



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 44; Microsoft Campus, Mountain View, CA, USA; 2003-10-20/23

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 2004-06-07.

ACTION ID: ACT

DUE DATE: 2004-06-14

DISTRIBUTION: SC 2/WG 2 members and Liaison organizations

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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/WG 2 N2653

Date: 2004-06-04

Title:	Unconfirmed minutes of WG 2 meeting 44 Microsoft Campus, Mountain View, CA, USA; 2003-10-20/23
Source:	V.S. Umamaheswaran (umavs@ca.ibm.com), Recording Secretary Mike Ksar (mikeksar@microsoft.com), Convener
Action:	WG 2 members and Liaison organizations
Distribution:	ISO/IEC JTC 1/SC 2/WG 2 members and liaison organizations

1 Opening

Input document:

N2631R Meeting 44 Updated Agenda with documents through 2003-10-02; Mike Ksar; 2003-10-02

Mr. Mike Ksar, the convener, opened the meeting at 10:11h and welcomed the delegates. All the documents received till last night – till document N2663 -- have been posted to the WG2 web site. 25 hardcopies of all the documents received till Friday are available. National bodies are requested to share these. New contributions are to be given to the convener – preferably electronically. We have LAN set up here – and IT support will provide assistance if needed. The meeting agenda is in document N2631R. Unicode Consortium is our host.

As we go through the documents – we first ensure synchronization with Unicode V4.0 and then with some of the scripts and characters that have been already approved by UTC for the next version. Other documents will be taken up as time permits – some may have to be postponed to the next meeting.

There will be two ad hoc meetings – one on Tibetan on Tuesday (12 to 2 pm .. extended Lunch period) and one on Wednesday on IPA. Delegates who want to participate in these ad hoc meetings are requested to contact the convener / secretary. If the 2h allocated time is not sufficient, we can have additional time allocated as needed. I will appoint a chair for each ad hoc – and expect the chair to report with the recommendations to WG2 before the plenary. The ad hoc method has helped us in the previous meetings to successfully progress different items relatively quickly and efficiently. He went on to explain the logistics of the meeting. Ms. Magda Danish of Unicode Consortium will be providing local assistance.

Mr. Michael Everson: A short ad hoc on Buginese / Lantara may be needed.

Mr. Zhang Zhoucai: Who will chair the ad hoc meetings?

Mr. Mike Ksar: Once I know who the interested participants are, I will pick the chair.

1.1 Roll Call

Input document:

N2651 Updated WG2 experts list –pre meeting 44; Ksar

The following thirty one (31) delegates representing six (6) national bodies, three (3) liaison organizations and eight (8) guests attended the meeting.

Name	Representing	Affiliation
V. S. (Uma) Umamaheswaran	Canada; Recording Secretary	IBM Canada Ltd.
Ben Ba Gyaltsso	China	Tibet University
Chen Zhuang	China Contributing Editor	Chinese Electronics Standardization Institute
Lobsang Tokme	China	Committee Office of Tibetan Languages

Name	Representing	Affiliation
Ngodrup Wang Qi	China China	Engineering College of Tibet University Department of Language Information Administration, Ministry of Education
Zhang Zhoucai	China; IRG Rapporteur Contributing Editor	UniHan Digital Technology Co. Ltd
Vladas Tumasonis	Guest, Lithuania	Vilnius University, Lithuania
Elżbieta Broma-Wrzesień	Guest, Poland	Telekomunikacja Polska, Poland
Christopher Walker	Guest, USA	University of Virginia
Eric Muller	Guest, USA	Adobe Systems, Inc.
Deborah Anderson	Guest, USA	University of California, Berkely, CA
Rick McGowan	Guest, USA	Unicode Inc.
Richard Cook	Guest, USA	University of California, Berkeley
Magda Danish	Host, The Unicode Consortium	Unicode Inc.
Michael Everson	Ireland; Contributing Editor	Everson Typography
Kazuhito OHMAKI	Japan	National Institute of Advanced Industrial Science and Technology
Shoichi SENDA	Japan	NTT Services Integration Laboratories
Hideki NAKADE	Japan	Mitsubishi Research Institute, Inc.
Tatsuo L. KOBAYASHI	Japan	Justsystem Corporation
Yasuhiro ANAN	Japan	Microsoft CTC
Asmus Freytag	Liaison - The Unicode Consortium; Contributing Editor	Unicode Inc.
Shih-Shyeng Tseng	Liaison, TCA	Academia Sinica Computing Centre
Pochung Chen	Liaison, TCA	University of California, Berkeley
Dae Hyuk Ahn	Republic of Korea	Microsoft Korea
Hideki Hiura	USA	Sun Microsystems Inc.
Lisa Moore	USA	IBM Corporation
Joan Aliprand	USA	RLG
Ken Whistler	USA; Contributing Editor; Convener – SC22/WG20	Sybase Inc.
Mike Ksar	USA; Convener	Microsoft Corporation
Michel Suignard	USA; Project Editor	Microsoft Corporation

The experts list in document N2651 with address, phone numbers and other information, was distributed for delegates to review and mark any changes needed. Delegates were requested to give their business cards also to the secretary.

Drafting committee: The draft resolutions were prepared by the recording secretary Dr. V.S. Umamaheswaran with assistance from Messrs. Michel Suignard (project editor), Zhang Zhoucai (IRG rapporteur), Ken Whistler (contributing editor), Michael Everson (contributing editor), Asmus Freytag (contributing editor) and Mike Ksar (the convener).

2 Approval of the agenda

Input document:

N2631R Meeting 44 Updated Agenda with documents through 2003-10-02; Mike Ksar; 2003-10-02

Mr. Mike Ksar: The latest agenda is in document N2631R dated October 17, 2003. Its online version has links to documents till N2663. In terms of prioritization of work for this meeting, we will first cover items to ensure synchronization with Unicode V4.0, then with the next version and then the remaining contributions. Document N2623R from UTC, currently under agenda item 10.1, contains a list of proposals that have been accepted for the next version (Unicode 4.1). It could be used for walking through the various proposals under agenda items 7 and 8. There is no input from IRG at this meeting.

The draft agenda was reviewed and some of the changes are:

Add item 6.4 - Call for nomination to the Joint Advisory Committee for ISO/IEC 15924
 Add SC22/WG20 liaison report to item 13.3

The draft agenda in document N2631R was approved with above modifications. Additional changes made during the progress of the meeting are captured and are reflected in the appropriate sections in these minutes. Some of the agenda items have been reorganized or renumbered in these minutes.

The following table of contents of these minutes reflect the final agenda items and the page number on which the corresponding discussion is recorded.

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3 Approval of minutes of meeting

Input document:

N2553 Draft minutes of meeting 43 - Tokyo; Uma – Ksar, 2003-08-26

Dr. Umamaheswaran introduced the unconfirmed meeting 43 minutes in document N2553. The resolutions from the Tokyo meeting were important. It was used to finalize the synchronization between ISO/IEC 10646 and Unicode V4.0. There were no errors identified. The minutes were approved as written.

4 Review action items from previous meeting

Input document:

N2553 Draft minutes of meeting 43 - Tokyo; Uma – Ksar, 2003-08-26

Dr. Umamaheswaran reviewed the Action Items list in section 16 of document N2553. At meeting 42, 48 action items action were processed with 10 carried forward and 58 new items were added from meeting 43. The updated status for each item is shown in the tables in the following sections. All action items that were not completed are carried forward to the next meeting and are included under item 16 on page 50 in these minutes. Document N2623R captures the comments from UTC and the US national body for several of the scripts in response to some of the action items. Some of the scripts have revised proposals, others do not.

4.1 Action items from previous WG 2 meetings (numbers 25 to 40)

All action items recorded in the minutes of the following previous meetings have been either completed or dropped. New action items from this meeting and outstanding action items from previous meetings are listed in the tables that follow.

- a. meeting 25, 1994-04-18/22, Antalya, Turkey (document N1033)
- b. meeting 26, 1994-10-10/14, San Francisco, CA, USA (document N1117)
- c. meeting 27, 1995-04-03/07, Geneva, Switzerland (document N1203)
- d. meeting 28, 1995-06-22/26, Helsinki, Finland (document N 1253)
- e. meeting 29, 1995-11-06/10, Tokyo, Japan (document N1303)
- f. meeting 30, 1996-04-22/26, Copenhagen, Denmark (document N1353)
- g. meeting 31, 1996-08-12/16, Québec City, Canada (document N1453)
- h. meeting 32, 1997-01-20/24, Singapore (document N1503)
- i. meeting 33, 1997-06-30/07-04, Heraklion, Crete, Greece (document N1603)
- j. meeting 34, 1998-03-16/20, Redmond, WA, USA (document N1703)
- k. meeting 35, 1998-09-21/25, London, UK (document N1903)
- l. meeting 36, 1999-03-09/15, Fukuoka, Japan (document N2003)
- m. meeting 37, 1999-09-17/21, Copenhagen, Denmark (document N2103)
- n. meeting 38, 2000-07-18/21, Beijing, China (document N2203)
- o. meeting 39, 2000-10-08/11, Vouliagmeni, Athens, Greece (document N2353) and
- p. meeting 40, 2001-04-02/05, Mountain View, CA, USA (document N2403)

4.2 Outstanding action items from meeting 41, 2001-10-15/18, Singapore

Item	Assigned to / action (Reference resolutions in document N2404R, and unconfirmed minutes in document N2403 for meeting 41 with any corrections noted in section 3 of document N2453 from meeting 42)	Status
AI-41-5	Ad hoc group on principles and procedures (lead - Dr. V.S. UMaaheswaran)	
a	To check for any suitable enhancement needed regarding resolution M41.13 (Policy regarding fonts for submissions to 10646). M42 and M43 - In progress.	Completed; see document N2652.
c	To address how to reference ISO/IEC 10646 in other publications and include in principles and procedures document. M42 and M43 - In progress.	Completed; see document N2652.
d	To look at the Principles and Procedures document and see if the guidelines have to be enhanced re: glyph related guidelines / defect reports etc. based on document N2382 (along with Mr. Tatsuo Kobayashi, Japan). M42 and M43 - In progress.	Completed; see documents N2576, N2577R, N2652.
AI-41-6	IRG Rapporteur (Mr. Zhang Zhoucai)	
c	To examine the guidelines document N2382 (from Japan - Mr. Tatsuo Kobayashi) and provide feedback to WG 2. M42 and M43 - In progress.	Completed; see documents N2576, N2577R, N2652.
AI-41-12	Japanese national body (Mr. Takayuki Sato, Mr. Tatsuo Kobayashi)	
a	Is invited to look at the Principles and Procedures document and see if the guidelines have to be enhanced re: glyph related guidelines / defect reports etc. based on document N2382 (along with Dr. Umamaheswaran). M42 and M43 - In progress.	Completed; see documents N2576, N2577R, N2652.

4.3 Outstanding action items from meeting 42, 2002-05-20/23, Dublin, Ireland

Item	Assigned to / action (Reference resolutions in document N2454R, and unconfirmed minutes in document N2453 for meeting 42 with any corrections noted in section 3 of document N2553 from meeting 43)	Status
AI-42-5	Ad hoc group on principles and procedures (lead - Dr. V.S. UMaaheswaran)	
b	Include document N2423 - Proposal for "Error correction on unified ideographs in UCS"; in discussion regarding CJK Error corrections and prepare appropriate new text to be added to Principles and Procedures documents. M43 – in progress.	Completed; see documents N2576, N2577R, N2652.
c	Messrs. Umamaheswaran, Takayuki Sato, Tatsuo Kobayashi, and a Unicode representative to consider the proposal in document N2467 - Proposal: "Additional guideline in the WG2 Principles and Procedures" and suggest additions to the principles and procedures document. M43 – in progress.	Completed; see documents N2576, N2577R, N2652.
AI-42-7	The US national body (Mr. Michel Suignard / Dr. Asmus Freytag)	

Item	Assigned to / action (Reference resolutions in document N2454R, and unconfirmed minutes in document N2453 for meeting 42 with any corrections noted in section 3 of document N2553 from meeting 43)	Status
b	With reference to documents N2424 - Reconsidering request: "Font supply guide for UCS development" (M41.13); Japan – Sato; 2002-03-25; N2443 - Clarification to WG2 N3568R, M41.13 resolution in Singapore; Singapore; 2002-05-06; N2447 - IRG #19 Resolutions; IRG; 2002-05-09 (Resolution M19.4), Dr. Asmus Freytag to prepare document N2445 on Font Policy clarification, based on ad hoc discussions with the project editor and IRG rapporteur and other interested parties. M43 – in progress.	In progress.
AI-42-8	The Irish national body (Mr. Michael Everson)	
b	To act on the resolution M42.3 (Coptic disunification): WG2 accepts the rationale and agrees in principle to the disunification of Coptic script from Greek script proposed in document N2444 and invites the proposers to submit a refined proposal for Coptic for future consideration by WG2. M43 – in progress.	Completed; see document N2636.
d	Is invited to prepare a separate contribution regarding guidebook symbols, resulting from discussion on Irish comment T.15-3 in document N2486. M43 – in progress.	In progress.

4.4 New action items from meeting 43, 2003-12-09/12, Tokyo, Japan

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
AI-43-1	Meeting Secretary - Dr. V.S. UMaaheswaran	
a	To finalize the document N2554 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N2554.
b	To finalize the document N2553 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N2553.
AI-43-2	Convener - Mr. Mike Ksar	
a	To communicate to SC2 the following WG2 resolutions: M43.13 (Roadmap snapshot): WG2 accepts the snapshot of the latest roadmaps in document N2559 and requests SC2 to circulate it to national bodies and liaison organizations for referencing as a guide for future submissions replacing the previous snapshot document N2461. M43.16 (IRG – Member’s Chief Editors for CJK Ext. C): WG2 endorses the IRG resolution M20.5 regarding appointment of a Chief Editor from each of the IRG member bodies, towards ensuring the quality of input to the work on CJK Extension C and all other contributions to the IRG M43.17 (IRG Officers): WG2 endorses the IRG nomination of Mr. Zhang Zhoucai as IRG Rapporteur for the next term.	Completed; document N2554 was sent to SC2 and discussed at the SC2 plenary on 2002-12-09 after the WG2 meeting ended.
b	To investigate and obtain copies of final published Amendments for use by the editor and contributing editors.	In progress.
c	To include the following proposals from this meeting for the next meeting agenda: N2530 Clarification to Resolution M42.13 on Hanja Compatibility Updated N2543 Devanagari Glottal Stop Updated N2546 Greek Metrical Symbols Updated N2555 Glagolitic script Updated N2505 Ol Chiki script Updated N2560 Additional Cyrillic Characters for Siberian Yupik N2572 & N2573 107 compatibility Hanja Updated N2558 Tibetan BrdaRaten characters Updated N2524 Kharoshthi script Updated N2544 Manichaeian script Updated N2545 Old Persian script Updated N2547 Ancient Greek Musical Symbols	Most documents are on M44 agenda; carry forward documents N2530, N2572, N2673 – Hanja compatibility characters, N2505 – Ol Chiki, N2544 – Manichaeian, and N2556 – Avestan and Pahlavi; Close and create new AI for M44.

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
	Updated N2549 Saurashtra script Updated N2556 Avestan and Pahlavi	
AI-43-3	Editor of ISO/IEC 10646-1 Mr. Michel Suignard with assistance from contributing editors	
	<i>To prepare the appropriate AM, DAM or PDAM 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>	
<p data-bbox="282 499 318 525">a-1</p> <p data-bbox="282 1075 318 1100">a-2</p> <p data-bbox="282 1831 318 1856">a-3</p>	<p data-bbox="334 499 1058 550">Resolution M43.1 (Additions / Corrections for FPDAM-2 of 10646-1): WG2 resolves:</p> <p data-bbox="380 554 1159 907">a. To add the following to the BMP:</p> <ol data-bbox="428 579 1159 907" style="list-style-type: none"> 23D0 VERTICAL LINE EXTENSION, with the glyph as a vertical line consistent with the glyphs for vertical arrows 03F9 GREEK CAPITAL LUNATE SIGMA SYMBOL with the glyph shown in document N2512 03FA GREEK CAPITAL LETTER SAN with a glyph similar to that shown in the sign column on page 4 of document N2522 03FB GREEK SMALL LETTER SAN with a glyph similar to that shown in the sign column on page 4 of document N2522 1D6B LATIN SMALL LETTER UE with the glyph shown on page 1 of document N2514 0B71 ORIYA LETTER WA with the glyph shown on the right within the circled pair on page 2 of document N2525 <p data-bbox="334 911 376 936">and</p> <p data-bbox="380 940 1159 991">b. To correct the glyph for 0B35 ORIYA LETTER VA to the glyph on the left side within the circled pair on page 2 of document N2525.</p> <p data-bbox="334 1020 1107 1071">WG2 further instructs its project editor to include the above additions and correction in the text for FDAM-2 to ISO/IEC 10646-1: 2000.</p> <p data-bbox="334 1075 1019 1100">Resolution M43.2 (Character name rule for Loose Matching):</p> <p data-bbox="334 1117 1153 1226">With reference to proposal for additional constraints on character names in document N2536, WG2 resolves to add the following new rule to Annex L on English character names in the standard, in order to enhance the uniqueness of character names::</p> <p data-bbox="334 1255 1130 1335">Names are unique if SPACES and HYPHENS are ignored, and if the strings "LETTER", "CHARACTER", and "DIGIT" are ignored in comparison of the names.</p> <p data-bbox="334 1365 782 1390">Examples of unacceptable unique names:</p> <p data-bbox="428 1394 766 1444">KHAROSHTI LETTER AA KHAROSHTI CHARACTER AA</p> <p data-bbox="334 1449 1042 1499">These two names would not be unique if the strings "LETTER" and "CHARACTER" are ignored.</p> <p data-bbox="334 1528 1153 1579">The following six character names will remain as exceptions to this rule, since already standardized character names will not be changed:</p> <p data-bbox="334 1608 1146 1722">0F68 TIBETAN LETTER A 0F60 TIBETAN LETTER –A 0FB8 TIBETAN SUBJOINED LETTER A 0FB0 TIBETAN SUBJOINED LETTER –A 116C HANGUL JUNGSEONG OE 1180 HANGUL JUNGSEONG O-E</p> <p data-bbox="334 1751 1153 1831">WG2 further instructs its editor to merge the above rule to the existing text of informative Annex L, with any needed editorial changes, and add it to the text for FDAM-2 to ISO/IEC 10646-1: 2000.</p> <p data-bbox="334 1835 1123 1906">Resolution M43.4 (Disposition of comments – FPDAM-2 to 10646-1): WG2 instructs its editor to prepare the final disposition of comments to ballot on FPDAM-2 to 10646-1 based on document N2541 and discussion at this</p>	<p data-bbox="1182 499 1409 604">Completed; see documents SC2 N3671.zip and SC2 N3672.pdf (N2579R)</p> <p data-bbox="1182 1075 1409 1180">Completed; see documents SC2 N3671.zip and SC2 N3672.pdf (N2579R)</p> <p data-bbox="1182 1831 1409 1906">Completed; see documents SC2 N3671.zip and SC2</p>

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
	<p>meeting, including the following notable changes:</p> <ul style="list-style-type: none"> a. Change LTR to RTL in the name for collection 105 b. Interchange glyphs for 060D and 060E c. Move character at 0659 to 0615 d. Rename FDFD to ARABIC LIGATURE BISMILLAH AR-RAHMAN AR-RAHEEM e. Rename 0658 to ARABIC MARK NOON GHUNNA f. Add a clarification note regarding normalization, such as "Note: The goal of normalization is to arrive at unique strings after normalization even though they may not be optimal for some purposes." g. Change definition of Collection 110 to 2B00-2BFF h. Annex Q: Add a machine readable version of the mapping information i. Annex R: Add a machine readable version of the full names for Hangul Syllables j. Modify the glyph for 070F SYRIAC ABBREVIATION MARK <p>Update the informative note regarding 00AD SOFT HYPHEN in clause F.1.1 and modify the glyph for 1806 MONGOLIAN TODO SOFT HYPHEN accordingly.</p> <p>a-4 Resolution M43.5 (Progression of Amendment 2 to 10646-1): WG2 instructs its project editor to prepare the text for FDAM-2 to ISO/IEC 10646-1, based on the disposition of comments per resolution M43.4 above, and including other accepted changes from resolutions M43.1 through M43.3 above. WG2 further instructs its editor to submit the disposition of comments and the FDAM-2 text to the SC2 secretariat for FDAM ballot, with the unchanged completion target date of 2003-04.</p> <p>a-5 To check and fix the shapes for 0656, 0657, 0659, 06EE, 06EF and 06FF per editorial comment from Iran in document N2520 before the next edition of the standard.</p> <p>a-6 To check and fix the glyph for Hot Beverage symbol 2615 per Irish comment in document N2520.</p>	<p>N3672.pdf (N2579R)</p> <p>Completed; see documents SC2 N3671.zip and SC2 N3672.pdf (N2579R)</p>
AI-43-4	Editor of ISO/IEC 10646-2: Mr. Michel Suignard with assistance from contributing editors	
	<i>To prepare the appropriate AM, DAM or PDAM texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:</i>	
a-1	Resolution M43.6 (Editor's input to Part 2 on CJK Compatibility Ideograph mappings): WG2 accepts the technical corrections to CJK Compatibility Source References listed in document N2563 and instructs its editor to include these corrections in FDAM-1 to ISO/IEC 10646-2.	Completed; see documents SC2 N3673.zip and SC2 N3674.pdf (N2570R)
a-2	Resolution M43.7 (Progression of Amendment 1 to 10646-2): WG2 instructs its project editor to prepare the text for FDAM-1 to ISO/IEC 10646-2 based on the disposition of comments, which is mostly correction of errors, in document N2542, and include the decision in resolution M43.6 above. WG2 further instructs its editor to submit the disposition of comments and the FDAM-1 text to the SC2 secretariat for FDAM ballot, with the unchanged completion target date of 2003-04.	Completed; see documents SC2 N3673.zip and SC2 N3674.pdf (N2570R)
AI-43-5	Editor of ISO/IEC 10646 edition with merged parts: Mr. Michel Suignard with assistance from contributing editors	
a	<p><i>To prepare the appropriate text with assistance from other identified parties, in accordance with the following:</i></p> <p>Resolution M43.11 (Single part standard): WG2 instructs its editor to prepare a Revised Text for the single-part ISO/IEC 10646: 2003, reflecting the final texts of FDAM-2 to 10646-1: 2000 and FDAM-1 to 10646-2: 2001 from this meeting, and all accepted changes arising out of the discussion on the feedback in documents N2527, N2528 and N2529 on the working draft in document N2499R.</p>	Completed; final text sent to ITTF.

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
	WG2 further instructs its editor to incorporate any additional changes arising out of FDAM ballots on the above two amendments, and to forward the final text to ITTF for publishing, incorporating any editorial changes needed to accommodate the feedback comments, to replace the current published parts of 10646 and their accepted amendments until that date. The target date for submitting the final text to ITTF is 2003-09.	
AI-43-6	Ad hoc group on principles and procedures (lead - Dr. V.S. UMaaheswaran)	
a	Update Principles and Procedures to include requirement for Source References and Mapping information for ideographs in machine readable form are sent to the editor.	In progress.
AI-43-7	IRG Rapporteur (Mr. Zhang Zhoucai)	
a	To act on resolution M43.12 (IRG Support for Single part standard): WG2 instructs the IRG to assist the project editor in a. reviewing the suitability of the font that has been used for Unicode V 3.1 for use in preparing the CJK charts for Extension B ideographs, b. preparing a new set of charts in PDF format for BMP CJK Unified ideographs for finalization by 2003-05.	Moot; IRG could not meet due to SARS; final text has been sent to ITTF.
b	IRG editor is to ensure the source reference files in the amendments are in synch with the Super CJK database.	Completed.
c	Per discussion on document N2526 on Ideographic Strokes versus Ideographs, IRG should separate the candidate characters for being Strokes versus ideographs.	In progress.
d	With reference to document N2571, IRG is encouraged filter the input on Ancient Ideographs before WG2 considers them.	In progress.
e	To act on resolution M43.15 (Basic international CJK sub-set): WG2 accepts the IRG input in document N2539 (IRG N947) and encourages the IRG to collect additional input and arrive at recommendations for a Basic international Ideograph Subset and submit for review at the next WG2 meeting.	In progress.
AI-43-8	The US national body (Mr. Michel Suignard / Dr. Asmus Freytag)	
a	Working with the authors to submit a revision of document N2547 (- Proposal to encode Ancient Greek Musical Symbols in the UCS; Thesaurus Linguae Graecae Project (University of California, Irvine); 2002-11-07) based on comments received at the meeting and any other feedback received before the next meeting.	Completed; see document N2623R.
AI-43-9	The Irish national body (Mr. Michael Everson)	
a	To act on resolution M43.14 (Roadmap - Plane 3): WG2 accepts the recommendation in document N2515 from the Roadmap ad hoc committee for adding Plane 3 as an additional supplementary plane to the roadmap, identifying it as 'Plane 3'.	In progress; a note has been added.
b	To update the roadmap document reflecting document N2549 on Saurashtrian script moving to Plane 1 from current Plane 0.	Completed.
c	To update the roadmap document reflecting document N2547 on Ancient Greek Musical Symbols in Plane 1	Completed.
d	To update the roadmap to provide some guidelines for differentiating Ideographic Strokes from Ideographs addressing concerns expressed in document N2526.	In progress.
e	To submit a revision of document N2556 on Avestan and Pahlavi based on comments received at the meeting and any other feedback received before the next meeting.	In progress.
f	To work with the authors and to submit a revision of document N2549 on Saurashtra script based on comments received at the meeting and any other feedback received before the next meeting.	Completed; see document N2619.
g	To submit a revision of document N2544 on Manichean script based on comments received at the meeting and any other feedback received before the next meeting.	In progress.

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
h	To submit a revision of document N2545 on Old Persian script based on comments received at the meeting and any other feedback received before the next meeting.	Completed; see document N2583R.
l	To submit a revision of document N2560, working with the authors, on Additional Cyrillic Characters for Siberian Yupik.	Dropped; see document N2623R.
j	To submit a revision of document N2505 on OI Chiki script based on comments received at the meeting and any other feedback received before the next meeting.	In progress.
k	To submit a revision of document N2555 on Glagolitic reflecting comments received at the meeting and any other feedback received before the next meeting.	Completed; see document N2610R.
l	To get further evidence of usage from the authors on Afghani sign proposed in document N2523.	Completed; see document N2640.
m	To inform experts from India on acceptance of Oriya character WA at 0B71 and change of shape of Oriya character VA.	Completed. US national body informed India.
n	To get feedback working with the authors of the proposal on Devanagari Glottal Stop in document N2543 (Proposal to add Devanagari Glottal Stop; Peter Constable, Steve Smith; 2002-11-01) from other users of Devanagari script, including the Government of India.	Dropped; see document N2623R.
AI-43-10	Chinese national body (Messrs, Cheng Zhuang, Lobsang Tokeme, Zhang Zhoucai)	
a	To act on resolution M43.9 (Tibetan BrdaRten proposal): WG2 notes the proposal for 956 BrdaRten Tibetan characters in document N2558, and invites all national bodies to review and provide feedback to the authors, and invites the Chinese national body to submit a revised proposal incorporating the feedback, prior to the next WG2 meeting.	Completed; see documents N2621, N2624, N2625 and N2661.
b	To feedback to HKSAR on resolution M43.8 (6 characters from Hong Kong SAR): With reference to the request for four precomposed characters and two symbols in document N2513 from HKSAR, WG2 resolves to reject the request for four precomposed characters since combining sequences in the standard can be used to represent these. Further, WG2 invites HKSAR to provide more clarification on the usage of the two proposed symbols.	Completed; no feedback from HKSAR.
AI-43-11	ROK national body (Professor Kyongsok Kim)	
a	Invited to make a contribution on Hangul Transliteration Rules that can be applied to all Hangul contributions (reference discussion on ROK comments in document N2520.)	In progress.
AI-43-12	Unicode Consortium (Dr. Asmus Freytag)	
a	Working with the authors, to submit a revised document N2524 (Proposal to Encode Kharoshthi in Plane 1 of ISO/IEC 10646; Andrew Glass, Stefan Baums, Richard Salomon – via Unicode; 2002-11-20) based on comments received at the meeting and any other feedback received before the next meeting.	Completed; no updates; see document N2623R.
b	To make sure written Unicode liaison report document N2516 is sent to the convener.	Completed.
c	To take note of Irish contribution in document N2509 on shaping behaviour of Syriac characters.	Noted.
AI-43-13	DPRK – Messrs. Ham Myong HO, Ri Kwang HO	
a	To act on resolution M43.10 (Request for additional Hanja Character Source References): With reference to the request from DPR of Korea for three Hanja character source references in document N2517, and two Hanja character source references in document N2518, WG2 invites DPRK to review these proposed references, with assistance from the IRG, prior to re-submitting the requests for future consideration by WG2.	In progress.
b	To act on resolution M43.3 (Compatibility Hanja characters): WG2 accepts the removal of 122 Compatibility Hanja characters FA70 to FAE9 from FPDAM-2 to ISO/IEC 10646-1. WG2 provisionally accepts, and invites DPRK and other interested parties to review, the refined replacement	In progress.

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
	set of 107 Compatibility Hanja characters (see Korean ad hoc report in document N2573, corrections to the FPDAM-2 charts in document N2540, and the code chart showing the 107 characters in document N2572) for further consideration at the next WG2 meeting.	
AI-43-14	All national bodies and liaison organizations	
a	To take note of resolution M43.18 (Future Meetings): WG 2 meetings: Meeting 44 -- 2003-10-20/23, San Francisco Bay area, USA Meeting 45 -- 2004-06 (tentative), Europe (waiting for a host); backup is USA Meeting 46 -- 2005-xx (tentative), Asia IRG meetings: IRG 21 - China 2003-04-07/11 IRG 22 -- October 2003 -- prior to WG2 meeting 44; Place to be determined, IRG 23 -- Taipei (tentative) and Unicode Consortium will be backup, in 2004.	Noted.
b	To take note of resolution M43.16 (IRG -- Member's Chief Editors for CJK Ext. C): WG2 endorses the IRG resolution M20.5 regarding appointment of a Chief Editor from each of the IRG member bodies, towards ensuring the quality of input to the work on CJK Extension C and all other contributions to the IRG.	Noted.
c	To review and feedback to DPRK per resolution M43.3 (Compatibility Hanja characters): WG2 accepts the removal of 122 Compatibility Hanja characters FA70 to FAE9 from FPDAM-2 to ISO/IEC 10646-1. WG2 provisionally accepts, and invites DPRK and other interested parties to review, the refined replacement set of 107 Compatibility Hanja characters (see Korean ad hoc report in document N2573, corrections to the FPDAM-2 charts in document N2540, and the code chart showing the 107 characters in document N2572) for further consideration at the next WG2 meeting.	In progress.
d	To review and feedback to China per resolution M43.9 (Tibetan BrdaRten proposal): WG2 notes the proposal for 956 BrdaRten Tibetan characters in document N2558, and invites all national bodies to review and provide feedback to the authors, and invites the Chinese national body to submit a revised proposal incorporating the feedback, prior to the next WG2 meeting.	Noted. Feedback comment documents on M44 agenda.
e	To review and feedback to IRG based on resolution M43.15 (Basic international CJK sub-set): WG2 accepts the IRG input in document N2539 (IRG N947) and encourages the IRG to collect additional input and arrive at recommendations for a Basic international Ideograph Subset and submit for review at the next WG2 meeting.	Noted; feedback document N2649.
f	To review and feedback on document N2546 - Proposal for encoding Greek Metrical Symbols in the UCS; Thesaurus Linguae Graecae Project (University of California, Irvine); 2002-11-07.	Noted; see document N2623R.
g	To review and feedback on document N2555 - Revised proposal for encoding the Glagolitic script in the UCS ; Michael Everson and Ralph Cleminson; 2002-12-04.	Noted; see documents N2610R and N2623R.
h	To review and feedback on document N2505 - Revised proposal for encoding the Ol Chiki script in the UCS; Michael Everson, R. C. Hansdah & N. C. Murmu; 2002-11-03	In progress.
i	To review and feedback on document N2560 - Proposal for Encoding Additional Cyrillic Characters for Siberian Yupik; SIL International (contacts: Jim Brase, Peter Constable); 2002-12-06.	Noted; see document N2623R.
j	To review and feedback on document N2524 - Proposal to Encode Kharoshthi in Plane 1 of ISO/IEC 10646; Andrew Glass, Stefan Baums, Richard Salomon -- via Unicode; 2002-11-20.	Noted; see document N2623R.
k	To review and feedback on document N2544 - Revised proposal to encode the Manichaeian script in the UCS; Everson; 2002-12-03.	In progress.
l	To review and feedback on document N2545 - Revised proposal to encode the Old Persian script in the UCS; Everson; 2002-12-03.	Noted; see documents N2583R and N2623R.

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
m	To review and feedback on document N2547 - Proposal to encode Ancient Greek Musical Symbols in the UCS; Thesaurus Linguae Graecae Project (University of California, Irvine); 2002-11-07.	Noted; see document N2623R.
n	To review and feedback on document N2549 - Proposal to encode the Saurashtra script in the UCS; Jeyakumar Chinnakkonda Krishnamoorthy and Michael Everson; 2002-12-03.	Noted; See document N2620.
o	To review and feedback on document N2556 - Revised proposal to encode the Avestan and Pahlavi script in the UCS; Michael Everson; 2002-12-04.	In progress.

5 JTC1 and ITTF matters

5.1 Recommendations of Geneva JTC1 ad hoc on CCCCLM

Input document:

N2595 Recommendations of the Meeting on the Cooperation of Cross Cultural and Linguistic Matters, June 2003 in Geneva [JTC 1 N 7136 / SC 2 N 3686]; SC2 Secretariat; 2003-07-01

Mr. Mike Ksar: Document N2595 is the report from the joint meeting on the Cooperation of Cross Cultural and Linguistic Matters (CCCCLM) called by the JTC1 chair. I attended the meeting; SC35, SC2 and SC22 chairs were there; Mr. Keld Simonsen was there. Canada had given proxy. SC22 WG20 convener was there. This JTC1 meeting was the last one called on CCCCLM – future work will be by regular liaison channels than a formal meeting of CCCCLM.

Recommendation 2 in document N2595 is relevant to WG2. Both SC2 and SC22 issued ballots on transferring 14651 to SC2. The SC2 ballot passed in SC2 (8 to 4?). It also passed in SC22 last week. Some SC 22 comments were based on changing the SC 2 charter to include collation. ISO/IEC 14651 will be on the next JTC1 plenary agenda on how to transfer the project from SC 22 to SC 2. This topic will be taken up again under agenda item 6.3.1 to see what kind of recommendation we can make to SC2 to take to JTC1.

5.2 JTC1 Plenary

The next JTC 1 plenary is next month.

6 SC2 matters

6.1 SC2 Program of Work

Mr. Mike Ksar: The SC2 program of work is online at <http://www.dkuug.dk/JTC1/SC2/open/pow.htm>. SC2 secretary had updated the program of work document last month. The FDAM ballots on ISO/IEC 10646 Parts 1 and 2 are still on going – closing October 28, 2003. The merged document – since it is not being balloted – at the suggestion of the secretariat has been submitted to ITTF.

All WG3 work projects have been completed. My suggestion to SC2 chair was to take over the maintenance of the WG3 projects at the SC2 level. Next SC2 plenary will discuss this.

6.2 Submittals to ITTF

6.2.1 Merged 10646 parts 1 & 2 as ISO/IEC 10646: 2003

Mr. Mike Ksar: Our project editor Mr. Michel Suignard has submitted the merged edition to ITTF. The hardcopy of the document if printed will be about 1000 pages. The text part can be used for the work of WG2. The complete standard will be on a single CD.

Discussion:

- Dr. Umamaheswaran: It will be useful to post the text part of the joint edition to the WG2 site for experts to use in the WG2 work.
- Ms Lisa Moore: It will be useful also for work of UTC.
- Mr. Zhang Zhoucai: Will the date of publication will be year 2003?
- Mr. Mike Ksar: The title will have 10646: 2003(E)

- e. Dr. Asmus Freytag: I need to access the code charts, especially those produced by the IRG.
- f. Mr. Mike Ksar: The charts can be made available for contributing editors to get the WG2 work done. Watermarks can be used to make it in accordance with the ISO Copyright rules.
- g. Mr. Michel Suignard: I have a hard copy with me – if anyone is interested in taking a look.

6.3 Ballot results

6.3.1 Transfer of ISO 14651 from SC22 to SC2

Input documents:

N2596	Ballot on Transfer of Project 14651 (JTC 1.22.30.02.02) from JTC 1/SC 22 to SC2 – ballot closes 2003-09-01; SC2 Secretariat; 2003-07-01
N2616	Results of SC2 ballot to transfer 14651 from SC22 to SC2; SC2 Secretariat; 2003-09-11
N2658	SC22 Ballot results – Approval to transfer 14651 from SC22 to SC2; SC22 Secretariat; 2003-10-15

Mr. Mike Ksar: Ballots on transfer of ISO/IEC 14651 from SC22 to SC2 have been approved both by SC2 and SC22. We can make some suggestions to SC2. The first step is to modify the scope of SC2 to include Collation – the subject matter of 14651. One possibility was to be more general than just to include Collation. One of the national body comments was for specific inclusion of ‘Collation’ in SC2’s scope. We could include other properties also in its scope. The question would be also on whether another WG will be preferred in SC2 or not.

Discussion:

- a. Mr. Michael Everson: The current scope includes – “and their characteristics”. The ballot has passed irrespective of German comments. I rather not see another go around with SC2 ballots to change the scope. SC2 should entertain certain character properties .. however, the Netherlands may have problems opening up to include character properties.
- b. Dr. Asmus Freytag: The example of moving Audio and Picture coding out to SC29 is an indication of how things can get changed, as part of the working mode of ISO. The statement of work includes “characteristics of character sets” and can include things like we see in ISO/IEC 2022 or ISO/IEC 10646 etc. To include other properties under the characteristics may not be right thing to do. Some house keeping needs to be done. May be we can just include words to include Collation and satisfy German comment and get on with it. Nothing prevents us in picking up additional work in the future.
- c. Dr. Ken Whistler: I think the US would agree with that. One of the purposes of scope is to make other committees understand who does what. If string ordering is specifically clarified to be in SC2 scope, it will assist in other committees to understand that. The US committee will be in favour of a limited wording change.
- d. Dr. Umamaheswaran: The Canadian national body position will be also to limit the changes to the minimum. A wording such as – characteristics, including string ordering – will alleviate the fears of national bodies. As to the WG, a new WG is what Canada would like to see instead of making it part of WG2.
- e. Mr. Soichi Senda: In Japan the SC2 counterpart consists of only experts of current WG2 scope. The scope needs further discussion .. We should consider relation with other experts also. It is difficult to come up with a specific opinion on WG.
- f. Mr. Mike Ksar: Do you think we do not have enough experts in WG2 or in Japanese NB committee?
- g. Mr. Soichi Senda: If we do expand our scope of work, Japanese committee will invite appropriate expertise to the national committee. It is difficult – because of that – to express our position. We are only character set coding experts, so we cannot really take a national body position on the string ordering. We are discussing at this time on a personal point of view.
- h. Mr. Mike Ksar: We as WG2 can make a resolution – to give our input to SC2. We can certainly make suggestion from WG2 point of view. I would prefer to keep the item within WG2 rather than opening up another WG. Other national bodies can invite experts on different technical areas as the scope is updated. The string ordering is directly related to ISO/IEC 10646 work. ISO/IEC 14651 is not the only item that could be transferred to SC2 -- especially others related to ISO/IEC 10646. I agree with suggested wordings to change the scope.
- i. Mr. Michael Everson: Ireland had suggested that an independent Rapporteur’s Group be created rather than a separate WG. In many national bodies they have joint expertise for both topics.
- j. Mr. Mike Ksar: The Rapporteur’s Group lives from plenary to plenary – formally. It is not good approach for ISO/IEC 14651.

- k. Mr. Yasuhiro Anan: I need some clarification. Are we recommending specific text for SC2 scope? (yes). I would agree with US on the proposed change of the current wording of SC2 scope; however, some experts do have problems with the wording 'characteristics'.
- l. Mr. Hideki Hiura: Did Japan talk to the SC22 WG20 members? They expressed preference for the transfer.
- m. Mr. Yasuhiro Anan: I am only talking about the proposed wordings of the scope.
- n. Dr. Ken Whistler: The parent committees have decided to transfer – the most appropriate thing will be to include the scope of ISO/IEC 14651 in SC2 scope.
- o. Mr. Yasuhiro Anan: Is there any possibility of expansion of the scope. (Not at this time).
- p. Mr. Mike Ksar: I would suggest that Japanese WG2 experts communicate with the SC22 experts in Japan.
- q. Ms. Joan Aliprand: There is also language specific ordering involved – and is not part of the scope of ISO/IEC 14651.
- r. Dr. Umamaheswaran: The term international or universal in scope may serve to indicate that other language specific or application-specific tailoring may be involved. However, it could be a detail left to the standard itself – using only 'string ordering' in the scope itself.

Disposition: WG2 will propose a revised SC2 scope for SC2 consideration and request assigning the project on ISO/IEC 14651 to WG2.

Relevant resolutions:

M44.13 (SC 2 scope and 14651 transfer):

Unanimous

With reference to documents ballot results in documents N2616 and N2658 on transferring of ISO/IEC 14651 from SC22 to SC2, WG 2 notes that the ballots to transfer the project to SC 2 have been approved by the respective SCs. In anticipation of the above transfer, WG 2 proposes that SC 2 adopt the following modified scope for SC2, which includes the phrase "including String Ordering" in it:

"Standardization of graphic character sets and their characteristics, *including string ordering*, associated control functions, ~~their~~ coded representation of *characters* for information interchange and code extension techniques. Excluded: audio and picture coding."

SC2 is further requested to relay the above to JTC1 at its next plenary in November 2003.

M44.14 (Future assignment of 14651 within SC 2):

Abstention: Canada

Yes: China, Ireland, Japan, Republic of Korea and the USA

With reference to the anticipated transfer of ISO/IEC 14651 to SC 2 from SC 22, it is the considered opinion of WG 2 that due to the close relationship between the ISO/IEC 10646 and ISO/IEC 14651, the best home for 14651 in SC 2 is within WG 2, and requests SC 2 to assign the project to WG 2, with a corresponding expansion of the title of WG 2 to say "Multiple-octet codes and string ordering".

6.4 Call for Participation to Joint Advisory Committee on ISO/IEC 15924

Mr. Michael Everson: ISO 15924 is a standard for Script Codes developed by TC46/WG3. These codes are already in use. The Registration Authority is the Unicode Consortium and has a Registration Advisory Group. I am the registrar – one representing TC46 is Mr. Randy Barry; Mr. Havard Hjulstad represents TC37. Two representatives from SC2 are to be nominated by WG2.

Dr. Ken Whistler is willing to participate. Messrs. Rick McGowan and Kent Karlsson are other candidates. Mr. Michael Everson: I corresponded with Mr. Kent Karlsson –he was interested only if there are no other candidates.

Disposition: WG2 proposes Messrs. Ken Whistler and Rick McGowan to the advisory committee representing WG2.

Relevant resolution:

M44.15 (ISO 15924 RA-JAC):

Unanimous

With reference to call for nomination of WG 2 experts in document N2582, WG 2 nominates and requests SC 2 to approve the nomination of Dr. Ken Whistler and Mr. Rick McGowan as SC 2 representatives to the Registration Authority's Joint Advisory Committee for ISO 15924.

7 BMP

Input document:

N2623R; provisional draft of Unicode 4.1; Asmus Freytag, Unicode liaison and contributing editor; 2003-09-28

Document N2623R contains the list of scripts and characters that have been approved by the Unicode Technical Committee (UTC) for the next version of Unicode. There is a total of 684 characters. Authors of the various proposals are requested to check the Glyphs and Names. This document will be used during review in WG2 of the various proposals that have been already considered by UTC.

7.1 Latin Variation Selectors

Input documents:

N2593 German request to encode the characters "LATIN VARIATION SELECTOR UMLAUT" and "LATIN VARIATION SELECTOR TREMA"; Peter Hortig - DIN; 2003-06-25

N2613 UTC response to N2593 - German request to encode the characters "LATIN VARIATION SELECTOR UMLAUT" and "LATIN VARIATION SELECTOR TREMA"; Unicode – Joan Aliprand and Asmus Freytag; 2003-09-04

Ms. Joan Aliprand: The UTC considered the request in document N2593 from DIN on Variation Selectors and concluded that the proposal was not implementable. There are other ways of solving the problem. Dr. Asmus Freytag: A particular feature of German is the usage differences between Umlaut and Trema/Diaeresis. When one makes a plural for example Haus it becomes H(a-umlaut)user. However, when there are two independent vowels like a u .. the second vowel becomes u-diaereses. When one sorts these like in bibliographic records, these have to be ordered in a specific way. The DIN proposal was to use Variation Selector in ISO/IEC 10646 for 'u'-s. Applying Variation Selectors to combining marks is not feasible, and Variants including combining marks are not definable. VS-s apply only to base characters and not combining characters. This text needs to be added to the text of the standard. Foreign words in German don't follow the German rules. For example a-umlaut is equivalent to ae and u umlaut becomes equivalent of u.

Ms. Joan Aliprand: If one wants to make such a distinction only in bibliographic situations, then one could suggest use of ISO 6630 like control characters to distinguish between such uses of combining marks. ISO/IEC 10646 can be used with C1 controls other than the default from ISO/IEC 6429. DIN may come back and say that they would like to send the data out of the bibliographic environments and bring them back. In non-sorting cases, this is not an issue at all. In telephone sort etc. the names don't have the feature of using trema etc. Document N2613 already explains technically that the proposal from DIN will not solve their problem. The e-mail response from UTC that was sent to DIN is also in document N2613.

Action item: Ms. Joan Aliprand: Send the suggestion to use C1 controls from ISO 6630 as an alternate way to solve the problem.

Relevant resolution:

M44.6 (Clarification text for Variation Selectors):

Unanimous

With reference to discussion on Latin Variation Selectors in document N2593 from DIN, WG 2 instructs its project editor to add appropriate text in the next amendment to the standard to clarify that Variation Selectors apply only to Base characters.

7.2 Coptic alphabet

Input documents:

N2611 Proposal to add the Coptic alphabet to the BMP of the UCS; NSAI/ICTSCC/SC4, Ireland; 2003-09-24
N2636 Coptic – replaces N2611; Everson; 2003-10-01

Dr. Asmus Freytag: The principle behind the proposal is to disunify Coptic from Greek. The proposal in document N2636 contains characters for Coptic writing. The UTC has processed document N2611 – result of the Unicode deliberation process is on pages 38 and 39. It differs from document N2636 in the charts on page 16. UTC had suggested symbol at 2CBC - KHI RO be unified with Greek KHI RO. This is reflected in UTC charts.

Discussion:

- a. Mr. Michael Everson: The first reason for an additional column, is that there are additional Coptic characters for Nubian use – sha, ha, ya etc. – from Ms. Deborah Anderson – there will be additional 12 characters with Casing Model. It is prudent to leave the extra expansion space. This was not considered in the UTC document. 2CBA to 2CBD are original ligatures. Explanation of use of these is given in the proposal. I appreciate that the standard has KHI RO somewhere else. It is also used in several places. The Coptic typography is different. After the UTC suggestion to unify these, I was able to show that there are Greek/Coptic bilingual docs and the Christ monogram (ChiRho) appears in them. Talked to an expert – his opinion is that the unification should not be done.
- b. Mr. Mike Ksar: What is the difference – between the two proposals?
- c. Mr. Michael Everson: Expansion space for more Coptic characters and the additional character for KHI RO.
- d. Dr. Asmus Freytag: If there is a reasonable probability that there will be expansion needed then we should consider the extra space.
- e. Ms. Lisa Moore: Knowing there will be more characters – it sounds reasonable to give extra column.
- f. Dr. Asmus Freytag: I withdraw the objection to the extra column – based on new information.
- g. Mr. Michel Suignard: What does disunification mean in this context? We have added in the Greek block characters used for Coptic. Will we be using characters from Greek plus new Coptic characters?. We should not be ambiguous.
- h. Dr. Asmus Freytag: The whole alphabet for Coptic is using the new set. For example Alpha at 2C80. Existing block was called Greek / Coptic. Some characters were called Greek and others were called Coptic. They can distinguish between the two.
- i. Mr. Michel Suignard: Are we assuming no one else is using Greek for Coptic now?
- j. Dr. Ken Whistler: Both committees had decided to disunify these some time ago – and use the new set for Coptic instead of using Greek.
- k. Dr. Umamaheswaran: The difference of opinion is about the KHI RO disunification problem. The other is to extend the column to CC in the future.
- l. Dr. Asmus Freytag: We can go in either direction .. start with document N2636 and wait for more info on the KHI RO character with the extra space.
- m. Mr. Mike Ksar: Are there implementation impacts?
- n. Dr. Umamaheswaran: I don't think there is any.
- o. Dr. Asmus Freytag: We have already taken the disunification decision – we are not going to rehash that argument.
- p. Dr. Ken Whistler: My suggestion is to simply add the KHI RO in the chart on pages 38 and 39 in documents N2623R. Character at 2055 is under agenda item 7.29 on page 32.
- q. Mr. Michel Suignard: What would be the nature of the Collection for Coptic -- a collection number also is needed.

Disposition: Accepted for encoding in the next amendment. See relevant resolution M44.1 item a, on page 41.

Note: The question on collection number and collection definition for Coptic was not answered during the meeting.

7.3 Glagolitic script

Input document:

N2610R Final proposal for encoding the Glagolitic script in the UCS; Michael Everson and Ralph Cleminson; 2003-09-04

Dr. Asmus Freytag: Document N2610R has three parts. Document N2623R captures the proposal in document N2610R. See pages 24,25 – general punctuation and pages 36-37 – main Glagolitic block -. in document N2623R. Page 25 identifies 2056 to 2059. 2057 is already allocated to a new character – it is not free.

An ad hoc group met and proposed the following name changes; there was no objection.

2056 – THREE DOT PUNCTUATION
2058 – FOUR DOT PUNCTUATION
2059 – FIVE DOT PUNCTUATION

Disposition: Accepted the proposal in document N2610R with modifications for encoding in the next amendment. See relevant resolutions M44.1 item b on page 41 and M44.5 item a on page 35.

7.4 Additional Georgian and other characters

Input document:

N2608R2 Proposal to add Georgian and other characters to the BMP of the UCS – (previous ref. N1962);

A total of 43 characters are requested. The proposal has been captured in the charts in document N2623R. Addition of three new characters to Georgian Block – pages 19 and 20 in document N2623R. Page 40 has the Khutsuri (Georgian Supplement block). Page 23 has two more characters under Phonetic Extensions. All characters will have (Khutsuri) as annotation in their names.

Disposition: Accepted additional Georgian characters as presented for inclusion in the next amendment. See relevant resolutions M44.5 item b on page 35, and M44.1 item c on page 41.

Note: Missed 1D77 and 1D78 from N2609R2 in preparing the resolutions. Have checked the draft resolutions table .. was missing there and hence also in the final list under new M44.5 in N2654R document. It is included in the FINAL charts in document N2676 and in the PDAM text. Suggest WG2 take a retroactive resolution to reflect the acceptance of this character at its next meeting. .. Uma.

7.5 Saurashtra script

Input documents:

N2607 Revised proposal to encode the Saurashtra script in the UCS – update of n2549; Jeyakumar Chinnakkonda Krishnamoorthy and Michael Everson; 2003-08-13
N2619 Saurashtra Script Encoding; Rick McGowan – personal contribution; 2003-09-18
N2620 Comments on Proposal to Encode the Saurashtra Script in the UCS (N2607); Peri Bhaskararao; 2003-09-18

Mr. Michael Everson: Based on all the information I have received, I prepared the proposal in document N2607 working with the authors. Document N2620 comments on the nature of one of the characters. The other one is a rearrangement proposal by Professor Peri Bhaskararao. I don't have access to any of the early use of some of the characters. The script needs more discussion towards resolving the differences.

Discussion:

- a. Dr. Ken Whistler: The two proposals should be back on next meeting's agenda.
- b. Dr. Umamaheswaran: There was also a suggestion to move the script to SMP at the Tokyo meeting.

Disposition: Postponed till the differences are resolved outside the meeting.

Action item: The convener is to add this script to next meeting's agenda. Both documents N2607 and N2620 are to be posted.

7.6 Additional Arabic script characters

Input document:

N2598 Proposal for additional Arabic-script characters; UTC & Jonathan Kew, SIL; 2003-07-10

Mr. Mike Ksar: Mr. Jonathan Kew submitted this proposal to Unicode Technical Committee. There was an earlier proposal with base + accent model for Arabic. A total of thirty combined characters are proposed in document N2598, rather than changing the encoding model. Page 4 of document N2598 has four characters at code positions 061E and 065A to 065C; and 26 characters at positions 0750 to 0769 – Arabic Supplement characters. These are included in the charts on pages 11 to 14 of document N2623R.

Disposition: The proposal in document N2598 is accepted for inclusion in the next amendment. Contributing editor will check the glyph for 075B.

Relevant resolution:

M44.2 (Arabic Supplement):

No: China

Yes: Canada, Ireland, Japan, Republic of Korea and the USA

With reference to document N2598R2 on additional Arabic characters, WG 2 resolves to create a new block named “Arabic Supplement” in the range 0750-077F, and populate it with 26 characters in code positions 0750-0769 with names and glyphs shown on pages 13-14 in document N2623R; some of these characters are right-to-left characters. See consolidated chart and names list on pages 14-15 in document N2676.

7.7 Combining Zigzag Above character

Input document:

N2597 Proposal to encode one combining character in the UCS; Lithuanian Standards Board (LST); 2003-06-25

Mr. Vladas Tumasonis: We need three combining accent characters for Lithuanian dialects. About 20 dialects are around. Most of the accents needed are already in the standard .. acute, tilde, grave, circumflex, vertical tilde and vertical line above are in. The missing one is for the Abrupt Tone – for which we propose COMBINING ZIGZAG ABOVE be included in the standard. See also pages 5 and 6 in document N2623R.

Discussion:

- a. Mr. Mike Ksar: Did you discover that this character was missing in the standard recently? Your proposal is very well documented.
- b. Mr. Vladas Tumasonis: There was a project on the various Lithuanian dialects – other colleagues identified the character they needed. I like to thank Mr. Michael Everson for his help.
- c. Dr. Ken Whistler: The dates on the example are – 1966 etc. These are not something created recently -- post-10646. Code point for tilde should be 033E instead of 030E.
- d. Mr. Michael Everson: Medieval scholastic society also uses this symbol – probably Lithuanian derived it from there. Those scholars are happy to learn of this proposal. We should accept this.
- e. Mr. Yasuhiro Anan: Would like to know if this character name is appropriate – Zigzag may suggest Lightning Form. Would there be a better name?
- f. Mr. Mike Ksar: The name is only suggestive of the shape. It does not conflict with other names.
- g. Ms. Lisa Moore: UTC has accepted this character at 035B.
- h. Dr. Asmus Freytag: UTC found the name acceptable.
- i. Mr. Michel Suignard: I Would like to know which of the four references would be the most suitable for 10646 – to be able to point to the font vendors.
- j. Dr. Ken Whistler: I think all four references should be given to the font vendors. For sources of characters – we don't identify sources of individual characters normally. Currently links for individual characters from 10646 Annex will not help. If additional information is needed point them to the Unicode Standard for information.

Disposition: Accept the proposal in document N2597 at code position 035B (see also pages 5 and 6 of document N2623R) for inclusion in the next amendment. See relevant resolution M44.5 item d on page 36.

7.8 Combining Double Breve Below character

Input document:

N2594 Proposal to encode combining double breve below; Rick McGowan, Peter Constable, Ken Whistler, and Unicode Technical Committee; 2003-07-01

Document N2594 is a contribution from UTC experts for a single character 'Combining Double Breve Below'. Document N2623R in pages 5 and 6 shows the name, glyph and code position 035C. It is used in IPA handbook. It is also known as Bottom Ligature. There are already six of these double wide ones in the standard. The glyph design could be two ways – one encompassing both characters, other is from middle of the two characters involved.

Disposition: Accept the character as shown in document N2693R pages 5 and 6 for inclusion in the next amendment. Also add to combining characters list. See relevant resolution M44.5 item e on page 36.

7.9 Syloti Nagri script

Input documents:

N2591 Proposal to WG2 for Encoding Syloti Nagri Script in the BMP; Peter Constable; 2003-06-12
N2592 Documentation in support of proposal for encoding Syloti Nagri in the BMP - N2591; Peter Constable - SIL; 2003-06-10

45 characters are proposed to be encoded – 44 at positions A800 to A82B. and one at code position 2055 (Flower Punctuation Mark). Page 43 and page 24 in document N2623R show the names, glyphs and code positions for the characters of this proposal.

Discussion:

- a. Mr. Michael Everson: Did the UTC consider why the Anusvara combining marks are in the middle of consonants etc? We have not done these in other Indic scripts.
- b. Dr. Ken Whistler: UTC did not question the positioning of these by the authors. Document N2592 has the information – see pages 11 and 12 on Dvisvara, and pages 13 and 14 on Anusvara. On page 11 Dvisvara is also listed with other combining marks. Collation is discussed in pages 34 to 36 and makes a case for placement of these Anusvara and Dvisvara, and also makes a case for the Dvisvara as not an ordinary dependent vowel.
- c. Dr. Asmus Freytag: It is a dependant vowel.

Disposition: Accept the proposed 45 characters with glyphs and names from document N2591 at positions A800 to A82B and at 2055 (Flower Punctuation Mark). Also take note of the combining marks. Include in the next amendment. See relevant resolution M44.3 below and resolution M44.5 item f on page 36.

M44.3 (Syloti Nagri script):

No: China

Yes: Canada, Ireland, Japan, Republic of Korea and the USA

With reference to document N2591 on Syloti Nagri script, WG 2 resolves to create a new block named "Syloti Nagri" in the range A800-A82F, and populate it with 44 characters in code positions A800-A82B with the names and glyphs given on page 51 of document N2591. Some of these characters are combining characters. See consolidated chart and names list on page 51 in document N2676.

7.10 Additional mathematical and letter like characters

Input document:

N2590 Additional Mathematical and letter like characters; The Unicode Consortium - Freytag; 2003-08-23

Dr. Asmus Freytag: These characters were part of original Math proposal – but were removed from the proposal that has been standardized. These are required for Mathematical publications and for mapping to ISO 9573-13 SGML entity sets.

- a. Combining Long Double Solidus Overlay at 0358
The glyph will be corrected to look like a doubled 0338.
20EB is the new proposed location; Name is OK; it is included on page 6 of document N2623R.
- b. PERPENDICULAR at 27C2 in Miscellaneous Math Symbols-A block

This character is requested for compatibility with ISO 9573-13 and LaTeX combination. The request is to disunify from UP TACK at 22A5 because it is an operator too. UTC considered this request and has accepted it.

- c. 213C DOUBLE-STRUCK SMALL PI
This math character is to designate the math PI constant value.
The request is to disunify this character from Greek letter Pi. See also page 27 in document N2623R
- d. 214C PER SIGN abbreviation for PER ...
See also page 27 in document N2623R.
- e. Math dotless italic i and Math dotless j
Their names are changed to ITALIC SMALL DOTLESS I at 1D6A4 and ITALIC SMALL DOTLESS J at 1D6A5.
- f. LATIN SMALL LETTER DOTLESS J at 0237
This character is to complete the collection for certain orthographies.
See also pages 3--4 in document N2623R.
Mr. Vladas Tumasonis: This character is used in Lithuanian also.

Disposition: Accept the above SEVEN characters from document N2590. Correct the names for dotless italic ‘i’ and ‘j’. Include in the next amendment. See relevant resolution M44.5 item g on page 36.

7.11 Buginese script

Input documents:

N2588 Final proposal for encoding the Buginese script in the UCS; Everson; 2003-06-09
N2633R Revised final proposal for encoding the Lontara (Buginese) script – update of N2588; Michael Everson; 2003-09-29

Mr. Michael Everson: There was a number of email messages on the name Buginese versus Lontara. The name Buginese is more in use than Lontara – so we could live with the name Buginese for the script. I am of two mind on this .. the expert on this prefers Lontara.

Additional Characters have been identified. Several of the punctuation characters in document N2633R need questioning. We will go with what has been in the previous proposal – reflected in document N2623R.

Characters proposed at 1A18 and 1A1D are to be removed. Move 1A19 to 1A1C up by one; leaving 1A1C and 1A1D unassigned. 1A1E and 1A1F will be as shown in page 21 of document N2623R.

Disposition: Accept with modifications the script from page 21 of document N2623R. Name of the block is BUGINESE. Include in the next amendment. See relevant resolution M44.1 item d on page 41.

7.12 Symbols for Genealogy & Gender studies

Input document:

N2663 Second revised proposal to encode symbols for genealogy and gender studies in the UCS – replaces N2580 and N2587; Everson; 2003-10-17

Mr. Michael Everson: Document N2663 replaces the previous documents N2580 and N2587. It incorporates some of the suggestions made on controversial characters. Characters at 26A6 and 26A7 are improved.

Discussion:

- a. Mr. Michael Everson: Battle Sign is better called CROSSED SWORDS. Suggest to remove BATTLE SIGN in favour of CROSSED SWORDS. Move up the rest.
- b. Dr. Asmus Freytag: I asked the Math community for information on whether the proposed MARRIED SYMBOL could be depicted as INFINITY and whether the circles etc. can be unified with others.

- Married symbols and infinity symbol – No. Infinity with bar is a 8 with a bar and cannot be unified with DIVORCE
 - Unmarried Partnership Symbol and Double-ended Multimap symbol -- if there were to be any change at all – its shape would have to be made even wider. They are unrelated in meaning and shape, therefore we should not unify.
 - The shapes at positions 26A5, 26A6 and 26A7 in the proposal – can be used in Math and should be identified as generic. – should not be in Miscellaneous Symbols. It would go in Geometric Shapes if there was room.
 - 26AC has been indicated as Coffin symbol.. One of the sources suggested using a wide Rectangle. That usage should be 25AD.
- I suggest we approve accommodating these comments on symbols and annotations etc.

- Male and Female - should be named HERMAPHRODITE SIGN. They have some of these in the Math collection – they can use this character. They don't have need for others.

- c. Mr. Michael Everson: The names were chosen on the basis of similar symbols from earlier. I would object to name change to Hermaphrodite.
- d. Dr. Ken Whistler: Me too.
- e. Mr. Michael Everson: I would also object to move these to some other block with unrelated characters such as Miscellaneous Symbols. The idea was to keep the circles near other gender related symbols.
- f. Dr. Ken Whistler: 26A0 and 26A1 have been taken already. 26AB goes out. The generic circles should be in the other block. Start the whole set from code position 26A2.
- g. Dr. Asmus Freytag: We have done a sort of organization of the symbols. Generic ones are put into one area even if they are separated from specific use set.

The final list of 16 proposed symbols starting at code position 26A2 ending at 26B1 is:

DOUBLED FEMALE SIGN
 DOUBLED MALE SIGN
 INTERLOCKED FEMALE AND MALE SIGN
 MALE AND FEMALE SIGN
 MALE WITH STROKE SIGN
 MALE WITH STROKE AND MALE AND FEMALE SIGN
 VERTICAL MALE WITH STROKE SIGN
 HORIZONTAL MALE WITH STROKE SIGN
 MEDIUM WHITE CIRCLE
 MEDIUM BLACK CIRCLE
 MEDIUM SMALL WHITE CIRCLE
 MARRIAGE SYMBOL
 DIVORCE SYMBOL
 UNMARRIED PARTNERSHIP SYMBOL
 COFFIN
 FUNERAL URN

Disposition: Accept 16 symbols excluding the Battle Sign, with names and glyphs as in document N2663 for inclusion in the next amendment. Comments during ballot period can bring up further discussion. See relevant resolution M44.5 item h on page 37.

7.13 Five miscellaneous symbols

Input document:

N2586R Proposal to encode five miscellaneous symbols in the UCS; Everson; 2003-09-04

Five miscellaneous symbols are proposed in document N2586R. These are included on pages 29 and 30 in document N2623R.

267E PERMANENT PAPER SIGN
 267F WHEELCHAIR SYMBOL
 269B ATOM SYMBOL
 2618 SHAMROCK
 269C FLEUR-DEL LIS

Disposition: Accept the proposed five symbols as shown on page 29 of document N2623R. Include in the next amendment. See relevant resolution M44.5 item 'l' on page 37.

7.14 Arabic Pashto Zwarakay

Input document:

N2581R2 Proposal to encode the ARABIC PASHTO ZWARAKAY in the UCS; Michael Everson and Roozbeh Pournader; 2003-04-15

Document N2581R2 proposes one character – ARABIC ZWARAKAY, a combining mark at 0659. It should be also included in Annex B1 – combining characters list. Document N2623R shows this character on pages 11-12.

Discussion:

- a. Mr. Michael Everson: It is a phonetic mark. It is not a macron. The glyph has to be a little bit longer. Its use is rare – in Pashto educational material. Evidence is presented.

Disposition: Accept as proposed. Include in the next amendment. See relevant resolution M44.5 item j on page 37.

7.15 Guarani Sign and Austral Sign - currency signs

Input document:

N2579 Proposal to encode the GUARANI SIGN and the AUSTRALSIGN in the UCS; Michael Everson; 2003-02-24

Document N2579 is an individual contribution from Mr. Michael Everson. Evidence is on the basis of text appearing on stamps. It has been accepted by UTC.

Disposition: Accept as proposed for inclusion in the next amendment. See relevant resolution M44.5 item k on page 37.

7.16 Tamil Letter SHA

Input documents:

N2617 Proposal to add TAMIL LETTER SHA; UTC – Michael Kaplan; 2003-09-14

N2618 Review of Proposal to add TAMIL LETTER SHA; UTC – Peri Bhaskararao; 2003-09-14

The contribution came from INFITT WG02.

Discussion:

- a. Dr. Umamaheswaran: We should support the inclusion of this character. Explained importance of SHA for removing the current confusion on the correct combining sequence for the conjunct Tamil SHREE and able to correctly transliterate to Tamil, for example, 'eswa' in name Umamaheswaran.

Disposition: Accept as proposed; also on page 27 in document N2623R. Include in the next amendment. See relevant resolution in M44.5 item on 'L' page 37.

7.17 Tibetan BrdaRten characters

Input documents:

N2558 Proposal on Tibetan BrdaRten Characters Encoding for 10646 - BMP; NB China; 2002-12-06

N2621 Revised Proposal on Tibetan BrdaRten Characters Encoding in 10646 BMP (N2558); China; pending

N2624 Comments on N2621 – Tibetan BrdaRten; Andrew C. West – individual contribution; 2003-09-24

N2625 Feedback on N2621 – Tibetan BrdaRten; Steve Hartwell – individual contributor; 2003-09-25

N2635 Response to N2621 on Tibetan; Robert R. Chilton, Asian Classics Input Project; 2003-09-30

N2637 Feedback on Tibetan N2621; Chris Fynn; 2003-09-30

N2638 Feedback on Tibetan N2621; Peter Constable; 2003-10-02

N2661 Clarification and Explanation on Tibetan BrdaRten Proposal; NB - China; 2003-10-20

N2668 Response to N2661 – Tibetan; UTC/L2; 2003-10-21

Ad hoc group: Ms. Lisa Moore, Chinese delegates, Messrs. Ken Whistler, Kazuhito Ohmaki, Shoichi Senda, Shih-Shyeng Tseng, Michael Everson, Michel Suignard, Chris Walker, Peter Constable (via phone), Umamaheswaran and Mike Ksar – Chair.

The ad hoc group met and deliberated on the different Tibetan BrdaRten related documents. The focus was on documents N2661 and N2668.

Dr. Umamaheswaran presented the key principles and procedures to keep in mind while the discussion took place. See foils in document N2696 posted to WG2 site after this meeting. Chinese national body experts were asked to summarize the document N2661 which was in response to the various responses on their initial proposal. China was explaining that even though the proposal is not strictly meeting the principles to be used, especially changing of encoding model, their proposal was based on implementation requirements.

Disposition: The proposal was not accepted since it will destabilize the current combining model for encoding of Tibetan in the standard. The reasons were explained to the Chinese experts. Some implementation issues were acknowledged and discussed in the ad hoc. WG2 experts were encouraged to assist the Chinese experts to resolve the implementation issues. The relevant resolution M44.20 below captures the outcome of the ad hoc and WG2 disposition. Messrs. Umamaheswaran, Ken Whistler and Zhang Zhoucai met and drafted a resolution (see resolution M44.20 below) summing up the disposition.

Relevant resolution:

M44.20 (Tibetan BrdaRten)

No: China

Yes: Canada, Ireland, Japan, Republic of Korea and the USA

With reference to the revised proposal in document N2621 on Tibetan BrdaRten from China, WG 2 resolves not to encode the suggested list of characters in the standard based on the following:

- a. All of the proposed characters can already be represented as sequences of existing encoded UCS characters, as shown explicitly in document N2624.
- b. The addition of the proposed characters would thereby lead to normalization issues.
- c. The addition of the proposed characters would also amount to a change in the overall encoding model for the Tibetan script, thereby destabilizing and introducing more complexity for existing implementations conformant to the standard.

Further.

- a. WG 2 notes that the various implementation issues for BrdaRten Tibetan raised in documents N2621 and N2661 can be addressed in a variety of ways, involving dynamic conversion interfaces to existing legacy systems and other techniques suggested in document N2668.
- b. WG 2 suggests that the list of BrdaRten Tibetan stacks enumerated in document N2621 might be appropriate for processing by WG 2 as additions to a potential future annex of named entities represented by USIs, rather than be encoded as individual characters.
- c. WG 2 notes the issues on Tibetan script encoding and its implementation in document N2661, and invites WG 2 experts to work with Chinese experts to arrive at a satisfactory solution.

7.18 IPA Extensions

Input documents:

N2626	Proposal on IPA Extensions & Combining Diacritical Marks for ISO/IEC 10646 in BMP; China National Body; 2003-09-27
N2646	Comments on N2626, Proposal on IPA Extensions & Combining Diacritical Marks for ISO/IEC 10646 in BMP; Peter Constable – expert contribution; 2003-10-09
N2673	Comments on N2626, “Proposal on IPA Extensions & Combining Diacritical Marks for ISO 10646 in BMP”; Deborah Anderson; 2003-10-22

The set of input documents was relegated to an ad hoc on IPA. A summary of the discussion was presented by Dr. Ken Whistler. The ad hoc group on IPA considered the documents N2626, N2646, N2673, N2628, N2669, and N2673. Reviewed documents N2626, N2646, and N2673 in one pass and documents N2628 and N2669 in another pass.

Taiwan Computer Association (TCA) is requested to respond to the concerns in document N2669. Document N2628 proposal is fine as it is. The publication related timeline was discussed – working backwards – Publish Amd, FDAM, FDAM Ballot 3 months, WG2 June 2004, PDAM 3 months, UTC

February 2004, UTC November 2003 and today is October 2003. If we issue the PDAM ballot in January 2004 it can close in May 2004 and the disposition of comments could be ready before the June 2004 WG2 meeting. The UTC will get a chance to issue ballot comments at its February meeting.

Documents N2628 and N2629 are related to a single combining character RIGHT DOT ABOVE. See also discussion under agenda item 7.20 on page 25.

China will provide updated document N2626 prior to the February 2004 meeting of UTC. The TCA contribution will also be updated adding more information about its relationship with respect to Pin Yin etc. Document N2628 will be updated by TCA based on document N2669 and IPA ad hoc results.

China will update document N2626 based on the comments from documents N2646, N2673, the IPA Handbook and discussion during the ad hoc meeting.

The new contributions can be made as comments into the PDAM ballot and will be dealt with in the disposition of comments on PDAM.

Disposition: China and TCA are requested to provide additional clarification in line with the IPA ad hoc discussion summarized above. The ad hoc discussion also covered agenda item 7.20 on page 25.

Relevant resolution:
(See also relevant resolution M44.12 on page 26.)

M44.11 (IPA Extensions from China):

Unanimous

With reference to document N2626 on IPA extensions, the Chinese national body is invited to submit a revised document reflecting the comments from documents N2646, N2673, the IPA handbook and the IPA ad hoc group discussion during this meeting, as part of response to the ballot on the next draft amendment to the standard.

7.19 Lam With Bar character for Marwari

Input document:

N2627 Proposal to encode Marwari LAM WITH BAR character; INCITS/L2; Unicode Technical Committee; Jonathan Kew, SIL International Member; liaison; expert contribution; 2003-09-29

Document N2627 authored by Mr. Jonathan Kew proposes a single character LAM WITH BAR for writing Marwari using the Arabic script, at location 076A; the glyph in the document does not print correctly in all printers. Use online version as the reference for the glyph. It is captured correctly on pages 13-14 in document N2623R.

Disposition: Accept the proposal. Include in the next amendment. See relevant resolution M44.5 item m on page 37.

7.20 Combining Right Dot Above character

Input document:

N2628 Proposal to add COMBINING RIGHT DOT ABOVE as required by Taiwanese Holo language Romanization to ISO/IEC 10646; TCA; 2003-09-29

Mr. Pochung Chen: This character is needed for using Latin Script in Taiwan for Holo language Romanization. There is already a COMBING DOT ABOVE. The request is for COMBINING RIGHT DOT ABOVE. In the writing it is to the right of the character. It is like any other COMBINING LATIN mark.

Discussion:

- a. Mr. Chen Zhuang: Feedback from a linguist in China is - Na Hwa is a sub dialect of Chinese – another name of Holo language. It is used in some specific areas in China. There are about 50 million people speaking these. Two additional vowels are required for Na Hwa. The Taiwanese researchers are proposing RIGHT DOT ABOVE. The mainland China researchers could not attend the meeting on the Taiwan proposal. We have a contribution in document N2626 containing our proposal.

- b. Dr. Umamaheswaran: During the feedback that was read out, a mention was made about proposal in document N2626. That document is related to different Chinese Dialects. The IPA ad hoc could discuss the character proposed from TCA in the ad hoc.
- c. Mr. Michael Everson: The TCA proposal is not quite the same character as IPA. We had proposed some years ago a set of precomposed characters – subsequently there has been more work to the current TCA proposal. The TCA proposal is sufficiently mature to accept that.
- d. Mr. Zhang Zhoucai: The characters are related .. document N2626 includes the IPA for all the Dialects of Chinese. We suggest that these be considered together. The TCA submission was received by Chinese experts too late for making any comments to the TCA experts.
- e. Mr. Michael Everson: But this character has been proposed in earlier contribution.
- f. Mr. Mike Ksar: As to the date of receiving the proposal it was within the deadline for WG 2 procedures.
- g. Mr. Shih-Shyeng Tseng: I do not agree that Holo language is the same as subject area covered by the Chinese experts. It is a different simpler system.
- h. Mr. Pochung Chen: This character is part of the Latin script – unlike the IPA symbols set.
- i. Mr. Mike Ksar: I would like this to be discussed within the IPA Ad Hoc.

Disposition: The following relevant resolution is based on the IPA ad hoc output. TCA is requested to provide more clarification addressing the Chinese experts' concerns raised in document N2669.

Relevant resolution:

M44.12 (Combining Right Dot Above):

Unanimous

With reference to document N2628 and related comment on that document, the Taiwan Computer Association is invited to provide clarification response to the concerns raised in document N2669. The proposal for COMBINING RIGHT DOT ABOVE can be submitted as part of response to ballot on the next draft amendment to the standard.

7.21 Horizontal Arrows with Tips Vertical

Input document:

N2629 Horizontal Arrows with Tips Vertical; Ted Shaneyfelt and Unicode Technical Committee; 2003-09-29

Dr. Ken Whistler: Document N2629 as submitted did not contain the glyphs. Document N2623R contains them on pages 33 and 34. Glyphs need fixing – RIGHTWARDS and LEFTWARDS are flipped in the document N2623R.

Disposition: Accept the characters at 2B0E to 2B11, with noted correction to glyphs. Include in the next amendment. See relevant resolution M44.5 item n on page 37.

7.22 Combining diacritic - Double Ring Below

Input document:

N2630 Proposal to add one combining diacritic - double-ring below; Andrew Glass, Stefan Baums, Richard Salomon – individual contribution; 2003-09-29

The character has been moved to 035A on pages 5 and 6 in document N2623R from 0350 proposed in document N2630.

Dr. Umamaheswaran: comment on the use of the term DOUBLE... being under a single versus two characters etc.

Mr. Mike Ksar: You are invited to make it a ballot comment.

Disposition: Accept the character U+035A COMBINING DOUBLE RING BELOW; add to list of combining characters. See page 5 in document N2623R.

NOTE: This item was MISSED in preparing the resolutions. Have checked the draft resolutions table .. was missing there and hence also in the final list under new M44.5 in N2654R document. It is included in the FINAL charts in document N2676 and in the PDAM text. Suggest WG2 take a retroactive resolution to reflect the acceptance of this character at its next meeting. .. Uma.

7.23 Phonetic Symbols with Middle Tilde

Input document:

N2632 Proposal to Encode Phonetic Symbols with Middle Tilde in the UCS; Peter Constable; 2003-09-30

Document N2632 proposes eleven phonetic symbols with MIDDLE TILDE in code positions 1D6C to 1D76. Charts on pages 22 and 23 in document N2623R show these.

Disposition: Accepted the 11 phonetic symbols for inclusion in the next amendment. See relevant resolution M44.5 item q on page 38.

7.24 Tai Lue script

Input documents:

N2634 Proposal to encode the Tai Lue script in the BMP; Michael Everson; 2003-09-29

N2660 Comments on N2634, Proposal to encode the Tai Lue script in the BMP of the UCS; Peter Constable; 2003-10-16

N2665 Opinions on Encoding Tai Lue; National Body – China; 2003-10-20

N2671 Comments on N2665, Opinions on Encoding Tai Lue; Peter Constable; 2003-10-21

Mr. Michael Everson: TAI LUE script has been under consideration since 1984. I met with the experts in Beijing and in Dublin. Document N2242R was brought in to Dublin improving on document N2044. Tai Lue experts, myself and Ken Whistler met and made some changes to the proposal. Document N2634 contains the proposal. Document N2665 is the Chinese response to document N2634. The Chinese comments don't reflect the agreements we had in the Dublin ad hoc. Mr. Peter Constable requests some changes in document N2660 – and I agree with the changes requested. Some of the Chinese comments are on the background information in the document. I would like if it is possible to include Tai Lue in the next amendment. This will be similar to what we did for Phags-pa – inviting comments from Chinese member body. We have captured the ad hoc discussion from Dublin at this meeting.

Discussion:

- a. Mr. Chen Zhuang: Since the Chinese experts are not here, I cannot take a position at this meeting.
- b. Mr. Mike Ksar: The process we follow has been to send the document as PDAM ballot and use the ballot process to get the comments in. There will be time for the experts to further review. The Chinese comments do not request any specific changes to the proposal in document N2634..
- c. Dr. Ken Whistler: One change would be to include the name Xishuang Banna Dai explicitly in the text of the pDAM text document. The block name will be what the rest of world recognizes it to be – TAI LUE.
- d. Mr. Mike Ksar: The proposal is to proceed with document N2634, with changes from document N2660 including consideration for input from China in document N2665.

Disposition: Accept the 80 characters from document N2634 in a new block TAI LUE 1980-19DF. Change the name of 19BC to VOWEL SIGN A; 19DE to TAI LUE SIGN LE; 19DF to TAI LUE SIGN LEW. Move 19C8 - TAI LUE VOWEL SIGN IY to after 19CC and move the whole range 19C9 to 19CC up by one. Include XISHUANG BANNA DAI name in the pDAM text. Include in the next amendment. See relevant resolution M44.1 item e on page 41.

7.25 Ancient Greek characters – Seven Parts

Input documents:

N2612-1 to N2612-7 Seven part contribution on Ancient Greek characters; Thesaurus Linguae Graecae Project; 2003-09-14

There are seven parts in this document summarizing earlier proposals. It updates earlier documents N2512, N2522, N2546, and N2547. All characters from the seven parts of document N2612 are in document N2623R -- the names have been changed based on discussion at the UTC.

Part 1 – Modern New Testament Editorial Characters

Dr. Asmus Freytag: A set of 13 characters are proposed. UTC had taken a look at these characters and have no objections. An ad hoc group discussed this and found that there is another character which is a mirror of 2E0C - we should add this.

2E0D - RAISED SMALL DIAGONAL LOWER LEFT TO UPPER RIGHT is the proposed new character.

Discussion:

- a. Dr. Umamaheswaran: Do you have any documentation on the new proposed character?
- b. Dr. Ken Whistler: Is this going to be a Left Bracket ?? It is a property issue.

Document N2675 containing the proposal for the new character along with evidence of use was prepared and submitted by Mr. Michael Everson before the end of the meeting by Mr. Michael Everson.

Disposition: Accepted the 13 characters from document N2612-1 (see relevant resolution 44.1 item f on page 41) and 1 from document N2675 (see relevant resolution 44.5 item 'o' on page 37). Include in the next amendment.

Part 2 - Standard Ancient Greek Numerical Symbols

These are proposed for the SMP. Page 46 of document N2623R shows these characters at code positions 10175—10189.

Disposition: Accepted the proposed 21 characters (see relevant resolution 44.1 item g on page 41.) Include in the next amendment.

Part 3 - 53 Greek Acrophonic Numerals

These numerals are used by transcribers of Ancient Greek transcriptions. The proposers have done careful analysis and unifications etc. The UTC has considered these as well.

Page 46 in document N2623R contains these characters at locations 101740—10175.

Names of all the characters are as shown in document N2623R.

Disposition: Accepted the proposed 53 characters (see relevant resolution M44.5 item p on page 37). Include in the next amendment.

Part 4 – Combining Asterisk Below

This character is proposed at 0359 in the BMP. Page 5 in document N2632R contains this character. No name change

Disposition: Accepted the proposed character (see relevant resolution M44.5 item r on page 38). Include in the next amendment.

Part 5 –Greek Rho with Stroke Symbol

03FC on page 7 of document N2632R. This character has been well researched; the UTC has no problem with it. An ad hoc group also discussed this.

Disposition: Accepted the proposed character (see relevant resolution M44.5 item s on page 38). Include in the next amendment.

Part 6 – Two Greek Mathematical characters

Page 42 of document N2632R show these at 27C0 and 27C1.

27C0 - THREE DIMENSIONAL ANGLE and 27C1 – WHITE TRIANGLE CONTAINING SMALL WHITE TRIANGLE.

Disposition: Accepted the proposed character (see relevant resolution M44.5 item t on page38). Include in the next amendment.

Part 7 – Three Supplemental Punctuation characters

An ad hoc group has discussed these three characters and agreed to put them in the GENERAL PUNCTUATION block with new code positions.

TWO DOT PUNCTUATION is moved to 205A.

FOUR DOT PUNCTUATION is moved to FOUR DOT MARK - 205B

DOTTED CROSS moved to 205C.

Disposition: Accepted the proposed three characters (see relevant resolution M44.5 item u on page 38). Include in the next amendment.

Members of the Thesaurus Linguae Graecae Project at the University of California, Irvine, are appreciated for the above (as well as others) well-researched proposals on Ancient Greek characters to add to the standard. See relevant resolution of appreciation M44.22 on page 50.

Action item: Request UTC / L2 – Mr. Rick McGowan to send a message of appreciation to the authors of these proposals.

7.26 Additional Greek editorial and punctuation characters

Input document:

N2642 Proposal to encode additional Greek editorial and punctuation characters; Thesaurus Linguae Graecae, (University of California, Irvine) - Maria Pantelia; 2003-10-06

Ancient Greek scribes used no separators between words. Punctuations were used to separate them. 17 characters are proposed in all – 3 combining diacritics, 11 punctuations and 3 additional Greek/Coptic characters.

Of the three proposed diacritical marks – the third one – Combining Double Breve Below - has been accepted earlier (see agenda item 7.8 on page 20) from another proposal. Its Greek usage will be annotated in the Unicode book. The three and five dot punctuations have also been accepted as part of Glagolitic script in item 7.3 on page 18.

The TRICOLON – at 205D is a new character proposed.
The combining marks block is FULL.

The Paragraph characters moved to Supplemental Punctuation at code positions 2E0E to 2E12.

Discussion:

- a. Mr. Michael Everson: Not comfortable with Coronis, Paragraphs etc. These seem to be layout related. These require more clarification. Glyph variants are also shown. Would like to know which of these are first / preferred.
- b. Dr. Ken Whistler: These have been discussed by UTC several times. There is a sense that these were valid for encoding – but not yet accepted. We are waiting for another iteration. I can understand Mr. Michael Everson's objection to the Coronis and Paragraphs etc. The explanation we got was that the Coronis is a marginal notation .. similar to the Arabic Poetry symbol. Based on that it was potentially a character. The paragraphs are similarly symbols dropped in to indicate paragraph breaks .. seems to be valid as symbols. Need more discussion on these.
- c. Dr. Asmus Freytag: We could wait for more clarifications and postpone these four characters for now.
- d. Mr. Michael Everson: I had an ad hoc with Mr. Rick McGowan who had extensive discussion with the authors – similar to my concerns. I am satisfied that these have been addressed satisfactorily and have no further objection for including these.
- e. Dr. Asmus Freytag: Dotted Obelos – is a glyph variant of others within the Greek set. Its shape is similar to Commercial Minus sign. There may be a possible unification that should be investigated.

Disposition: Accept the proposed characters – three unified with earlier proposals and others new in different blocks. Create new Combining Diacritics Supplement block; include in next amendment.

Characters to be encoded as follows (numbers refer to the character identified in the table on page 4 of document N2642).

Three characters unified with earlier proposals.

Tricolon at 205D.

4, 5, 6, 7, 10, 12, 13, 14 and 15 at 2E0E, 2E0F, 2E10, 2E11, 2E12, 2E13, 2E14, 2E15 and 2E16.
11, 16 and 17 at 03FD, 03FE and 03FF.

Create a new block 1DC0 to 1DFF splitting current Alphabetic Extension in Roadmap document – called COMBINING DIACRITICS SUPPLEMENT. Populate with characters 1 and 2 at 1DC0 and 1DC1.

Action item: Mr. Michael Everson to update the roadmap to reflect creating a new block 1DC0 to 1DFF splitting current Alphabetic Extension in Roadmap document – named COMBINING DIACRITICS SUPPLEMENT.

See relevant resolutions M44.5 item z on page 39 and M44.1 item h on page 41.

7.27 Phags-pa script

Input documents:

N2622 Proposal to encode the Phags-pa script; Andrew West; 2003-09-18
N2666 Principles on Encoding Phags-pa Script; National Body – China; 2003-10-20

Mr. Mike Ksar: Document N2622 is an individual contribution from Mr. Andrew West. This is the first time it is being submitted to WG2. 52 characters are proposed for the BMP. There is no particular preference for the BMP. Feedback from China is in document N2666.

Discussion:

- a. Dr. Asmus Freytag: The UTC has discussed this and we ended up in approving the repertoire, the four VS-s and their encoding.
- b. Mr. Chen Zhuang: We have concerns – we do have an expert group in China. We did not have time to bring our experts to this meeting.
- c. Mr. Mike Ksar: Would you have any problems if we accept it and entertain your comments as ballot comments?
- d. Mr. Chen Zhuang: We need more time to study the proposal and bring our experts' input.
- e. Dr. Asmus Freytag: This is a detailed and well-written document that UTC has accepted. The document was sent within the deadline though the Chinese experts did not have enough time to respond. We could probably process this as PDAM text and China will have opportunity to comment on the PDAM ballot. That would be the most appropriate way to deal with this. The nature of comments are like arrangements, presentations etc. The identity of the characters themselves seem to be not in question. I am comfortable going with a PDAM text – giving a dead line for comments. If we postpone for the next meeting there may not be any responses with deadlines.
- f. Dr. Ken Whistler; In response to document N2666 – point 1 is historical. There is no disagreement. Point 2 – the proposal agrees with document N2666. Point 3 – the ordering is based on Shushi Huiyo. Point 4 – it is the Kaiti form used in the proposal. You will find that the proposal does follow the principles Chinese experts have outlined in document N2666.
- g. Mr. Michael Everson; Chinese national body has a point that this is the first time in WG2. They are a user community and they would like to have chance to review it. I understand that the UTC has approved it and there is a desire to synchronize with it.
- h. Dr. Ken Whistler: The US national body has examined this document – and believes that it is good for going ahead as a PDAM. We are not opposed to postponing it if needed. I personally agree with Dr. Asmus Freytag that the two ballot rounds should be sufficient to deal with the feedbacks commenting etc. The US national body will not oppose delaying this if China has problem going ahead with the PDAM inclusion.
- i. Dr. Umamaheswaran: WG2 usually gives time for each proposal be reviewed – first time submission etc. This proposal is a well written and very complete document. The user community – one of them is China – seems to have some concerns. One thing that is not clear is how urgent is this script.
- j. Dr. Asmus Freytag: If we do put it on the ballot – Chinese experts can come up with detailed comments on the proposal, whether is good or incomplete etc. If Chinese agree that it would be better to include it in this amendment it will be better to go that route. The conclusion by Chinese expert seems to be not substantiated by the comments made.
- k. Mr. Mike Ksar: Question to China – if you are in general agreement with going ahead with the PDAM – and bring up any comments related to the repertoire, arrangement, shapes etc. at that time – it would give you a deadline for the experts to comment on. Do you agree that the proposal is in general agreement with the principles outlined by the Chinese experts in document N2666.

- l. Mr. Zhang Zhoucai: What would be the dead line?
- m. Mr. Mike Ksar: It would be the PDAM ballot period – based on what we decide at this meeting.
- n. Mr. Michel Suignard: if we agree in principle to include it in this amendment , is there a way to make it conditional?
- o. Mr. Mike Ksar: If we receive comments before the PDAM text is sent out for ballot.
- p. Dr. Asmus Freytag: One thing we could do along those lines – we put it out as is with the usual ballot deadlines. If there is further input from China before we issue the document -- I don't see any reason why we cannot have a note to the reviewers that contains the comments that may come from China.
- q. Dr. Umamaheswaran: The cleanest way would be to include the proposal as is in the next amendment – China can review and comment during the ballot period. – this assumes that China agrees with Dr. Ken Whistler's analysis of the Chinese comments vis a vis the proposal.

Chinese experts, Dr. Asmus Freytag, Mr. Michael Everson and Dr. Ken Whistler discussed the topic in an ad hoc and recommended to accept the proposal in documents N2622 and N2666 as the basis for creating pDAM text. The proposed code position was moved to A840-A87F from AB80—ABB3.

Action item: Mr. Michael Everson to update the roadmap accordingly to reflect the new allocation of Phags-Pa to A840-A87F from AB80—ABB3.

Relevant resolution:

M44.4 (Phags-Pa script):

No: China

Yes: Canada, Ireland, Japan, Republic of Korea and the USA

With reference to document N2622 on Phags-Pa script, WG 2 resolves to create a new block named “Phags-Pa” in the range A840-A87F (block start changed to A840 from AB80 proposed in document N2622), and populate it with 52 characters in code positions A840-A873 with the names and glyphs from table 1 in document N2622. Document N2666 will also be used as a basis for creating the amendment text. See consolidated chart and names list on pages 52-54 in document N2676.

7.28 Afghani currency sign

Input documents:

- N2523** Proposal to encode the AFGHANI SIGN in the UCS; Everson; 2002-11-20
- N2640** Revised proposal to encode the AFGHANI SIGN in the UCS; Michael Everson and Roozbeh Pournader; 2003-10-01

Document N2640 is an updated document – by Messrs. Michael Everson and Roozbeh Pournader. Evidence of use has been provided - completing an action item. Afghan keyboard from Afghanistan Ministry of Communications has this sign. It is in the PUA for current locale use. It has been endorsed by the government of Afghanistan.

Discussion:

- a. Dr. Ken Whistler: Endorsement by the ministry is strong enough for its acceptance.
- b. Mr. Michel Suignard: Where should it be encoded – is it a BiDi algorithm affected character?
- c. Dr. Ken Whistler: Can be in the currency sign block or along with other Arabic character like Riyal sign. Or 060B along with punctuations or symbols etc. Being an Arabic character, it is more likely to be supported along with other Arabic characters. There could be directionality issue.
- d. Mr. Michael Everson: The character has a Right To Left behaviour similar to other Arabic characters. Proposed at 060B – AFGHANI SIGN; with the Unicode property AL.
- e. Mr. Michel Suignard: Now we have bidi algorithm normatively referenced in the standard. The proposals must identify the BiDi property.

Action item: Dr. Umamaheswaran – add to the principles and procedures – one question “does it have BiDi property”.

Disposition: Accept 060B – AFGHANI SIGN for inclusion in the next amendment; with the Unicode property AL, and the glyph as shown in document N2640. See relevant resolution M44.5 item v on page 38.

7.29 HYPHEN and DOUBLE HYPHEN in Fraktur typography

Input documents:

- N2639 On the use of HYPHEN and DOUBLE HYPHEN in Fraktur typography; Everson; 2003-10-03
N2647 Further discussion of the DOUBLEOBLIQUEHYPHEN; Michael Everson; 2003-10-13
N2657 Additional information on typesetting Fraktur; Asmus Freytag; 2003-10-15

Mr. Michael Everson: Document N2647 contains the proposal. 002D in Fraktur is a glyph with two strokes. Scholars took that and used in Semitic and other corpuses etc. and used it for distinguishing it from hyphens etc. It looks like a glyph variant of Hyphen. In modern typography they have pressed into service as a character on its own right. Semiticists and Cuneiformists use these for various things. It is used along with regular hyphen sign, regular equal sign and long mathematical sign.

Discussion:

- a. Mr. Mike Ksar: there was a lot of email discussion on this topic. Have the concerns been addressed in this document?
- b. Dr. Ken Whistler: The document N2647 does address a number of comments on email discussion. The rendering model related information in this document will give the guideline for others. Document N2657 is for your information.

Disposition: Accept 2E17 - DOUBLE OBLIQUE HYPHEN with glyph B on page 1. Include in next amendment. See relevant resolution M44.5 item w on page 38.

7.30 Irish phonetic letter – Insular g

Input document:

- N2641 Proposal to encode one Irish phonetic letter; Everson; 2003-10-05

Mr. Michael Everson: The proposal in document N2641 is for one phonetic letter.

Discussion:

- a. Dr. Ken Whistler: I am concerned this may be an edge case like we have seen in other cases. You may get into the situation that the appearance of an insular g may be associated with one character in one case and another in other situation. In text layout using Gaelic font – it may look like what you have shown in the document.
- b. Dr. Asmus Freytag: We have a systematic issue – each and every time we have a case of a symbol borrowed from another set into a different set of characters with its own meaning – we have an issue – for example, Fraktur. In the metal typing world, the complete set was from a single set. In software we use the fonts with different layout rules for each. By borrowing a symbol from another set, different rules may have to apply. Symbols are not being treated – to use such with a different style sheet etc. We have not been treating symbols in the standard on such considerations – except a few cases where the software is to handle the use correctly – for example, PERIOD. For the phonetic notations, we have traditionally given separate characters in the past, though the character may be an edge case.
- c. Mr. Mike Ksar: There seems to be some concern on whether this character is a glyph of another character in a specific font or not.
- d. Dr. Ken Whistler: The ‘g’ on page 1 is the IPA g – using the ASCII g. The question is whether the shape distinction has to be maintained or not.
- e. Mr. Michael Everson: the g is not IPA g – it is ordinary g.
- f. Ms. Lisa Moore: may be an ad hoc is needed to get a consensus.
- g. Dr. Ken Whistler: (After the ad hoc met) I still have personal concern about the character. I will not object to it going ahead. I withdraw my formal objection to it – will look at it during ballot review.

Disposition: Accept 1D79 LATIN SMALL LETTER INSULAR G, with glyph as in document N2641. Include in the next amendment. See relevant resolution M44.5 item ‘x’ on page 38.

7.31 Latin Small Letter TH with Strikethrough

Input documents:

- N2645 LATIN SMALL LETTER TH WITH STRIKETHROUGH; UTC – Mark Davis; 2003-10-08
N2656 Proposal — Phonetic symbols used in dictionaries; Asmus Freytag; 2003-10-15

Dr. Asmus Freytag: The proposal from Dr. Mark Davis is in document N2645. The paper trail that was missing earlier has been completed with document N2656. Alternate glyphs are possible for this character.

Discussion:

- a. Mr. Michael Everson: This proposal opens up an item on Digraphs with Strikethroughs etc. I think it is premature to add this.
- b. Dr. Ken Whistler: The US position is to get this character in. If it needs to be postponed in WG2 and get more clarification US will not be opposed to it. Ireland can also make a comment on the PDAM ballot if we accept the character now.
- c. Mr. Michael Everson: I prefer this character to be delayed. We could always make comment to the PDAM text.

Disposition: Accept 0238 – LATIN SMALL LETTER TH WITH STRIKETHROUGH with Glyph from document N2645. Include in next amendment. See relevant resolution M44.5 item y on page 38.

Action item: Document N2656 contains the beginning of discussion on similar other characters. National bodies to review document N2656 containing discussion on characters similar to TH with strikethrough. The convener is to add to agenda item for next meeting.

7.32 Additional Cyrillic characters for Siberian Yupik

Input document:

N2560 Proposal for Encoding Additional Cyrillic Characters for Siberian Yupik; SIL International (contacts: Jim Brase, Peter Constable); 2002-12-06

Document N2560 proposes two Cyrillic Characters for Siberian Yupik use – Pages 9 and 10 in document N2623R shows the proposed characters – they have been accepted by UTC.

Disposition: Accept Small (at 04F7) and Capital (at 04F6) Letters GHE with Descenders for inclusion in the next amendment – see pages 9 and 10 of document N2623R.

NOTE: These characters were MISSED in preparing the resolutions. Have checked the draft resolutions table .. they were missing there and hence also in the final list under new M44.5 in N2654R document. It is included in the FINAL charts in document N2676 and in the PDAM text. Suggest WG2 take a retroactive resolution to reflect the acceptance of this character at its next meeting. ... Uma.

7.33 Greek Metrical Symbols

Input document:

N2546 Proposal for encoding Greek Metrical Symbols in the UCS; Thesaurus Linguae Graecae Project (University of California, Irvine);2002-11-07

Document N2546 (hardcopy was not available) contains the proposal for 9 Greek Metrical Symbols. They are reflected on page 29 of document N2623R and have been accepted by the UTC.

Discussion:

- a. Dr. Asmus Freytag: While called Greek metrical – these symbols are not limited to use in Greek alone. They are used in discussion of Poetry for various stress marks etc. They could be punctuation, technical symbol or miscellaneous symbol. These should be accepted.
- b. Dr. Ken Whistler: they are not punctuation, nor technical.
- c. Dr. Asmus Freytag: I personally suggest that these be moved to tech symbols .. 23D1-23DA. In the 2600 block they are different kinds of symbols. In the 2300 block, there are symbols similar to these new ones – even though the meanings are different.
- d. Ms. Lisa Moore: I would like to suggest that these be left alone as proposed – and ballot comments can be made to move them.
- e. Dr. Ken Whistler: US position is to leave them alone – but not disagree with WG2 if decision is to move. Personally I don't quite agree with Dr. Asmus Freytag.
- f. Mr. Michael Everson: The document requests for 9 characters, and the evidence shown in document N2546 addresses only three characters. I would like to know why some of the symbols are not doubled ones of the others. Would like to see some samples.

- g. Mr. Mike Ksar: I would suggest we accept these characters as they are. Ballot comments can be used to change their assignments etc.
- h. Dr. Ken Whistler: Please see Tokyo meeting minutes – we had the discussion and the action item was taken for feedback. The discussion we are having seems to be repeating all the points we did make at the last meeting.

An ad hoc by Messrs. Asmus Freytag, Michael Everson and Ken Whistler met and recommended to move the characters from 2692—269A to 23D1—23DA in miscellaneous technical symbols block; the glyphs and names are as in document N2632R.

Disposition: Accept the ad hoc recommendation to include these 9 symbols in the next amendment at code positions 23D1 to 23DA. See relevant resolution M44.5 item ‘aa’ on page 39.

7.34 Devanagari Glottal Stop

Input document:

N2543 Proposal to add Devanagari Glottal Stop; Peter Constable, Steve Smith;2002-11-01

This character is used for writing Limbu in Devanagari script. At the last meeting we wanted feedback from Indic experts. At the March UTC meeting with the Indian representative present this character was accepted.

The Glyph has no top bar as presented on page 15 in document N2623R. The one with the Bar is a glyph variant.

Disposition: Accept 097D DEVANAGARI GLOTTAL STOP for inclusion in the next amendment with the glyph with no top bar. See relevant resolution M44.5 item ‘bb’ on page 39.

7.35 Dictionary Symbols

Input document:

N2655 Proposal — Symbols used in Dictionaries; Asmus Freytag; 2003-10-15

Dr. Asmus Freytag: In response to a number of proposals that existed –I took a look at some of the sources of symbols in running text in dictionaries. For the most part, there are a couple that can be considered as punctuations. Page 9 in document N2655 has a list of these symbols.

CROSSED SWORDS is also in Genealogy proposal. We should encode it only once. Just want to point out that the request comes from more than one direction.

ROD OF AESCLEPIUS – is confused with CADUCEUS at 2624. These are two different Greek symbols .. CADUCEUS is connected with Medicine and AESCLEPIUS is Medical. The confusion exists – the thing with one or two snake symbols could be a unification. I think these should be separated.

Vertical Four Dots – we discussed a number of punctuations in an ad hoc. This one is considered to be OK from usage in dictionaries.

There are three sets –

First set –A set of symbols used to represent SUBJECT MATTER of the Term – for example, military versus commercial etc. See page 5 for example.

The symbols are arranged in the list in approximately in their canonical order. ANCHOR for Nautical, Hammer and Chisel in Mining, Scales for Legal etc. Further down .. Swimming for sports is less settled.

There are two that are widely understood – could not locate particular use of – not included in the proposal.

Page 10 – has the second set – a set of punctuation-like symbols VERTICAL FOUR DOTS, WX mark, BOGEN, LOW TILDE, LOW TILDE with a CIRCLE. The last should not be composed. Usages are mentioned in table for these.

The third set – a set of square symbols. These are similar to decomposition of Ideographs. We have some related symbols already in the standard. The missing ones are proposed to complete the set.

The three or four characters mentioned up front should be included .. others can wait if WG2 feels that they need more discussion.

Discussion:

- a. Dr. Ken Whistler: I am not ready to accept these yet .. I appreciate the work done from Dr. Asmus Freytag. Most of these characters need further discussion. VERTICAL FOUR DOTS can go in right now .. and first few that Dr. Asmus Freytag mentioned. I would like to see more discussion on others as we go down the list below the STAFF OF HERMES. Why LOKOMOTIVE is spelled in German .. the symbols is using a Sterling Locomotive .. and not a more modern one?
- b. Dr. Asmus Freytag: I would be perfectly happy to accept what we can and submit others for further discussion.
- c. Mr. Michael Everson: ALEMBIC – is that the term. I concur up to STAFF OF HERMES. Vertical Four Dots. I don't object to the square symbols –names can be improved. I can take the action item to create decent fonts for the PDAM. The submission contains scans.
- d. Dr. Ken Whistler: Four Vertical Dots surely since we have accepted others. TOP and BOTTOM complete a current set. Other four I would like to see more citations .. argument that these are used as characters needs more evidence.
- e. Dr. Asmus Freytag: I will be happy with the sub setting .. 1 to 9 symbols, the vertical four dots and first two of the square symbols -- seem to have consensus.

Disposition: Accept the following characters for inclusion in the current amendment and request national body feedback on the remainder.

At code positions 2692 to 269A in Miscellaneous Symbols block, encode:
HAMMER AND CHISEL, ANCHOR, CROSSED SWORDS, ROD OF AESCLEPIUS, SCALES,
ALEMBIC, FLOWER, GEAR, and STAFF OF HERMES

VERTICAL FOUR DOTS at 205E, SQUARE WITH TOP HALF BLOCK at 2B12 and SQUARE WITH BOTTOM HALF BLOCK at 2B13.

See relevant resolution M44.5 item 'cc' on page 39.

Action item: National bodies are to review and feedback on document N2655 for symbols that have not been accepted at this meeting.

Relevant resolution:

M44.5 (Additions of individual characters):

Unanimous

WG 2 resolves to add the following characters in different blocks:

- a. With reference to pages 8-9 in document N2610R on Glagolitic script, 3 characters with modified names in the "General punctuation" block:
2056 THREE DOT PUNCTUATION
2058 FOUR DOT PUNCTUATION
2059 FIVE DOT PUNCTUATION
with their glyphs from document N2610R. See consolidated chart and names list on pages 29-30 in document N2676.
- b. With reference to document N2608R2 on Georgian script, 3 characters in the "Georgian" block:
10F9 GEORGIAN LETTER TURNED GAN
10FA GEORGIAN LETTER AIN
10FC MODIFIER LETTER GEORGIAN NAR
with their glyphs from page 19 in document N2623R. See consolidated chart and names list on pages 21-22 in document N2676.

- c. With reference to pages 4-5 of document N2598 on additional Arabic-script characters, 4 characters in the “Arabic” block:
 061E ARABIC TRIPLE DOT PUNCTUATION
 065A ARABIC VOWEL SIGN SMALL V ABOVE
 065B ARABIC VOWEL SIGN INVERTED SMALL V ABOVE
 065C ARABIC VOWEL SIGN DOT BELOW
 with their glyphs from page 11 in document N2623R. Some of these characters are combining characters. They are right-to-left characters. See consolidated chart and names list on pages 12-13 in document N2676.
- d. With reference to document N2597 on combining Zigzag above, 1 character in the “Combining Diacritical Marks” block:
 035B COMBINING ZIGZAG ABOVE
 with its glyph from page 5 in document N2623R. This character is a combining character. See consolidated chart and names list on pages 6-7 in document N2676.
- e. With reference to document N2594 on combining double breve below (also in document N2642), 1 character in the “Combining Diacritical Marks” block:
 035C COMBINING DOUBLE BREVE BELOW
 with its glyph from page 5 in document N2623R. This character is a combining character. See consolidated chart and names list on pages 6-7 in document N2676.
- f. With reference to Flower Punctuation Mark on page 5 in document N2591 on Syloti Nagri script, 1 character in the “General Punctuation” block:
 2055 FLOWER PUNCTUATION MARK
 with its glyph from page 5 in document N2591. See consolidated chart and names list on pages 29-30 in document N2676.
- g. With reference to document N2590 on additional mathematical and letter-like characters:
- 1 character, moved from 0358 in the proposal to 20EB, in the “Combining Diacritical Marks for Symbols” block:
 20EB COMBINING LONG DOUBLE SOLIDUS OVERLAY
 with its glyph from page 2 in document N2590. See consolidated chart and names list on Page 32 in document N2676.
 - 1 character in the “Miscellaneous Mathematical Symbols-A” block:
 27C2 PERPENDICULAR
 with its glyph from page 2 in document N2590. See consolidated chart and names list on pages 39-40 in document N2676.
 - 2 characters in the “Letter-Like Symbols” block:
 213C DOBLE STRUCK PI; 214C PER SIGN
 with their glyphs from pages 2-3 in document N2590. See consolidated chart and names list on pages 33-34 in document N2676.
 - 1 character in the “Latin Extended-B” block:
 0237 LATIN SMALL LETTER DOTLESS J
 with its glyph from page 2 in document N2590. See consolidated chart and names list on pages 4-5 in document N2676.
 - 2 characters with modified names in the “Mathematical Alphanumeric Symbols” block:
 1D6A4 MATHEMATICAL ITALIC SMALL DOTLESS I
 1D6A5 MATHEMATICAL ITALIC SMALL DOTLESS J
 with their glyphs from pages 2-3 in document N2590. See consolidated chart and names list on pages 66-67 in document N2676.

- h. With reference to document N2663 on symbols for genealogy and gender studies, 16 characters excluding the Battle Sign and with changed code positions in the “Miscellaneous Symbols” block:
 26A2 DOUBLED FEMALE SIGN 26A3 DOUBLED MALE SIGN
 26A4 INTERLOCKED FEMALE AND MALE SIGN
 26A5 MALE AND FEMALE SIGN 26A6 MALE WITH STROKE SIGN
 26A7 MALE WITH STROKE AND MALE AND FEMALE SIGN
 26A8 VERTICAL MALE WITH STROKE SIGN
 26A9 HORIZONTAL MALE WITH STROKE SIGN
 26AA MEDIUM WHITE CIRCLE 26AB MEDIUM BLACK CIRCLE
 26AC MEDIUM SMALL WHITE CIRCLE 26AD MARRIAGE SYMBOL
 26AE DIVORCE SYMBOL 26AF UNMARRIED PARTNERSHIP SYMBOL
 26B0 COFFIN 26B1 FUNERAL URN
 with their glyphs from page 2 in document N2663. See consolidated chart and names list on pages 37-38 in document N2676.
- i. With reference to document N2586R on five miscellaneous symbols, 5 characters in the “Miscellaneous Symbols” block:
 2618 SHAMROCK 267E PERMANENT PAPER SIGN 267F WHEELCHAIR SYMBOL
 269B ATOM SYMBOL 269C FLEUR-DE-LIS
 with their glyphs from pages 29-30 in document N2623R. See consolidated chart and names list on pages 37-38 in document N2676.
- j. With reference to document N2581R2 on Arabic Zwarakay character, 1 character in the “Arabic” block:
 0659 ARABIC ZWARAKAY
 with its glyph from page 2 in document N2581R2. This character is a combining character. See consolidated chart and names list on pages 12-13 in document N2676.
- k. With reference to document N2579 on Guarani and Austral signs, 2 characters in the “Currency Symbols” block:
 20B2 GUARANI SIGN; 20B3 AUSTRAL SIGN
 with their glyphs from page 1 of document N2579. See consolidated chart and names list on page 31 in document N2676.
- l. With reference to document N2617 on Tamil Letter Sha, 1 character in the “Tamil” block:
 0BB6 TAMIL LETTER SHA
 with its glyph from page 17 in document N2623R. See consolidated chart and names list on pages 18-19 in document N2676.
- m. With reference to document N2627 on Marwari character Lam with Bar, 1 character in the “Arabic Supplement” block:
 076A ARABIC LETTER LAM WITH BAR
 with its glyph from page 3 in document N2627. This character is a right-to-left character. See consolidated chart and names list on pages 14-15 in document N2676.
- n. With reference to document N2629 on horizontal arrows with vertical tips, 4 characters in the “Miscellaneous Symbols and Arrows” block:
 2B0E RIGHTWARDS ARROW WITH TIP DOWNWARDS
 2B0F RIGHTWARDS ARROW WITH TIP UPWARDS
 2B10 LEFTWARDS ARROW WITH TIP DOWNWARDS
 2B11 LEFTWARDS ARROW WITH TIP UPWARDS
 with their glyphs in page 34 of document N2623R corrected by swapping the shapes for Leftwards and Rightwards characters. See consolidated chart and names list on pages 41-42 in document N2676.
- o. With reference to discussion on New Testament editorial characters in document N2612-1 (see document N2675), 1 character in the Supplemental Punctuation” block:
 2E0D RAISED SMALL DIAGONAL LOWER LEFT TO UPPER RIGHT
 with a glyph that is a mirrored version of the glyph of 2E0C from document N2512-1. See consolidated chart and names list on pages 49-50 in document N2676.
- p. With reference to document N2612-3 on ancient Greek numbers, 53 characters in the new “Ancient Greek Numbers” block in the range “10140-1018F”, at code positions 10140 to 10174 with their names and glyphs as shown on pages 46-47 in document N2623R. See consolidated chart and names list on pages 55-56 in document N2676.

- q. With reference to document N2632 on phonetic characters with middle tilde, 11 characters in the “Phonetic Extensions” block:
 1D6C LATIN SMALL LETTER B WITH MIDDLE TILDE
 1D6D LATIN SMALL LETTER D WITH MIDDLE TILDE
 1D6E LATIN SMALL LETTER F WITH MIDDLE TILDE
 1D6F LATIN SMALL LETTER M WITH MIDDLE TILDE
 1D70 LATIN SMALL LETTER N WITH MIDDLE TILDE
 1D71 LATIN SMALL LETTER P WITH MIDDLE TILDE
 1D72 LATIN SMALL LETTER R WITH MIDDLE TILDE
 1D73 LATIN SMALL LETTER R WITH FISHHOOK AND MIDDLE TILDE
 1D74 LATIN SMALL LETTER S WITH MIDDLE TILDE
 1D75 LATIN SMALL LETTER T WITH MIDDLE TILDE
 1D76 LATIN SMALL LETTER Z WITH MIDDLE TILDE
 with their glyphs from page 22 in document. Document N2665 will also be used as a basis for creating the Amendment text. See consolidated chart and names list on pages 25-26 in document N2676.
- r. With reference to document N2612-4 on combining asterisk below, 1 character in the “Combining Diacritical Marks” block:
 0359 COMBINING ASTERISK BELOW
 with its glyph from page 5 in document N2623R. See consolidated chart and names list on pages 6-7 in document N2676.
- s. With reference to document N2612-5 on Greek rho with stroke symbol, 1 character in the “Greek and Coptic” block:
 03FC GREEK RHO WITH STROKE SYMBOL
 with its glyph from page 7 in document N2623R. See consolidated chart and names list on pages 8-9 in document N2676.
- t. With reference to document N2612-6 on two ancient Greek mathematical characters, 2 characters in the “Miscellaneous Mathematical Symbols-A” block:
 27C0 THREE DIMENSIONAL ANGLE
 27C1 WHITE TRIANGLE CONTAINING SMALL WHITE TRIANGLE
 with their glyphs from page 31 in document N2623R. See consolidated chart and names list on pages 39-40 in document N2676.
- u. With reference to document N2612-7 on three additional punctuation characters, 3 characters with new names and code positions in the “General Punctuation” block:
 205A TWO DOT PUNCTUATION
 205B FOUR DOT MARK
 205C DOTTED CROSS
 with their glyphs from the last page of document N2612-7. See consolidated chart and names list on pages 29-30 in document N2676.
- v. With reference to document N2640 on Afghani sign, 1 characters in the “Arabic” block:
 060B AFGHANI SIGN
 with its glyph from page 1 of document N2640. This character is a right-to-left character. See consolidated chart and names list on pages 12-13 in document N2676.
- w. With reference to document N2647 on double oblique hyphen, unified with Coptic Double Hyphen from document N2636, 1 character in the “Supplemental Punctuation” block:
 2E17 DOUBLE OBLIQUE HYPHEN
 with its glyph from document Glyph B on page 1 in document N2647. See consolidated chart and names list on pages 49-50 in document N2676.
- x. With reference to document N2641 on one Irish phonetic letter, 1 character in the “Phonetic Extensions” block:
 1D79 LATIN SMALL LETTER INSULAR G
 with its glyph from page 1 in document N2641. See consolidated chart and names list on pages 27-28 in document N2676.
- y. With reference to document N2645 on ‘th’ with strikethrough, 1 character in the “Latin Extended-B” block:
 0238 LATIN SMALL LETTER TH WITH STRIKETHROUGH
 with its glyph from document N2645. See consolidated chart and names list on pages 4-5 in document N2676.

- z. With reference to document N2642 on additional Greek editorial and punctuation characters:
- 4 characters in the “Supplemental Punctuation” block:
 2E0E EDITORIAL CORONIS 2E0F PARAGRAPHOS
 2E10 FORKED PARAGRAPHOS 2E11 REVERSED FORKED PARAGRAPHOS
 with their glyphs from document N2642. See consolidated chart and names list on pages 49-50 in document N2676.
 - 1 character in the “General Punctuation” block:
 205D TRICOLON
 with its glyph from document N2642. See consolidated chart and names list on pages 29-30 in document N2676.
 - 5 characters in the “Supplemental Punctuation” block, in code positions moved down by one:
 2E12 HYPODIASTOLE 2E13 DOTTED OBELOS
 2E14 DOWNWARDS ANCORA 2E15-UPWARDS ANCORA
 2E16 DOTTED RIGHT-POINTING ANGLE
 with their glyphs from document N2642. See consolidated chart and names list on pages 49-50 in document N2676.
 - 3 characters in the “Greek and Coptic” block:
 03FD REVERSED GREEK CAPITAL LUNATE SIGMA SYMBOL
 03FE-DOTTED GREEK CAPITAL LUNATE SIGMA SYMBOL
 03FF-REVERSED DOTTED GREEK CAPITAL LUNATE SIGMA SYMBOL
 with their glyphs from document N2642. See consolidated chart and names list on pages 8-9 in document N2676.
- aa. With reference to document N2546 on Greek metrical symbols, 9 characters, moved from 2692-269A in document N2632R to 23D1-23D9, in the “Miscellaneous Technical” block:
 23D1 METRICAL BREVE 23D2 METRICAL LONG OVER SHORT
 23D3 METRICAL SHORT OVER LONG 23D4 METRICAL LONG OVER TWO SHORTS
 23D5 METRICAL TWO SHORTS OVER LONG 23D6 METRICAL TWO SHORTS JOINED
 23D7 METRICAL TRISEME 23D8 METRICAL TETRASEME
 23D9 METRICAL PENTASEME
 with the glyphs for 2692—269A on page 29 in N2632R page 29. See consolidated chart and names list on pages 35-36 in document N2676.
- bb. With reference to document N2543 on Devanagari Glottal Stop, 1 character in the “Devanagari” block:
 097D DEVANAGARI GLOTTAL STOP
 with the glyph without the top bar from page 15. See consolidated chart and names list on pages 17-18 in document N2676.
- cc. With reference to document N2655 on symbols used in dictionaries
- 9 characters with new code positions in the “Miscellaneous Symbols” block:
 2692 HAMMER AND CHISEL 2693-ANCHOR
 2694 CROSSED SWORDS 2695-ROD OF AESCLEPIUS
 2696 SCALES 2697 ALEMBIC
 2698 FLOWER 2699 GEAR
 269A STAFF OF HERMES
 with their glyphs in the table on page 9 of document N2655. See consolidated chart and names list on pages 37-38 in document N2676.
 - 1 character with a new code position in the “General Punctuation” block:
 205E VERTICAL FOUR DOTS
 with its glyph from table on page 10 of document N2655. See consolidated chart and names list on pages 29-30 in document N2676.
 - 2 characters in the “Miscellaneous Symbols and Arrows” block:
 2B12 SQUARE WITH TOP HALF BLACK
 2B13 SQUARE WITH BOTTOM HALF BLACK
 with their glyphs from page 10 of document N2655. See consolidated chart and names list on pages 41-42 in document N2676.

8 SMP

8.1 Principles for encoding of Sumero-Akkadian Cuneiform

Input document:

N2585 Basic principles for the encoding of Sumero-Akkadian Cuneiform; Micahel Everson and Karljürgen Feuerherm; 2003-05-25

No discussion.

Action item: National bodies to review and feedback.

8.2 Old Persian script

Input document:

N2583R; Final proposal to encode the Old Persian script in the UCS; Everson; 2003-09-18

Dr. Asmus Freytag: Old Persian was presented at the last meeting in Tokyo. The Character Properties were corrected. UTC has considered this to be mature and is ready to proceed. See pages 49-50 in document N2623R.

Dr. Ken Whistler: The US national body agrees with this proposal. If Iran representative was here they would be behind this proposal as well.

Disposition: Accept the repertoire, code positions and glyphs as in document N2583R. Include in the next amendment. Names are given on page 6, at code positions 103A0 to 103D5 in a new block named OLD PERSIAN from 103A0 to 103DF. See relevant resolution M44.1 item 'i' on page 41.

8.3 Kharoshthi script

Input document:

N2524 Proposal to Encode Kharoshthi in Plane 1 of ISO/IEC 10646; Andrew Glass, Stefan Baums, Richard Salomon – via Unicode; 2002-11-20

This proposal was discussed at the Tokyo meeting. It has been reviewed by the UTC and the charts on pages 51 and 52 in document N2623R reflect what has been accepted in the UTC. The names on page 52 are missing Hs in 'Kharoshthi' for the last two characters in the name.

Discussion:

- a. Mr. Michael Everson: In Japan – we discussed there were 31 empty slots – Did the UTC address this specific issue? Is there a justification for this arrangement?
- b. Dr. Ken Whistler: This is an archaic script – there is possibility of more characters being discovered. Does this follow the ISCII model – no. There are places left after the numbers just in case.
- c. Mr. Michael Everson: I will take up any further concerns during the ballot stage.

Disposition: Accept the proposal for encoding in the next amendment. There are 65 characters in the chart on p 51 with names on p 52 of document N2623R. A new block KHAROSHTHI 10A00 – 10A59 is to be created. KV is an alternate format character. A list of combining characters is provided in document N2524. The BiDi and other properties are also listed in the document. See relevant resolution M44.1 item j on page 41.

8.4 Ancient Greek Musical Symbols

Input document:

N2547 Proposal to encode Ancient Greek Musical Symbols in the UCS; Thesaurus Linguae Graecae Project (University of California, Irvine); 2002-11-07

Seventy characters are proposed. 29 Vocal notation symbols, 37 Instrumental, three combining marks and one other musical notation symbol are proposed – shown on pages 7 to 9 in document N2547.

Proposed code positions are 1D200 to 1D24F in a new block Archaic Greek Musical Notation ending at 1D24F.

Dr. Ken Whistler: UTC has reviewed and accepted this proposal with the block name changed - replacing Archaic with Ancient – to ANCIENT GREEK MUSICAL NOTATION from 1D200 to 1D24F. The term 'Ancient' is used in several documents like document N2612. The names are based on numbers used by scholars.

Disposition: Accept the proposed 70 characters at code positions 1D200-1D245 in a new block ANCIENT GREEK MUSICAL NOTATION from 1D200 to 1D24F. There are three combining characters at 1D242 to 1D244. See relevant resolution M44.1 item k on page 38.

Relevant resolution:

M44.1 (New Blocks – Scripts and Script Extensions):

Unanimous

WG2 resolves to add the following new blocks and new scripts or extensions to existing scripts as detailed below:

- a. With reference to document N2636 on Coptic script, a new block named “Coptic” in the range 2C80-2CCF, with 59 characters in code positions ending at 2CB0, with their names and glyphs from pages 38-39 in document N2623R, including 2CBC COPTIC SYMBOL KHI RO and its glyph from document N2636, and an empty column CC for future additions. See consolidated chart and names list on pages 46-47 in document N2676.
- b. With reference to document N2610R on Glagolitic script, a new block named “Glagolitic” in the range 2C00-2C5F, with 94 characters in code positions ending at 2C5E with their names and glyphs from pages 35-37 in document N2623R. See consolidated chart and names list on pages 43-45 in document N2676.
- c. With reference to document N2608R2 on additional Georgian characters, a new block named “Georgian Supplement” in the range 2D00-2D2F, with 38 characters in code positions 2D00-2D25 with their names and glyphs from page 40 in document N2623R. See consolidated chart and names list on page 48 in document N2676.
- d. With reference to document N2633R on Lontara (Buginese) script, a new block named “Buginese” in the range 1A00-1A1F, with 30 characters in code positions ending at 1A1F, with their names and glyphs from page 21 in document N2623R with the following changes - delete 1A18 - Sign YI and 1A1D - Virama; Move up 1A19-1A1C; leaving 1A1C and 1A1D unused. See consolidated chart and names list on page 24 in document N2676.
- e. With reference to document N2634 on Tai Lue script, a new block named “Tai Lue” in the range 1980-19DF, with 80 characters in code positions ending at 19DF with their names and glyphs from pages 8-9 in document N2634 page 8 with the following changes - move Sign IY to after Sign UEY; move up the rearranged set from Sign UY to Sign IY by one position; change in names of 19DE – ‘AND’ to ‘LE’; 19DF – ‘RESULTATIVE’ to ‘LEW’. Some of these characters are combining characters. The project editor is to ensure explicit mention the Chinese name XISHUANG BANNA DAI for the script in the amendment text. See consolidated chart and names list on pages 22-23 in document N2676.
- f. With reference to document N2612-1 on New Testament editorial characters, a new block named “Supplemental Punctuation” in the range 2E00-2E7F, with 13 characters in code positions 2E00-2E0C with their names and glyphs from pages 5-6 in document N2612-1. See consolidated chart and names list on pages 49-50 in document N2676.
- g. With reference to document N2612-2 on Greek numerical characters, a new block named “Ancient Greek Numbers” in the range 10140-1018F, with 21 characters in code positions 10175-10189 with their names and glyphs from pages 45-46 in document N2623R. See consolidated chart and names list on pages 55-57 in document N2676.
- h. With reference to document N2642 on additional Greek editorial and punctuation characters, a new block named “Combining Diacritical Marks Supplement” in the range 1DC0-1DFF, with the 2 characters 1DC0 COMBINING DOTTED GRAVE ACCENT and 1DC1 COMBINING DOTTED ACUTE ACCENT, with their glyphs from document N2642. See consolidated chart and names list on pages 27-28 in document N2676.
- i. With reference to document N2583R on Old Persian script, a new block named “Old Persian” in the range 103A0-103DF, with 50 characters in code positions ending at 103D5 with their names and glyphs from pages 5-6 in document. See consolidated chart and names list on pages 58-59 in document N2676.
- j. With reference to document N2524 on Kharoshthi script, a new block named “Kharoshthi” in the range 10A00-10A5F, with 65 characters in code positions ending at 10A58 with their names and glyphs on pages 51-52 in document N2623R, with corrected spellings for names of 10A57. Some characters in this set are combining characters. 103AF, the VIRAMA character is an Alternate Format Character. See consolidated chart and names list on pages 60-61 in document N2676.

- k. With reference to document N2547 on ancient Greek musical symbols, a new block named “Ancient Greek Musical Notation” in the range 1D200-1D24F, with characters in code positions 1D200-1D245 with their names and glyphs from pages 53-54 in N2623R. Some characters in this set are combining characters. See consolidated chart and names list on pages 62-63 in document N2676.

9 Architecture issues

9.1 Character names for USI mapped characters

Input document:

N2589 Character names for USI mapped characters; Sato; 2003-04-01

This document is a contribution from Mr. Takayuki Sato. The standard has USIs – but no naming capability for each USI. There have been requirements for this from Lithuania and others in the past. The discussion we had on Tibetan also points to possible use of such named sequences. We should have done this long time ago.

Discussion:

- a. Dr. Ken Whistler: In response to this and similar suggestions at the UTC, I have drafted a starting list of sequences – includes the JIS sequences mentioned in document N2589 and a large number of other characters are represented only using sequences. Several are mentioned in the Unicode standard description of scripts. My suggestion regarding the naming is:
Use an entity name following the syntax of Annex L for character names. Such a list of Character Entity Names associated with USIs can be an annex of the standard itself. This will also assist future requesters in not making requests for additional characters that could already be represented by USI.
- b. Mr. Michael Everson: If the names follow the rules, they will be unique etc. We should insist to prevent confusion with Character names we should perhaps use only lowercase letters instead of all capital letters in the names.
For example: Latin small letter o with dot below <006E, 0323>
- c. Mr. Yasuhiro Anan: I want to clarify that the problem presented by Mr. Takayuki Sato is that the ISO/IEC 2375 registration procedure exists .. and that the requester should provide the character names and the code chart. In the process of registering JSI X0213 .. some of the characters had to be mapped to USIs. We did not have any way to give a name to these characters in X0213. Giving a name, we want it to be consistent with UCS - provide a local name for the USI. Document N2589 proposes different possible ways.
- d. Mr. Mike Ksar: You seem to be suggesting – to add the local name in addition to standardized name within square brackets.
- e. Dr. Ken Whistler: Another suggestion from Mr. Takayuki Sato was to prefix each entity name with USI to avoid confusion with other names.
- f. Dr. Umamaheswaran: The naming convention should follow the current guidelines of Uppercase only. Keep the USI- as the prefix. Case differentiation can cause problems in searching it.
- g. Dr. Ken Whistler: The essential information for USI will be the glyph, entity name and USIs.
- h. Dr. Umamaheswaran: The entity names will be translatable in different language versions of the standard. USIs will be the unique identifiers.
- i. Mr. Yasuhiro Anan: The use of ISO/IEC 2375 procedures – what format to use etc. – was that all names must be in ASCII. Use of UCS names was needed. I think it is necessary to provide the principle that it has to be unique not only in a local set but also across all other standards. Registrations in ISO Registry can contain an entry for the USI-name where the non-UCS code point maps to a sequence of UCS code points.
- j. Dr. Asmus Freytag: The USI prefix will make these names unique; the USI names will be unique within the USI names list. The names cannot duplicate an existing character name. Would like to be able to annotate these USI entity names.
- k. Dr. Ken Whistler: the Square Bracket method is only for use in non-UCS standards – where the local names can be identified to reference the USI. The list I have is a starting list ..I have sent it to Dr. Umamaheswaran for a look at it.
- l. Mr. Yasuhiro Anan: We have to address the question of who gets to contribute to the list, how the requests can be done etc.

- m. Mr. Mike Ksar: Should this be Normative?
- n. Dr. Ken Whistler, Dr. Asmus Freytag: Yes – If this is referencable it should be normative. Once we have a draft with the rules, the initial content etc. we can address the process issues.

Disposition: Accept the request to assign names for USIs in the standard from document N2589.

Action item: The US national body is invited to prepare a contribution

Relevant resolution:

M44.16 (Names for USIs):

Unanimous

With reference to document N2589, WG2 accepts the request for providing standardized names for entities represented as USIs, and invites the US national body to provide a more detailed proposal based on discussions at meeting M44 for consideration at the next WG 2 meeting.

9.2 Updated Principles and Procedures

Input document:

- N2576R Annex for Principles and Procedures 2352R – CJK disunification; Uma, Kobayashi & Sato; 2003-09-02
- N2577 Annex for Principles and Procedures 2352R – mapping tables; Uma, Kobayashi & Sato; 2003-09-02
- N2652R Updated Principles & Procedures, link page and .doc and .pdf formats; Uma; 2003-11-25

Dr. Umamaheswaran presented the changes made to the Principles and procedures document in document N2652. It has incorporated the Annexes on CJK from documents N2576R and N2577 – documents that have been previously accepted based on completion of action items from earlier meetings.

Discussion:

- a. Mr. Michael Everson: I question the use of the categories in section 2.2. I ignore these categories when I fill out one of these forms. You can put that in a check list or box to be checked in the form.
- b. Dr. Asmus Freytag: we may have to update the categorization etc.
- c. Dr. Ken Whistler: Annex K should be simplified or reduced to minimum.
- d. Dr. Asmus Freytag: Character categories letters could be dropped.
- e. Dr. Umamaheswaran: I have a list editorial fixes to do and add some missing pieces.

Disposition: Accept the document with changes agreed upon during the meeting; post the updated document as the replacement for current principles and procedures. Document N2652R is the resulting document.

Relevant resolution:

M44.19 (Principles and Procedures):

Unanimous

WG 2 accepts the revisions to the principles and procedures in document N2652, amended by the discussion at the meeting (to be consolidated as document N2652R), as replacement to document N2352R.

WG 2 further requests SC2 to adopt the revised Principles and Procedures document N2652R and the associated updated Proposal Summary Form and roadmap documents available on the WG 2 web site dkuug.dk/JTC1/SC2/WG2, and to invite national bodies and liaison organizations to use these latest documents.

9.3 Updated snapshot of roadmap

Input document:

- N2662R Roadmap Snapshot, pdf, html and link page; Uma; 2003-11-24

The only difference between what is on the Unicode site and document N2662 is the status of some of the scripts – Under Consideration – instead of Approved (by the UTC) for some of the scripts – these were not accepted by WG2 prior to this meeting when the snapshot was taken.

Relevant resolution:

RESOLUTION M44.18 (Roadmap Snapshot):

No: China

Yes: Canada, Ireland, Japan, Republic of Korea and the USA

WG2 accepts the snapshot of the latest roadmaps in document N2662R, updated reflecting the results of meeting M44, and requests SC2 to circulate it to national bodies and liaison organizations for referencing as a guide for future submissions replacing the previous snapshot document N2559.

9.4 Basic International CJK Subset

Input document:

N2649 UTC Consensus on a Basic International CJK Subset; UTC – Lisa Moore; 2003-10-15

WG2 requests the IRG to take as input for their work. See relevant resolution M44.17 item b on page 45.

10 Publication issues

10.1 Provisional Draft of Unicode 4.1 Character Additions

Input document:

N2623R Updated N2623 – provisional draft of Unicode 4.1; Asmus Freytag, Unicode liaison and contributing editor; 2003-09-28

The above document contains a list of all the scripts and characters along with the code charts and names lists that have been reviewed and accepted for inclusion in the next Unicode version by the UTC. It was used during discussion on different scripts and proposals in agenda items 7 and 8. No additional issues were identified. Corrections and changes have been identified / accepted in 7 and 8 discussions. The changes and corrections will be taken back to the UTC by the liaison representative.

Action item: Dr. Asmus Freytag, the Unicode liaison representative to communicate to the UTC the changes made to the set of accepted characters and scripts in document N2623R. The final revised set of charts is in document N2676.

11 IRG

11.1 IRG Rapporteur's Report

Input document:

N2670 IRG Rapporteur's Report to WG2 #44 in Mountain View, 2003-10-20-23; Zhang – IRG Rapporteur; 2003-10-21

Mr. Zhang Zhoucai: IRG meeting 21 was postponed due to SARS. The meeting will be November 17-21, 2003 in Guilin, China.

The members did not have a chance to meet each other – only via Internet. Rapporteur, the project editor and IRG Editor – worked on the charts for the final edition. There are some bugs introduced. The short report is in document N2670.

DPRK and Singapore have not assigned Chief Editor from their countries.

Documents N2576 and N2577 will be considered as input into the next IRG. Document N2677 will be also input to IRG. Regarding document N2649 – Basic International CJK subset, I agree that the focus should be on BASIC. Documents N2644 and N2659 – defect reports could be assigned to the IRG for input.

Mr. Mike Ksar: we need to have discussion on documents N2644 and N2659 at this meeting also. (See discussion on document N2644 under agenda item 12.1 on page 45, and on document N2659 under agenda item 12.3 on page 47.)

Disposition: Noted. See relevant resolution M44.17 on page 45. See also additional resolutions relevant to IRG work in section 11.2 on page 45.

Relevant resolution:

M44.17 (IRG Action Items):

Unanimous

WG2 instructs IRG to review and report to the next WG 2 meeting on the following:

- a. Defects on Duplicate Encoded CJK Forms reported in document N2644.
- b. Input on Basic International CJK subset in document N2649.
- c. item 1 – Clarification - in document N2667, for each of the eight dictionary entries, extract from the SuperCJK database additional information in the format (such as dddd.d for HYD) identified in the Editor's Note on page 2 in document SC2 N3673 (FPDAM-1 to 10646-2), and prepare input suitable for adding to the CJKU_SR.txt file, for consideration at the next WG 2 meeting in June 2004.
- d. On the characters that are reported as 'mapped from HKSCS-2001 to PUA zone' in the last paragraph on page 2 of document N2667 (CJK Ideograph source references corrections) – classifying them as candidates for CJK Unified Ideographs or CJK Compatibility Ideographs – so that they can be given a potential encoding in the non-PUA zone.
- e. On the correct glyph to use for the characters 21E2D (G_4K source reference) and 21E45 (G_HZ source reference).

11.2 CJK Source references stability/availability of glyph reference for all sources

Input document:

N2667 CJK Ideograph Source References Corrections; Michel Suignard – Project Editor; 2003-10-22

Current source references are based on dictionaries. The project editor, Mr. Michel Suignard, has identified a number of corrections that have to be made to the CJK Ideographic Source References in document N2667. See also item c in resolution M44.17 on page 45.

Relevant resolutions:

M44.7 (Unified CJK Ideographs in CJK Compatibility block):

Unanimous

WG2 instructs IRG to investigate the many missing source references for CJK Unified Ideographs located in the CJK Compatibility block (listed on top of page 2 in document N2667, under item 2a), and provide the missing source references for inclusion in CJKU_Sr.txt file to the project editor before 2003-12-15. The project editor is instructed to include these as part of the next amendment to the standard.

M44.8 (CJK Source Reference Corrections):

Unanimous

With reference to CJK ideograph source reference corrections reported in document N2667, WG 2 accepts the following proposed corrections:

- a. Change reference file for information for 04443, 04695, 058F3, 09376, and 04D56 (reference item 2a) in CJKU_SR.txt file.
- b. Remove the JPN references for 041B4, 0517B and 08980 in CJKU_SR.txt file.
- c. Remove HKSCS reference for 8728, and add the missing (approximately 3270) HKSCS-2001 references to the CJKU_SR.txt file.
- d. Correct the HKSCS references for 23FF0 and 25D20 after cross-checking with the glyphs for these in the HKSCS-2001 source document in CJKU_SR.txt file
- e. Add the HKSCS Compatibility Ideograph source references in CJKC_SR.txt file for F907, 2F825, 2F83B, 2F878, 2F8A6, and 2F9BC.

12 Defect reports

12.1 Duplicate Encoded CJK Forms

Input document:

N2644 Defect Report on Duplicate Encoded CJK Forms; Richard Cook – individual expert; 2003-10-06

Mr. Mike Ksar: IRG will review the defect report. IRG will consider these at the next IRG meeting and we will await their input before deciding on what to do with the defects.

Point 1 - Request IRG to provide more information from dictionaries. Would like to get more information, such as page numbers and index into the page number from the dictionary – for example: DICT.Page.Index.

Mr. Zhang Zhoucai: IRG already has such data in the Super CJK database.

Mr. Richard Cook: Volume number, page number, character number xx format is used in KangXi dictionary. It is the preferred format of all information that is already in the SuperCJK as mentioned in the Editor Note in Page 2 Amendment 1 to Part 2.

Disposition: Accepted .. see relevant resolution on M44.7 on page 45.

Point 2 - Corrections

Item A – IRG input

Change reference file information for 04443, 04695, 058F3, 09376 and change info for 04D56. (see document N2667). See relevant resolution – item a of M44.8 on page

B – Three JPN source references must be removed. They are not even official references.

See relevant resolution M44.8 item b on page 45.

C -- K4 Sources

Found six erroneous K source info. They do have a decimal value problem – probably an oversight during the changeover to Hexadecimal notation. For CJK in BMP we can check the multicolumn tables for any missing GLYPHS.

Action item: Republic of Korea should check and provide corrections. A note is required to say that the notation was changed from Decimal to Hex notation. Editor will add note in the next amendment.

Relevant resolution:

M44.9 (K4 Source reference corrections):

Unanimous

With reference to the six erroneous K source information in CJKU_SR.txt file reported in document N2667, WG 2 resolves to remove the suspect K4 references for 03614, 03B20, 05579, 05C21, 06725, and 06DA4, unless Republic of Korea provides the corrected K4 entries in hexadecimal format and the correct Glyphs for these to the project editor before 2003-12-15.

Further, WG 2 accepts the recommendation to change the appropriate K4 decimal indices to the corresponding K4 hexadecimal notation (per 1st bullet in document N2667) and to add a note to clarify the relationship between the original K4 decimal index and the hexadecimal notation (per 3rd bullet in document N2667) used in the standard.

D --HKSCS Reference

Lots of references published by HK government do not agree with the source reference files.

U+8728 source has been moved from 957A moved from U+8728 to U+2F9BC

Additions: There are about 3000 additions in the HKSCS 2001 source. These are propose to be added. If there is an error on part of HKSAR, we have to inform them through China.

HKSCS has published character mappings to PUA. These must be mapped into unified CJK at the earliest opportunity. A Government Entity such as HKSAR should map them into the regular area. Most of the HKSAR characters have been rejected for Unification – and because of that they ended up in putting into PUA. They are candidates for either Compatibility or otherwise into the non PUA zone.

Disposition:

a. Accept the proposed corrections. See items c, d and e in relevant resolution M44.8 on page 45.

b. Request IRG to investigate – WG2 would like to know which of the characters were these 35 PUA assigned characters mapped to? Provide a list of correspondence between HKSCS characters mapped to UCS PUA and Unified CJK. Have they been considered for unification and if so with what. Whether they have been not submitted to IRG? See relevant resolution M44.17 item d on page 45.

12.2 Missing Alternate Format Characters in ISO/IEC 10646

Input document:

N2648 Missing Alternate Format Characters in ISO/IEC 10646; Uma; 2003-10-13

Dr. Umamaheswaran presented the investigation on Alternate Format Characters (AFC-s) in document N2548. The definition of AFC is not clear or crisp. The only hint is that it is shown in the code charts with a glyph with a square box around it, along with a whole bunch of other characters that are not called AFCs. The document raises the problem of incomplete definition and some inconsistencies in the standard. A table with potential candidates for AFCs is also given.

Discussion:

- a. Dr. Ken Whistler: There are inconsistencies in the standard. Both WG2 and the UTC have made a number of small decisions, which has led to the situation reported in document N2648.
- b. Mr. Eric Muller: Double accented characters could be candidates for AFCs – not represented by glyphs with dashed square boxes.
- c. Mr. Michel Suignard: Is there anything we can do at this meeting regarding completing Annex F?
- d. Mr. Mike Ksar: Any changes to standard depends on a comprehensive solution to the problems identified in the document. We should seek national body feedback to be sent to Dr. Umamaheswaran, with possible solutions.

Action item: National bodies to review and feedback on document N2648. It will be on the next meeting agenda.

12.3 KangXi Radical Forms

Input document:

N2659 Defect Report on Kangxi Radical Forms; Richard Cook; 2003-10-16

Mr. Richard Cook: There are 214 KangXi Radical forms. Four of them have the wrong stroke count. The revised column has the correct form and the stroke counts based on Table of radicals. 2F35 has three strokes in the revised form. It is not encoded anywhere else. The four revised forms don't exist elsewhere. The current forms in the standard reflect the common forms found elsewhere due to unification. Mappings are shown between the KangXi form to non-KangXi form. Rather than adding separate entries as extended KangXi – the suggestion is to show the correct Glyphs for the four characters. The current forms can be used.

Discussion:

- a. Mr. Tatsuo Kobayashi: CJK Radicals and KangXi Radicals are outside the unification rules of IRG. IRG usually uses the stroke method for sorting and searching, but only informatively. Sometimes the strokes are ambiguous. Some say three others say four strokes etc. The shapes are very similar to the original KangXi source. Someone would like to know the Radicals with his own Stroke count. For this purpose the revised shapes could be useful. I suggest use these as CJK Radical Supplement .. for example, Grass Radicals. Six Strokes in xxx dictionary, but most of them are of 3 or 4 strokes for ordinary use. These radicals can also be used for searching etc. so we ended up in encoding the different grass radicals with different stroke counts. Our recommendation is that the forms shown as Revised in the contribution, be proposed for additions to CJK Radical Supplement.
- b. Mr. Richard Cook: Items 5 and 6, 9AA8 has 9 strokes –form in the code charts is of bone radical. There is inconsistency within the KangXi code charts themselves. The form of the bone radical that appears in 10646 code charts with ten strokes – in the radicals chart. It has 9 strokes in another area of the standard.
- c. Mr. Tatsuo Kobayashi: There are many similar situations in UCS. We have sometimes unified several shapes.
- d. Mr. Chen Zhuang: What are you suggesting – are these for the Unicode or 10646? The four in Table 1 can be added to CJK Supplementary – not for KangXi Radical.

- e. Dr. Ken Whistler: US national body position is to agree with Japan and China – simply to add 4 supplementary CJK radicals. Items 5 and 6 are also equivalent to 2EE3 and 2EE4 respectively. If the solution is to swap these, then it is like moving characters and redefining them.
- f. Mr. Richard Cook: The suggested solution of adding 4 new characters in CJK Radical Supplement is OK.
- g. Mr. Yasuhiro Anan: The suggestion to add more is fine. We do not count strokes when we encode the CJK Radicals. We encode them as it appears in dictionaries, even though they may have originated from stroke count. The supplements are based on exact appearance – not on stroke count etc.
- h. Mr. Tatsuo Kobayashi: I recommend that the four new shapes be added – we should consider that we need evidence of use of the new forms before we proceed.

Disposition: WG2 does not consider the four characters to be defective as reported in document N2659.

Action item: Mr. Richard Cook is invited to propose four new characters for the CJK Radical Supplement with evidence of use, proposal summary form etc.

13 Liaison reports

13.1 Unicode Consortium

Input document:

N2609 Unicode Liaison Report for meeting 44; Unicode; pending
 N2623R Provisional draft of Unicode 4.1; Asmus Freytag, Unicode liaison and contributing editor; 2003-09-28

Dr. Asmus Freytag: Document N2609 contains the Unicode Consortium. Liaison report. We have work on Character Property Model, we have finished Math Report, Regular expressions, and Unicode Collation Algorithm for V4. Information on IUCs is also included. Basic CJK Subset was discussed. pipeline is mentioned. The actual press release for V4 is included. There is also a link on how to order the book. Document N2623 was used as reference for cross checking during the discussion of various proposed additions during this meeting.

13.2 SC22and SC22/WG20

Input document:

N2615 SC2 to SC22 Liaison Report at SC22 plenary; Mike Ksar; 2003-08-19

Dr. Ken Whistler: WG20 met last week in Mountain View. US, Ireland, Norway, RoK, and Canada (in attendance) and Sweden (by phone) participated. ISO/IEC 14651 Amendment is progressed. There is technical agreement on the ballot – the repertoire of 14651 is to be brought up to the 10646: 2003 / Unicode V4. Ballot resolution was completed on ISO/IEC 15897 Revision – Cultural Elements Registration standard – the standard is going forward for FDIS – and will be published as revision. It is not subject to project transfer from SC22. ISO/IEC 14651 will be transferred by JTC1 in the future.

Mr. Mike Ksar: Document N2615 contains the liaison statement from SC2 to SC22. The draft from Press release of Unicode V4 was also included. Participation by Dr. Asmus Freytag in one of the SC22 plenary meetings was appreciated by them.

As side information, SC34 is doing work on SGML - on Mathematical Entity Sets – October 28, 2003, is the deadline for their ballot. They are mapping to 10646 – we should review to ensure that they should get it right.

Action item: Liaison to SC34 to review mapping of Mathematical Entity Sets to 10646 and feedback if needed.

13.3 W3C

Input document:

N2643 W3C-I18N WG Liaison Report; Martin Duerst; 2003-10-06

Mr. Mike Ksar: Dr. Martin Duerst has sent in the liaison report in document N2643. It contains information on what w3c i18n working group is doing and they are aware of what we are doing. The Character Model

is the document they are still working on. Their web site is accessible – you can join the w3c interest group and provide the input – you don't have to be a member of the w3c. A note sent by Sir Tim Bernards Lee to ISO on charging of codes by ISO is also included.

13.4 TC46/SC4

Input document:

N2584 Report on ISO TC46/SC4 N517 Status of Character Set Work; Everson; 2003-05-20

Mr. Mike Ksar: This document for information and further reading by WG2 experts.

13.5 SC36 and SC36/CLFA Overview

Input document:

N2599 SC36 and SC36/CLFA Overview; SC36; 2003-06-26

Mr. Mike Ksar: SC36 set of slides is to be found in document N2599 – for your information. SC36 is a user of ISO/IEC 10646.

14 Other business

14.1 Web Site Review

Mr. Mike Ksar: Mr. Keld Simonsen has been very responsive in posting and updating changes etc. Dr. Umamaheswaran has volunteered to take the document register – and make it shorter. The document register needs fixing up – each entry has to be checked and verified. Older documents can be scanned and could be posted to the WG2 web site if someone wants to volunteer. A zipped file is being created on a per meeting basis. We will continue with this practice.

Dr. Ken Whistler: I find the main WG2 site to be very unfriendly. It did not have sufficient information. I would like to see at least the titles of the documents.

Dr. Asmus Freytag: If I put all the email messages from Mr. Keld Simonsen into a folder then I can find the list of the documents.

Dr. Umamaheswaran: For your information, Attendance.html file is made available through the meetings.html file.

14.2 Future Meetings

Mr. Mike Ksar: For meeting 45 in summer 2004, WG2 had solicited a host in Europe. Now we have three offers - from the USA, Canada and Denmark. The offer from Denmark is not firm. The Canadian offer is for 21st to 25th June 2004 – WG2 followed by SC2 plenary in IBM Software Lab in Toronto area. This is planned to follow the Unicode Technical Committee meeting being hosted from the 15th to the 18th the previous week.

For meeting 46 in Spring/Summer 2005 we are soliciting a host in the Far East or Europe. Mr. Zhang Zhoucai was mentioning possibility of meeting 46 somewhere in China end of April or early May in 2005. For 2006 – Lithuania (Mr. Vladas Tumasonis) will consider inviting us in the spring.

Ms. Lisa Moore: If the meetings are more frequent, it helps with synchronization issues with Unicode.

WG2 decided to accept the Canadian offer for meeting 45.

Relevant resolution:

M44.21 (Future meetings):

Unanimous

WG 2 meetings:

Meeting 45 -- 2004-06-21/24, Markham, Ontario, Canada; in conjunction with SC2 plenary meeting (2004-06-24/25)

Meeting 46 – 2005 – Late April or early May - (tentative), China (tentative)

Meeting 47 – 2006 April / May (tentative), Europe

15 Closing

15.1 Approval of Resolutions of Meeting 44

Output document:

N2654R; Meeting 44 resolutions – SC2 doc 02n3701; WG2; 2003-11-07

Draft document N2654Draft was prepared and circulated with draft resolution numbers. They were organized into two parts. The first part was in the form of a multicolumn table describing the resolution number, the block into which a character or script was accepted for encoding during the discussion, the source document number, the code positions, source for the glyphs and names, and any changes made to the original proposal during the meeting. Each script and character addition accepted during the meeting was entered in a table with its own draft resolution number to permit review and acceptance of each one by national body experts. The second part of the draft resolutions contained all items that were not related to any repertoire additions. After the adoption of the various resolutions, the first part was regrouped into adopted resolutions covering scripts that were unanimously accepted, individual characters that were unanimously accepted and one resolution for each item that was not unanimously accepted. The set of adopted resolutions from the second part was merged with the above set. These are documented in document N2654R along with a list of national bodies that agreed, disagreed or abstained when the acceptance was not unanimous.

The following resolution captures the progression of work on additions to the repertoire and other changes to the standard arising out of this meeting:

RESOLUTION M44.10 (Processing of Amd 1 to 10646: 2003):

Unanimous

WG 2 requests SC2 to approve a project subdivision for Amendment no. 1 to ISO/IEC 10646: 2003, with the scope of encoding the approved scripts and characters and error-corrective actions, accepted in resolutions M44.1 through M44.9 (was erroneously M44.57 in document N2654R)above. Document N2676 contains the summary in the form of charts showing code positions and character names proposed for inclusion in this amendment. The completion schedule is PDAM-1 2004/05; FPDAM-1 2005/02; FDAM-1 2005-08.

WG 2 instructs its editor to prepare the text of PDAM-1 to ISO/IEC 10646:2003 incorporating the above characters and submit it to SC2 for further processing to meet the above target dates.

15.1.1 Appreciation:

Relevant resolutions:

M44.22 (Appreciation to TLG):

By Acclamation

WG 2 thanks members of the Thesaurus Linguae Graecae Project, University of California, Irvine, for their valuable and well-researched contributions on Ancient Greek characters for inclusion in the standard.

M44.23 (Appreciation to DKUUG for web services):

By Acclamation

WG 2 thanks DKUUG, in particular Mr. Keld Simonsen, for its continued support of the web site for WG 2 document distribution and the e-mail server.

M44.24 (Appreciation):

By Acclamation

WG 2 thanks the hosts -- the US national body, the Unicode Consortium and Microsoft Corporation, and in particular Ms. Magda Danish, for hosting and providing the excellent meeting facilities and administrative support. WG2 also appreciates the kind hospitality extended by the Unicode Consortium.

15.2 Adjournment

Meeting was adjourned around 12:00h.

16 Action Items

All action items recorded in the minutes of the following previous meetings have been either completed or dropped. New action items from this meeting and outstanding action items from previous meetings are listed in the tables that follow.

- a. meeting 25, 1994-04-18/22, Antalya, Turkey (document N1033)
- b. meeting 26, 1994-10-10/14, San Francisco, CA, USA (document N1117)
- c. meeting 27, 1995-04-03/07, Geneva, Switzerland (document N1203)
- d. meeting 28, 1995-06-22/26, Helsinki, Finland (document N 1253)
- e. meeting 29, 1995-11-06/10, Tokyo, Japan (document N1303)
- f. meeting 30, 1996-04-22/26, Copenhagen, Denmark (document N1353)
- g. meeting 31, 1996-08-12/16, Québec City, Canada (document N1453)
- h. meeting 32, 1997-01-20/24, Singapore (document N1503)
- i. meeting 33, 1997-06-30/07-04, Heraklion, Crete, Greece (document N1603)
- j. meeting 34, 1998-03-16/20, Redmond, WA, USA (document N1703)
- k. meeting 35, 1998-09-21/25, London, UK (document N1903)
- l. meeting 36, 1999-03-09/15, Fukuoka, Japan (document N2003)
- m. meeting 37, 1999-09-17/21, Copenhagen, Denmark (document N2103)
- n. meeting 38, 2000-07-18/21, Beijing, China (document N2203)
- o. meeting 39, 2000-10-08/11, Vouliagmeni, Athens, Greece (document N2353) and
- p. meeting 40, 2001-04-02/05, Mountain View, CA, USA (document N2403)
- q. meeting 41, 2001-10-15/18, Singapore (document N2453)
- q. meeting 41, 2001-10-15/18, Singapore (document N2453)

16.1 Outstanding action items from meeting 42, 2002-05-20/23, Dublin, Ireland

Item	Assigned to / action (Reference resolutions in document N2454R, and unconfirmed minutes in document N2453 for meeting 42 with any corrections noted in section 3 of document N2553 from meeting 43)	Status
AI-42-7	The US national body (Mr. Michel Suignard / Dr. Asmus Freytag)	
b	With reference to documents N2424 - Reconsidering request: "Font supply guide for UCS development" (M41.13); Japan – Sato; 2002-03-25; N2443 - Clarification to WG2 N3568R, M41.13 resolution in Singapore; Singapore; 2002-05-06; N2447 - IRG #19 Resolutions; IRG; 2002-05-09 (Resolution M19.4), Dr. Asmus Freytag to prepare document N2445 on Font Policy clarification, based on ad hoc discussions with the project editor and IRG rapporteur and other interested parties. M43, M44 – in progress.	In progress.
AI-42-8	The Irish national body (Mr. Michael Everson)	
d	Is invited to prepare a separate contribution regarding guidebook symbols, resulting from discussion on Irish comment T.15-3 in document N2486. M43, M44 – in progress.	In progress.

16.2 Outstanding action items from meeting 43, 2003-12-09/12, Tokyo, Japan

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
AI-43-2	Convener - Mr. Mike Ksar	
b	To investigate and obtain copies of final published Amendments for use by the editor and contributing editors. M44 – in progress.	In progress.
AI-43-6	Ad hoc group on principles and procedures (lead - Dr. V.S. UMaaheswaran)	
a	Update Principles and Procedures to include requirement for Source References and Mapping information for ideographs in machine readable form are sent to the editor. M44 – in progress.	In progress.
AI-43-7	IRG Rapporteur (Mr. Zhang Zhoucai)	
c	Per discussion on document N2526 on Ideographic Strokes versus Ideographs, IRG should separate the candidate characters for being Strokes versus ideographs. M44 – in progress.	In progress.

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
d	With reference to document N2571, IRG is encouraged filter the input on Ancient Ideographs before WG2 considers them. M44 – in progress.	In progress.
e	To act on resolution M43.15 (Basic international CJK sub-set): WG2 accepts the IRG input in document N2539 (IRG N947) and encourages the IRG to collect additional input and arrive at recommendations for a Basic international Ideograph Subset and submit for review at the next WG2 meeting. M44 – in progress.	In progress.
AI-43-9	The Irish national body (Mr. Michael Everson)	
a	To act on resolution M43.14 (Roadmap - Plane 3): WG2 accepts the recommendation in document N 2515 from the Roadmap ad hoc committee for adding Plane 3 as an additional supplementary plane to the roadmap, identifying it as 'Plane 3'. M44 – in progress.	In progress; a note has been added.
d	To update the roadmap to provide some guidelines for differentiating Ideographic Strokes from Ideographs addressing concerns expressed in document N2526. M44 – in progress.	In progress.
e	To submit a revision of document N2556 on Avestan and Pahlavi based on comments received at the meeting and any other feedback received before the next meeting. M44 – in progress.	In progress.
g	To submit a revision of document N2544 on Manichean script based on comments received at the meeting and any other feedback received before the next meeting. M44 – in progress.	In progress.
j	To submit a revision of document N2505 on OI Chiki script based on comments received at the meeting and any other feedback received before the next meeting. M44 – in progress.	In progress.
AI-43-11	ROK national body (Professor Kyongsok Kim)	
a	Invited to make a contribution on Hangul Transliteration Rules that can be applied to all Hangul contributions (reference discussion on ROK comments in document N2520.) M44 – in progress.	In progress.
AI-43-13	DPRK – Messrs. Ham Myong HO, Ri Kwang HO	
a	To act on resolution M43.10 (Request for additional Hanja Character Source References): With reference to the request from DPR of Korea for three Hanja character source references in document N2517, and two Hanja character source references in document N2518, WG2 invites DPRK to review these proposed references, with assistance from the IRG, prior to re-submitting the requests for future consideration by WG2. M44 – in progress.	In progress.
b	To act on resolution M43.3 (Compatibility Hanja characters): WG2 accepts the removal of 122 Compatibility Hanja characters FA70 to FAE9 from FPDAM-2 to ISO/IEC 10646-1. WG2 provisionally accepts, and invites DPRK and other interested parties to review, the refined replacement set of 107 Compatibility Hanja characters (see Korean ad hoc report in document N 2573, corrections to the FPDAM-2 charts in document N2540, and the code chart showing the 107 characters in document N2572) for further consideration at the next WG2 meeting. M44 – in progress.	In progress.
AI-43-14	All national bodies and liaison organizations	

Item	Assigned to / action (Reference resolutions in document N2554, and unconfirmed minutes in document N2553 for meeting 43, with any corrections noted in section 3 of document N2653 from meeting 44)	Status
c	To review and feedback to DPRK per resolution M43.3 (Compatibility Hanja characters): WG2 accepts the removal of 122 Compatibility Hanja characters FA70 to FAE9 from FPDAM-2 to ISO/IEC 10646-1. WG2 provisionally accepts, and invites DPRK and other interested parties to review, the refined replacement set of 107 Compatibility Hanja characters (see Korean ad hoc report in document N 2573, corrections to the FPDAM-2 charts in document N2540, and the code chart showing the 107 characters in document N2572) for further consideration at the next WG2 meeting. M44 – in progress.	In progress.
h	To review and feedback on document N2505 - Revised proposal for encoding the OI Chiki script in the UCS; Michael Everson, R. C. Hansdah & N. C. Murmu; 2002-11-03 M44 – in progress.	In progress.
k	To review and feedback on document N2544 - Revised proposal to encode the Manichaeian script in the UCS; Everson; 2002-12-03. M44 – in progress.	In progress.
o	To review and feedback on document N2556 - Revised proposal to encode the Avestan and Pahlavi script in the UCS; Michael Everson; 2002-12-04. M44 – in progress.	In progress.

16.3 New action items from meeting 44, 2003-10-20/23, Mountain View, CA, USA

Item	Assigned to / action (Reference resolutions in document N2654, and unconfirmed minutes in document N2653 for meeting 44 - this document you are reading)	Status
AI-44-1	Meeting Secretary - Dr. V.S. UMaaheswaran	
a	To finalize the document N2654 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N2654.
b	To finalize the document N2653 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N2653.
AI-44-2	Convener - Mr. Mike Ksar	
a	To include the following proposals from meeting 43 for the next meeting agenda: N2530 Clarification to Resolution M42.13 on Hanja Compatibility Updated N2505 OI Chiki script N2572 & N2573 107 compatibility Hanja Updated N2544 Manichaeian script Updated N2607/2620 Saurashtra script Updated N2556 Avestan and Pahlavi N2585 Basic principles for the encoding of Sumero-Akkadian Cuneiform N2656 Characters with Strikethrough	
b	To communicate to SC2 secretariat on resolutions on: - project subdivision for new amendment along with its scope - M44.10 - schedule for PDAM – resolution M 44.10 - updated principles and procedures document – M44.19 and document N2652R - updated roadmap document – M44.18 and document N2559 - proposed revised scope of SC2 – M44.13 - recommendation to transfer 14651 to WG2 – M44.14 - nominations to ISO 15924 Registration Authority Joint Advisory Group - M44.15 - future meetings – M44.21	
AI-44-3	Editor of ISO/IEC 10646: 2003 edition with merged parts: Mr. Michel Suignard with assistance from contributing editors	
	<i>To prepare the appropriate AM, DAM or PDAM texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:</i>	
a	M44.1 (New Blocks – Scripts and Script Extensions):	

Item	Assigned to / action (Reference resolutions in document N2654, and unconfirmed minutes in document N2653 for meeting 44 - this document you are reading)	Status
	<p>WG2 resolves to add the following new blocks and new scripts or extensions to existing scripts as detailed below:</p> <ul style="list-style-type: none"> i. With reference to document N2636 on Coptic script, a new block named “Coptic” in the range 2C80-2CCF, with 59 characters in code positions ending at 2CB0, with their names and glyphs from pages 38-39 in document N2623R, including 2CBC COPTIC SYMBOL KHI RO and its glyph from document N2636, and an empty column CC for future additions. See consolidated chart and names list on pages 46-47 in document N2676. m. With reference to document N2610R on Glagolitic script, a new block named “Glagolitic” in the range 2C00-2C5F, with 94 characters in code positions ending at 2C5E with their names and glyphs from pages 35-37 in document N2623R. See consolidated chart and names list on pages 43-45 in document N2676. n. With reference to document N2608R2 on additional Georgian characters, a new block named “Georgian Supplement” in the range 2D00-2D2F, with 38 characters in code positions 2D00-2D25 with their names and glyphs from page 40 in document N2623R. See consolidated chart and names list on page 48 in document N2676. o. With reference to document N2633R on Lontara (Buginese) script, a new block named “Buginese” in the range 1A00-1A1F, with 30 characters in code positions ending at 1A1F, with their names and glyphs from page 21 in document N2623R with the following changes - delete 1A18 - Sign YI and 1A1D - Virama; Move up 1A19-1A1C; leaving 1A1C and 1A1D unused. See consolidated chart and names list on page 24 in document N2676. p. With reference to document N2634 on Tai Lue script, a new block named “Tai Lue” in the range 1980-19DF, with 80 characters in code positions ending at 19DF with their names and glyphs from pages 8-9 in document N2634 page 8 with the following changes - move Sign IY to after Sign UY; move up the rearranged set from Sign UY to Sign IY by one position; change in names of 19DE – ‘AND’ to ‘LE’; 19DF – ‘RESULTATIVE’ to ‘LEW’. Some of these characters are combining characters. The project editor is to ensure explicit mention the Chinese name XISHUANG BANNA DAI for the script in the amendment text. See consolidated chart and names list on pages 22-23 in document N2676. q. With reference to document N2612-1 on New Testament editorial characters, a new block named “Supplemental Punctuation” in the range 2E00-2E7F, with 13 characters in code positions 2E00-2E0C with their names and glyphs from pages 5-6 in document N2612-1. See consolidated chart and names list on pages 49-50 in document N2676. r. With reference to document N2612-2 on Greek numerical characters, a new block named “Ancient Greek Numbers” in the range 10140-1018F, with 21 characters in code positions 10175-10189 with their names and glyphs from pages 45-46 in document N2623R. See consolidated chart and names list on pages 55-57 in document N2676. s. With reference to document N2642 on additional Greek editorial and punctuation characters, a new block named “Combining Diacritical Marks Supplement” in the range 1DC0-1DFF, with the 2 characters 1DC0 COMBINING DOTTED GRAVE ACCENT and 1DC1 COMBINING DOTTED ACUTE ACCENT, with their glyphs from document N2642. See consolidated chart and names list on pages 27-28 in document N2676. t. With reference to document N2583R on Old Persian script, a new block named “Old Persian” in the range 103A0-103DF, with 50 characters in code positions ending at 103D5 with their names and glyphs from pages 5-6 in document. See consolidated chart and names list on pages 58-59 in document N2676. u. With reference to document N2524 on Kharoshthi script, a new block named “Kharoshthi” in the range 10A00-10A5F, with 65 characters in 	

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	<p>code positions ending at 10A58 with their names and glyphs on pages 51-52 in document N2623R, with corrected spellings for names of 10A57. Some characters in this set are combining characters. 103AF, the VIRAMA character is an Alternate Format Character. See consolidated chart and names list on pages 60-61 in document N2676.</p> <p>v. With reference to document N2547 on ancient Greek musical symbols, a new block named “Ancient Greek Musical Notation” in the range 1D200-1D24F, with characters in code positions 1D200-1D245 with their names and glyphs from pages 53-54 in N2623R. Some characters in this set are combining characters. See consolidated chart and names list on pages 62-63 in document N2676.</p> <p>b M44.2 (Arabic Supplement): With reference to document N2598R2 on additional Arabic characters, WG 2 resolves to create a new block named “Arabic Supplement” in the range 0750-077F, and populate it with 26 characters in code positions 0750-0769 with names and glyphs shown on pages 13-14 in document N2623R; some of these characters are right-to-left characters. See consolidated chart and names list on pages 14-15 in document N2676.</p> <p>c M44.3 (Syloti Nagri script): With reference to document N2591 on Syloti Nagri script, WG 2 resolves to create a new block named “Syloti Nagri” in the range A800-A82F, and populate it with 44 characters in code positions A800-A82B with the names and glyphs given on page 51 of document N2591. Some of these characters are combining characters. See consolidated chart and names list on page 51 in document N2676.</p> <p>d M44.4 (Phags-Pa script): With reference to document N2622 on Phags-Pa script, WG 2 resolves to create a new block named “Phags-Pa” in the range A840-A87F (block start changed to A840 from AB80 proposed in document N2622), and populate it with 52 characters in code positions A840-A873 with the names and glyphs from table 1 in document N2622. Document N2666 will also be used as a basis for creating the amendment text. See consolidated chart and names list on pages 52-54 in document N2676.</p> <p>e M44.5 (Additions of individual characters): WG 2 resolves to add the following characters in different blocks:</p> <p>dd. With reference to pages 8-9 in document N2610R on Glagolitic script, 3 characters with modified names in the “General punctuation” block: 2056 THREE DOT PUNCTUATION 2058 FOUR DOT PUNCTUATION 2059 FIVE DOT PUNCTUATION with their glyphs from document N2610R. See consolidated chart and names list on pages 29-30 in document N2676.</p> <p>ee. With reference to document N2608R2 on Georgian script, 3 characters in the “Georgian” block: 10F9 GEORGIAN LETTER TURNED GAN 10FA GEORGIAN LETTER AIN 10FC MODIFIER LETTER GEORGIAN NAR with their glyphs from page 19 in document N2623R. See consolidated chart and names list on pages 21-22 in document N2676.</p> <p>ff. With reference to pages 4-5 of document N2598 on additional Arabic-script characters, 4 characters in the “Arabic” block: 061E ARABIC TRIPLE DOT PUNCTUATION 065A ARABIC VOWEL SIGN SMALL V ABOVE 065B ARABIC VOWEL SIGN INVERTED SMALL V ABOVE 065C ARABIC VOWEL SIGN DOT BELOW with their glyphs from page 11 in document N2623R. Some of these characters are combining characters. They are right-to-left characters.</p>	

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	<p>26AC MEDIUM SMALL WHITE CIRCLE 26AD MARRIAGE SYMBOL</p> <p>26AE DIVORCE SYMBOL 26AF UNMARRIED PARTNERSHIP SYMBOL</p> <p>26B0 COFFIN 26B1 FUNERAL URN</p> <p>with their glyphs from page 2 in document N2663. See consolidated chart and names list on pages 37-38 in document N2676.</p> <p>ii. With reference to document N2586R on five miscellaneous symbols, 5 characters in the "Miscellaneous Symbols" block:</p> <p> 2618 SHAMROCK 267E PERMANENT PAPER SIGN 267F WHEELCHAIR SYMBOL</p> <p> 269B ATOM SYMBOL 269C FLEUR-DE-LIS</p> <p>with their glyphs from pages 29-30 in document N2623R. See consolidated chart and names list on pages 37-38 in document N2676.</p> <p>mm. With reference to document N2581R2 on Arabic Zwarakay character, 1 character in the "Arabic" block:</p> <p> 0659 ARABIC ZWARAKAY</p> <p>with its glyph from page 2 in document 2581R2. This character is a combining character. See consolidated chart and names list on pages 12-13 in document N2676.</p> <p>nn. With reference to document N2579 on Guarani and Austral signs, 2 characters in the "Currency Symbols" block:</p> <p> 20B2 GUARANI SIGN; 20B3 AUSTRAL SIGN</p> <p>with their glyphs from page 1 of document N2579. See consolidated chart and names list on page 31 in document N2676.</p> <p>oo. With reference to document N2617 on Tamil Letter Sha, 1 character in the "Tamil" block:</p> <p> 0BB6 TAMIL LETTER SHA</p> <p>with its glyph from page 17 in document N2623R. See consolidated chart and names list on pages 18-19 in document N2676.</p> <p>pp. With reference to document N2627 on Marwari character Lam with Bar, 1 character in the "Arabic Supplement" block:</p> <p> 076A ARABIC LETTER LAM WITH BAR</p> <p>with its glyph from page 3 in document N2627. This character is a right-to-left character. See consolidated chart and names list on pages 14-15 in document N2676.</p> <p>qq. With reference to document N2629 on horizontal arrows with vertical tips, 4 characters in the "Miscellaneous Symbols and Arrows" block:</p> <p> 2B0E RIGHTWARDS ARROW WITH TIP DOWNWARDS</p> <p> 2B0F RIGHTWARDS ARROW WITH TIP UPWARDS</p> <p> 2B10 LEFTWARDS ARROW WITH TIP DOWNWARDS</p> <p> 2B11 LEFTWARDS ARROW WITH TIP UPWARDS</p> <p>with their glyphs in page 34 of document N2623R corrected by swapping the shapes for Leftwards and Rightwards characters. See consolidated chart and names list on pages 41-42 in document N2676.</p> <p>rr. With reference to discussion on New Testament editorial characters in document N2612-1 (see document N2675), 1 character in the "Supplemental Punctuation" block:</p> <p> 2E0D RAISED SMALL DIAGONAL LOWER LEFT TO UPPER RIGHT</p> <p>with a glyph that is a mirrored version of the glyph of 2E0C from document N2512-1. See consolidated chart and names list on pages 49-50 in document N2676.</p> <p>ss. With reference to document N2612-3 on ancient Greek numbers, 53 characters in the new "Ancient Greek Numbers" block in the range "10140-1018F", at code positions 10140 to 10174 with their names and glyphs as shown on pages 46-47 in document N2623R. See consolidated chart and names list on pages 55-56 in document N2676.</p> <p>tt. With reference to document N2632 on phonetic characters with middle</p>	

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	<p>tilde, 11 characters in the “Phonetic Extensions” block: 1D6C LATIN SMALL LETTER B WITH MIDDLE TILDE 1D6D LATIN SMALL LETTER D WITH MIDDLE TILDE 1D6E LATIN SMALL LETTER F WITH MIDDLE TILDE 1D6F LATIN SMALL LETTER M WITH MIDDLE TILDE 1D70 LATIN SMALL LETTER N WITH MIDDLE TILDE 1D71 LATIN SMALL LETTER P WITH MIDDLE TILDE 1D72 LATIN SMALL LETTER R WITH MIDDLE TILDE 1D73 LATIN SMALL LETTER R WITH FISHHOOK AND MIDDLE TILDE 1D74 LATIN SMALL LETTER S WITH MIDDLE TILDE 1D75 LATIN SMALL LETTER T WITH MIDDLE TILDE 1D76 LATIN SMALL LETTER Z WITH MIDDLE TILDE with their glyphs from page 22 in document. Document N2665 will also be used as a basis for creating the Amendment text. See consolidated chart and names list on pages 25-26 in document N2676.</p> <p>uu. With reference to document N2612-4 on combining asterisk below, 1 character in the “Combining Diacritical Marks” block: 0359 COMBINING ASTERISK BELOW with its glyph from page 5 in document N2623R. See consolidated chart and names list on pages 6-7 in document N2676.</p> <p>vv. With reference to document N2612-5 on Greek rho with stroke symbol, 1 character in the “Greek and Coptic” block: 03FC GREEK RHO WITH STROKE SYMBOL with its glyph from page 7 in document N2623R. See consolidated chart and names list on pages 8-9 in document N2676.</p> <p>ww. With reference to document N2612-6 on two ancient Greek mathematical characters, 2 characters in the “Miscellaneous Mathematical Symbols-A” block: 27C0 THREE DIMENSIONAL ANGLE 27C1 WHITE TRIANGLE CONTAINING SMALL WHITE TRIANGLE with their glyphs from page 31 in document N2623R. See consolidated chart and names list on pages 39-40 in document N2676.</p> <p>xx. With reference to document N2612-7 on three additional punctuation characters, 3 characters with new names and code positions in the “General Punctuation” block: 205A TWO DOT PUNCTUATION 205B FOUR DOT MARK 205C DOTTED CROSS with their glyphs from the last page of document 2612-7. See consolidated chart and names list on pages 29-30 in document N2676.</p> <p>yy. With reference to document N2640 on Afghani sign, 1 characters in the “Arabic” block: 060B AFGHANI SIGN with its glyph from page 1 of document N2640. This character is a right-to-left character. See consolidated chart and names list on pages 12-13 in document N2676.</p> <p>zz. With reference to document N2647 on double oblique hyphen, unified with Coptic Double Hyphen from document N2636, 1 character in the “Supplemental Punctuation” block: 2E17 DOUBLE OBLIQUE HYPHEN with its glyph from document Glyph B on page 1 in document N2647. See consolidated chart and names list on pages 49-50 in document N2676.</p> <p>aaa. With reference to document N2641 on one Irish phonetic letter, 1 character in the “Phonetic Extensions” block: 1D79 LATIN SMALL LETTER INSULAR G with its glyph from page 1 in document N2641. See consolidated chart and names list on pages 27-28 in document N2676.</p>	

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	<p>bbb. With reference to document N2645 on 'th' with strikethrough, 1 character in the "Latin Extended-B" block: 0238 LATIN SMALL LETTER TH WITH STRIKETHROUGH with its glyph from document N2645. See consolidated chart and names list on pages 4-5 in document N2676.</p> <p>ccc. With reference to document N2642 on additional Greek editorial and punctuation characters:</p> <ul style="list-style-type: none"> • 4 characters in the "Supplemental Punctuation" block: 2E0E EDITORIAL CORONIS 2E0F PARAGRAPHOS 2E10 FORKED PARAGRAPHOS 2E11 REVERSED FORKED PARAGRAPHOS with their glyphs from document N2642. See consolidated chart and names list on pages 49-50 in document N2676. • 1 character in the "General Punctuation" block: 205D TRICOLON with its glyph from document N2642. See consolidated chart and names list on pages 29-30 in document N2676. • 5 characters in the "Supplemental Punctuation" block, in code positions moved down by one: 2E12 HYPODIASTOLE 2E13 DOTTED OBELOS 2E14 DOWNWARDS ANCORA 2E15-UPWARDS ANCORA 2E16 DOTTED RIGHT-POINTING ANGLE with their glyphs from document N2642. See consolidated chart and names list on pages 49-50 in document N2676. • 3 characters in the "Greek and Coptic" block: 03FD REVERSED GREEK CAPITAL LUNATE SIGMA SYMBOL 03FE-DOTTED GREEK CAPITAL LUNATE SIGMA SYMBOL 03FF-REVERSED DOTTED GREEK CAPITAL LUNATE SIGMA SYMBOL with their glyphs from document N2642. See consolidated chart and names list on pages 8-9 in document N2676. <p>ddd. With reference to document N2546 on Greek metrical symbols, 9 characters, moved from 2692-269A in document N2632R to 23D1-23D9, in the "Miscellaneous Technical" block: 23D1 METRICAL BREVE 23D2 METRICAL LONG OVER SHORT 23D3 METRICAL SHORT OVER LONG 23D4 METRICAL LONG OVER TWO SHORTS 23D5 METRICAL TWO SHORTS OVER LONG 23D6 METRICAL TWO SHORTS JOINED 23D7 METRICAL TRISEME 23D8 METRICAL TETRASEME 23D9 METRICAL PENTASEME with the glyphs for 2692—269A on page 29 in N2632R page 29. See consolidated chart and names list on pages 35-36 in document N2676.</p> <p>eee. With reference to document N2543 on Devanagari Glottal Stop, 1 character in the "Devanagari" block: 097D DEVANAGARI GLOTTAL STOP with the glyph without the top bar from page 15. See consolidated chart and names list on pages 17-18 in document N2676.</p> <p>fff. With reference to document N2655 on symbols used in dictionaries</p> <ul style="list-style-type: none"> • 9 characters with new code positions in the "Miscellaneous Symbols" block: 2692 HAMMER AND CHISEL 2693-ANCHOR 2694 CROSSED SWORDS 2695-ROD OF AESCLEPIUS 2696 SCALES 2697 ALEMBIC 	

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	<p style="text-align: center;">2698 FLOWER 2699 GEAR 269A STAFF OF HERMES</p> <p>with their glyphs in the table on page 9 of document N2655. See consolidated chart and names list on pages 37-38 in document N2676.</p> <ul style="list-style-type: none"> • 1 character with a new code position in the “General Punctuation” block: <p style="margin-left: 40px;">205E VERTICAL FOUR DOTS</p> with its glyph from table on page 10 of document N2655. See consolidated chart and names list on pages 29-30 in document N2676. • 2 characters in the “Miscellaneous Symbols and Arrows” block: <p style="margin-left: 40px;">2B12 SQUARE WITH TOP HALF BLACK 2B13 SQUARE WITH BOTTOM HALF BLACK</p> with their glyphs from page 10 of document N2655. See consolidated chart and names list on pages 41-42 in document N2676. <p>f M44.6 (Clarification text for Variation Selectors): With reference to discussion on Latin Variation Selectors in document N2593 from DIN, WG 2 instructs its project editor to add appropriate text in the next amendment to the standard to clarify that Variation Selectors apply only to Base characters.</p> <p>g M44.7 (Unified CJK Ideographs in CJK Compatibility block): WG2 instructs IRG to investigate the many missing source references for CJK Unified Ideographs located in the CJK Compatibility block (listed on top of page 2 in document N2667, under item 2a), and provide the missing source references for inclusion in CJKU_Sr.txt file to the project editor before 2003-12-15. The project editor is instructed to include these as part of the next amendment to the standard.</p> <p>h M44.8 (CJK Source Reference Corrections): With reference to CJK ideograph source reference corrections reported in document N2667, WG 2 accepts the following proposed corrections:</p> <ol style="list-style-type: none"> f. Change reference file for information for 04443, 04695, 058F3, 09376, and 04D56 (reference item 2a) in CJKU_SR.txt file. g. Remove the JPN references for 041B4, 0517B and 08980 in CJKU_SR.txt file. h. Remove HKSCS reference for 8728, and add the missing (approximately 3270) HKSCS-2001 references to the CJKU_SR.txt file. i. Correct the HKSCS references for 23FF0 and 25D20 after cross-checking with the glyphs for these in the HKSCS-2001 source document in CJKU_SR.txt file j. Add the HKSCS Compatibility Ideograph source references in CJKC_SR.txt file for F907, 2F825, 2F83B, 2F878, 2F8A6 and 2F9BC. <p>i M44.9 (K4 Source reference corrections): With reference to the six erroneous K source information in CJKU_SR.txt file reported in document N2667, WG 2 resolves to remove the suspect K4 references for 03614, 03B20, 05579, 05C21, 06725, and 06DA4, unless Republic of Korea provides the corrected K4 entries in hexadecimal format and the correct Glyphs for these to the project editor before 2003-12-15.</p> <p>Further, WG 2 accepts the recommendation to change the appropriate K4 decimal indices to the corresponding K4 hexadecimal notation (per 1st bullet in document N2667) and to add a note to clarify the relationship between the original K4 decimal index and the hexadecimal notation (per 3rd bullet in document N2667) used in the standard.</p> <p>j M44.10 (Processing of Amd 1 to 10646: 2003): WG 2 requests SC2 to approve a project subdivision for Amendment no. 1 to ISO/IEC 10646: 2003, with the scope of encoding the approved scripts and characters and error-corrective actions, accepted in resolutions M44.1 through M44.57 above. Document N2676 contains the summary in the form of charts</p>	

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	<p>showing code positions and character names proposed for inclusion in this amendment. The completion schedule is PDAM-1 2004/05; FPDAM-1 2005/02; FDAM-1 2005-08.</p> <p>WG 2 instructs its editor to prepare the text of PDAM-1 to ISO/IEC 10646:2003 incorporating the above characters and submit it to SC2 for further processing to meet the above target dates.</p>	
AI-44-4	Ad hoc group on principles and procedures (lead - Dr. V.S. UMaaheswaran)	
a	<p>Update Principles and Procedures to include</p> <ul style="list-style-type: none"> - requirement for Source References and Mapping information for ideographs in machine readable form are sent to the editor - a question on BiDi property for new characters, 	In progress.
AI-44-5	IRG Rapporteur (Mr. Zhang Zhoucai)	
a	<p>To respond to resolution M44.17 (IRG Action Items) -- WG2 instructs IRG to review and report to the next WG 2 meeting on the following:</p> <ul style="list-style-type: none"> f. Defects on Duplicate Encoded CJK Forms reported in document N2644. g. Input on Basic International CJK subset in document N2649. h. item 1 – Clarification - in document N2667, for each of the eight dictionary entries, extract from the SuperCJK database additional information in the format (such as dddd.ddd for HYD) identified in the Editor's Note on page 2 in document SC2 N3673 (FPDAM-1 to 10646-2), and prepare input suitable for adding to the CJKU_SR.txt file, for consideration at the next WG 2 meeting in June 2004. i. On the characters that are reported as 'mapped from HKSCS-2001 to PUA zone' in the last paragraph on page 2 of document N2667 (CJK Ideograph source references corrections) – classifying them as candidates for CJK Unified Ideographs or CJK Compatibility Ideographs – so that they can be given a potential encoding in the non-PUA zone. j. On the correct glyph to use for the characters 21E2D (G_4K source reference) and 21E45 (G_HZ source reference). 	
b	<p>M44.7 (Unified CJK Ideographs in CJK Compatibility block):</p> <p>WG2 instructs IRG to investigate the many missing source references for CJK Unified Ideographs located in the CJK Compatibility block (listed on top of page 2 in document N2667, under item 2a), and provide the missing source references for inclusion in CJKU_Sr.txt file to the project editor before 2003-12-15. The project editor is instructed to include these as part of the next amendment to the standard.</p>	
AI-44-6	The US national body (Ms. Joan Aliprand, Dr. Ken Whistler, Mr. Richard Cook)	
a	<p>Ms. Joan Aliprand to send the suggestion to use C1 controls from ISO 6630 as an alternate way to solve the problem, with reference to documents N2593 and N2613 on Latin Variation Selectors.</p>	
b	<p>to act on resolution M44.16 (Names for USIs):</p> <p>With reference to document N2589, WG2 accepts the request for providing standardized names for entities represented as USIs, and invites the US national body to provide a more detailed proposal based on discussions at meeting M44 for consideration at the next WG 2 meeting.</p>	
c	<p>Mr. Richard Cook is invited to propose four new characters for the CJK Radical Supplement - WG2 does not consider the four characters to be defective as reported in document N2659.</p>	
AI-44-7	The Irish national body (Mr. Michael Everson)	
a	<p>To update the roadmaps to reflect:</p> <ul style="list-style-type: none"> - the relocation of Phags-Pa to A840-A87F from AB80—ABB3 - creating a new block 1DC0—1DFF – named COMBINING DIACRITICS SUPPLEMENT splitting current Alphabetic Extension block - other changes to the roadmap arising from meeting M44 discussion. 	
b	<p>To resolve differences between documents N2619 and N2620 on Saurashtrian script working with the authors of these documents and to submit</p>	

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	an updated document.	
AI-44-8	Chinese national body (Messrs, Cheng Zhuang, Lobsang Tokeme, Zhang Zhoucai)	
a	To act on resolution M44.11 (IPA Extensions from China) - With reference to document N2626 on IPA extensions, the Chinese national body is invited to submit a revised document reflecting the comments from documents N2646, N2673, the IPA handbook and the IPA ad hoc group discussion during this meeting, as part of response to the ballot on the next draft amendment to the standard.	
b	<p>To take note of resolution M44.20 (Tibetan BrdaRten)</p> <p>With reference to the revised proposal in document N2621 on Tibetan BrdaRten from China, WG 2 resolves not to encode the suggested list of characters in the standard based on the following:</p> <ul style="list-style-type: none"> d. All of the proposed characters can already be represented as sequences of existing encoded UCS characters, as shown explicitly in document N2624. e. The addition of the proposed characters would thereby lead to normalization issues. f. The addition of the proposed characters would also amount to a change in the overall encoding model for the Tibetan script, thereby destabilizing and introducing more complexity for existing implementations conformant to the standard. <p>Further.</p> <ul style="list-style-type: none"> d. WG 2 notes that the various implementation issues for BrdaRten Tibetan raised in documents N2621 and N2661 can be addressed in a variety of ways, involving dynamic conversion interfaces to existing legacy systems and other techniques suggested in document N2668. e. WG 2 suggests that the list of BrdaRten Tibetan stacks enumerated in document N2621 might be appropriate for processing by WG 2 as additions to a potential future annex of named entities represented by USIs, rather than be encoded as individual characters. f. WG 2 notes the issues on Tibetan script encoding and its implementation in document N2661, and invites WG 2 experts to work with Chinese experts to arrive at a satisfactory solution. 	
AI-44-9	ROK national body (Professor Kyongsok Kim)	
a	<p>Act on the following part of resolution M44.9 (K4 Source reference corrections):</p> <p>With reference to the six erroneous K source information in CJKU_SR.txt file reported in document N2667, WG 2 resolves to remove the suspect K4 references for 03614, 03B20, 05579, 05C21, 06725, and 06DA4, unless Republic of Korea provides the corrected K4 entries in hexadecimal format and the correct Glyphs for these to the project editor before 2003-12-15.</p>	
AI-44-10	Unicode Consortium (Dr. Asmus Freytag / Mr. Rick McGowan)	
a	Mr. Rick McGowan to send a message of appreciation to the authors from the TLG project for the set of well-prepared proposals on Ancient Greek characters.	
b	Dr. Asmus Freytag to communicate to the UTC the changes made to the set of accepted characters and scripts in document N2623R. The final revised set of charts is in document N2676.	
AI-44-11	TCA	
a	To act on resolution M44.12 (Combining Right Dot Above) - With reference to document N2628 and related comment on that document, the Taiwan Computer Association is invited to provide clarification response to the concerns raised in document N2669. The proposal for COMBINING RIGHT DOT ABOVE can be submitted as part of response to ballot on the next draft amendment to the standard.	
AI-44-12	All national bodies and liaison organizations	
a	To take note of resolution M44.21 (Future Meetings): Meeting 45 -- 2004-06-21/24, Markham, Ontario, Canada; in conjunction with	

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	SC2 plenary meeting (2004-06-24/25) Meeting 46 – 2005 – Late April or early May - (tentative), China (tentative) Meeting 47 – 2006 April / May (tentative), Europe	
b	Review and feedback on Alternate Format Characters in document 2648.	
c	Review and feedback on not-yet-encoded characters from document N2655 – Dictionary Symbols.	
d	Review and feedback on Characters with Strikethrough from document N2656.	
e	Review and feedback on basic principles for the encoding of Sumero-Akkadian Cuneiform in document N2585.	
f	To respond to the following Item from resolution M44.20 (Tibetan BrdaRten) WG 2 notes the issues on Tibetan script encoding and its implementation in document N2661, and invites WG 2 experts to work with Chinese experts to arrive at a satisfactory solution.	
g	WG2 experts who may be participating in SC34 activities are encouraged to review mapping of Mathematical Entity Sets to 10646 and feedback if needed.	

(Please notify me of any errors you detect in these minutes – send email to: umavs@ca.ibm.com. Thanks. Uma)

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