with assistance from contributing editors)</b>   |   |  |
| <i>To prepare the appropriate amendment texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:</i> |   |  |

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| a. | <b>M54.01 (Canadian Aboriginal Syllabics Extended):</b> With reference to ballot comments regarding Canadian Aboriginal Syllabic characters in FPDAM6 (in document <a href="#">N3609</a> ) and in PDAM7 (in document <a href="#">N3610</a> ) WG2 resolves to combine, reorder and consolidate the set of 29 characters encoded in 18E0 to 18FC in Amd. 6 and the set of 41 characters encoded in 18B0 to 18D1, 18D3 to 18D7, 18D9 and 18DA in Amd. 7, and include the combined set in Amd. 6. The new code positions, the corresponding character glyphs and names are as shown in pages 2 and 3 of document <a href="#">N3533</a> .   | Completed.   |
| b. | <b>M54.02 (Note re: KS X 1026-1):</b> With reference to document <a href="#">N3611</a> from Korea (republic of) regarding KS X 1026-1, WG2 accepts to add the following note in clause 26.1 of the standard and include it in Amendment 6.<br>"NOTE 3 - Hangul text can be represented in several different ways in this standard. Korean Standard KS X 1026-1: Information Technology - Universal Multiple-Octet Coded Character set (UCS) - Hangul - Part 1, Hangul processing guide for information interchange, provides guidelines on how to ensure interoperability in information interchange."   | Completed.   |
| c. | <b>M54.03 (Disposition of FPDAM6 ballot comments):</b> WG2 accepts the disposition of ballot comments on FPDAM6 in document <a href="#">N3631</a> and instructs its editor to prepare the final text of Amendment 6 incorporating the dispositions, including all the changes accepted in resolutions M54.01 and M54.02 above. The editor is to take note of additional glyph changes per section 2, items a through f in document <a href="#">N3623</a> . The significant accepted changes are noted below:<br>14 name changes:<br>- 1CD4 to VEDIC SIGN YAJURVEDIC MIDLINE SVARITA<br>- A9C0 to JAVANESE PANGKON<br>- 10A6A to OLD SOUTH ARABIAN LETTER SAT<br>- 10A6F to OLD SOUTH ARABIAN LETTER SAMEKH<br>- 1F157 to NEGATIVE CIRCLED LATIN CAPITAL LETTER H<br>- 1F15F to NEGATIVE CIRCLED LATIN CAPITAL LETTER P<br>- 1F179 to NEGATIVE SQUARED LATIN CAPITAL LETTER J<br>- 1F17B to NEGATIVE SQUARED LATIN CAPITAL LETTER L<br>- 1F17C to NEGATIVE SQUARED LATIN CAPITAL LETTER M<br>- 1F17F to NEGATIVE SQUARED LATIN CAPITAL LETTER P<br>- 1F18A to CROSSED NEGATIVE SQUARED LATIN CAPITAL LETTER P<br>- 1F18B to NEGATIVE SQUARED IC<br>- 1F18C to NEGATIVE SQUARED PA<br>- 1F18D to NEGATIVE SQUARED SA<br>51 code position changes:<br>- 1F14F SQUARE DJ is moved to 1F190<br>- 1F200 to 1F2FF block; and 32FF The 43 enclosed ideographs added in Amd. 6 in this block and KATAKANA DE ENCLOSED IN SQUARE from 32FF are rearranged to follow the order in ARIB STD-B24; into two groups (see final charts in document <a href="#">N3625</a> )<br>- 26CE HEAVY EXCLAMATION MARK SYMBOL is moved to 2757<br>- 26E2 HEAVY LARGE CIRCLE is moved to 2B55<br>- 26E4 HEAVY OVAL WITH OVAL INSIDE is moved to 2B56<br>- 26E5 HEAVY CIRCLE WITH CIRCLE INSIDE is moved to 2B57<br>- 26E6 HEAVY CIRCLE is moved to 2B58<br>- 26E7 HEAVY CIRCLED SALTIRE is moved to 2B59<br>4 character additions:<br>- 1F12E CIRCLED WZ with its glyph from document <a href="#">N3579</a><br>- 110BE-110BF 110BE - KAITHI SECTION MARK<br>110BF - KAITHI DOUBLE SECTION MARK, with their glyphs from document <a href="#">N3574</a><br>- AA7B MYANMAR SIGN PAO KAREN TONE as shown in document <a href="#">N3625</a> | Completed.   |
| d. | <b>M54.04 (Progression of Amendment 6):</b> WG2 instructs its project editor to forward the final text of Amendment 6 along with the disposition of comments document <a href="#">N3631</a> to the SC2 secretariat for an FDAM ballot. The final set of charts and names lists are in document <a href="#">N3625</a> . The unchanged target starting date for FDAM6 is 2009-06.  | Completed; see document <a href="#">N3656</a> (SC2 <a href="#">N4075</a> ) |
| e. | <b>M54.05 (Tangut script):</b> WG2 accepts the recommendation to remove Tangut script currently encoded in code positions 17000 to 18715 from Amd. 7, and accepts the action items towards further refining its repertoire, contained in the Tangut ad hoc report in document <a href="#">N3629</a> .  | Completed.   |

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

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



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| p.             | <b>M54.16 (CD of 2nd edition):</b> WG2 instructs its project editor to prepare text for the next edition of the standard, based on documents <a href="#">N3593</a> and <a href="#">N3627</a> and the feedback from this meeting, and changes resulting from resolutions M54.02 on Amendment 6, M54.06 on Amendment 7, M54.15 on Jamo fillers, and other changes to glyphs and annotations requested of the names lists in the ballot feedbacks, and to forward it for processing as a CD to SC2 secretariat. The editor is to take note of additional glyph changes per sections 4 in document <a href="#">N3623</a> . The updated start dates for the next edition of standard are: CD: 2009-06, FCD: 2009-12 and FDIS: 2010-06. | Completed; see document <a href="#">SC2 N4079</a> (103MB zipped file). |
| <b>AI-54-4</b> | <b>IRG Convenor and IRG Editor (Dr. Lu Qin)</b>   |  |
|                | <i>To take note of and act upon the following items:</i>  |  |
| a.             | <b>M54.20 (IRG Principles and Procedures):</b> WG2 takes note of the IRG Principles and Procedures in document <a href="#">N3562</a> , and invites all national bodies and liaison organizations to review and provide feedback to the IRG rapporteur by 2009-05-15 in time for the next IRG meeting.   |  |
| b.             | <b>M54.21 (Annex S revision):</b> The IRG is instructed to review and finalize the content of revised text for Annex S by 2009-07-17. All IRG members are requested to assist the IRG rapporteur in this effort. The outcome can be input as national body comments to the ballot on CD for the next edition of ISO/IEC 10646.  |  |
| c.             | <b>M54.22 (Fonts for DPRK ideographs):</b> The IRG rapporteur is requested to contact the SC2 secretariat to reach DPRK for getting the fonts suitable to print the DPRK ideographs in the multi-column CJK charts in the standard. All IRG members are also requested to assist the IRG rapporteur in this effort.   |  |
| <b>AI-54-5</b> | <b>Ad hoc group on roadmap (Mr. Michael Everson)</b>  |  |
| a.             | To update the roadmaps reflecting changes to block allocations through the various resolutions at this meeting 54, including CJK Extension D in the range 2B740-2B81F.  |  |
| <b>AI-54-6</b> | <b>Ireland (Mr. Michael Everson)</b>  |  |
| a.             | Invited to submit a proposal on enclosed alphanumeric supplement additions (see document <a href="#">N3599-I</a> ) taking into consideration discussion at meeting M54.   |  |
| <b>AI-54-7</b> | <b>China (Mr. Chen Zhuang)</b>  |  |
|                | <i>To take note of and act upon the following items:</i>  |  |
| a.             | <b>M54.18 (Nüshu script):</b> WG2 accepts the ad hoc report in document <a href="#">N3635</a> on Nüshu script and invites the Chinese national body to provide a revised contribution by 2009-07-31, including considerations for items in the ad hoc report.   |  |
| b.             | <b>M54.19 (Jurchen script):</b> WG2 accepts the ad hoc report in document <a href="#">N3639</a> on Jurchen script and invites the Chinese national body to provide a revised contribution, including considerations for items in the ad hoc report.   |  |
| <b>AI-54-8</b> | <b>Germany (Mr. Karl Pentzlin)</b>  |  |
|                | <i>To take note of and act upon the following items:</i>  |  |
| a.             | Invited to submit a revised proposal on Florin currency symbol (see document <a href="#">N3588</a> ) taking into consideration discussion at meeting M54.   |  |
| b.             | Invited to revised proposal on Latin letters for pre-1921 Latvian orthography (see document <a href="#">N3587</a> ) taking into consideration discussion at meeting M54.  |  |
| c.             | Invited to revised proposal for Yeru characters (see document <a href="#">N3581</a> ) taking into consideration discussion at meeting M54.  |  |
| <b>AI-54-9</b> | <b>All national bodies and liaison organizations</b>  |  |
|                | <i>To take note of and provide feedback on the following items.</i>   |  |
| a.             | <b>M54.17 (Hungarian Runic script):</b> WG2 accepts the ad hoc report in document <a href="#">N3640</a> on the Hungarian Runic, with revisions made during the discussions on it, and invites the authors to provide a revised contribution including considerations for items in the ad hoc report..   |  |
| b.             | <b>M54.18 (Nüshu script):</b> WG2 accepts the ad hoc report in document <a href="#">N3635</a> on Nüshu script and invites the Chinese national body to provide a revised contribution by 2009-07-31, including considerations for items in the ad hoc report.   |  |
| c.             | <b>M54.19 (Jurchen script):</b> WG2 accepts the ad hoc report in document <a href="#">N3639</a> on Jurchen script and invites the Chinese national body to provide a revised contribution, including considerations for items in the ad hoc report.   |  |
| d.             | <b>M54.20 (IRG Principles and Procedures):</b> WG2 takes note of the IRG Principles and Procedures in document <a href="#">N3562</a> , and invites all national bodies and liaison organizations to review and provide feedback to the IRG rapporteur by 2009-05-15 in time for the next IRG meeting.   |  |
| e.             | Information on the Unicode Ideographic Variation Database in document <a href="#">N3591</a> .   |  |

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| f. | <p><b>M54.25 (Future meetings):</b> WG2 endorses the following schedule for future meetings of WG2 and of IRG:</p> <p>WG 2 meetings:</p> <ul style="list-style-type: none"> <li>- Meeting 55 - 2009-10-26/30, Tokyo, Japan (along with SC2 plenary)</li> <li>- Meeting 56 - 2010-04-19/23, Mountain View, CA, USA (pending confirmation); Canada and Finland (as backups).</li> <li>- Meeting 57 - Fall 2010, Korea (Republic of) (pending confirmation of date and location)</li> <li>- Meeting 58 - Spring 2011, Finland (pending confirmation) (along with SC2 plenary)</li> <li>- Meeting 59 - Fall 2011, Mountain View, CA, USA (pending confirmation), Germany (as backup)</li> </ul> <p>IRG meetings:</p> <ul style="list-style-type: none"> <li>- IRG 32 - 2009-06-15/19; Hong Kong SAR</li> <li>- IRG 33 - 2009-11-23/27; Danang, Vietnam</li> </ul>   |  |
| g. | <p>To review and feedback the following proposals for consideration at the next meeting M54:</p> <ul style="list-style-type: none"> <li>- Manichaeian script proposal in document <a href="#">N3486</a></li> <li>- Sorang Sompeng script in documents <a href="#">N1957</a> and <a href="#">N3410</a></li> <li>- Varang Kshiti script in documents <a href="#">N1958</a> and <a href="#">N3411</a></li> <li>- Naxi Dongba pictographs in documents <a href="#">N3425</a>, <a href="#">N3442</a> and <a href="#">N3543</a></li> <li>- Chakma script in document <a href="#">N3428</a></li> <li>- Old Yi script in document <a href="#">N3288</a></li> <li>- Meroitic script in document <a href="#">N3484</a></li> <li>- Pahawh Hmong script in the UCS in document <a href="#">N3616</a></li> <li>- Germanicist, Nordicist, and other phonetic characters in document <a href="#">N3555</a></li> <li>- Khojki script in document <a href="#">N3596</a></li> <li>- Sharada script in document <a href="#">N3595</a></li> <li>- Mro script in document <a href="#">N3589</a></li> </ul> |  |

*End of Minutes*