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 45; IBM Software Lab, Markham, Ontario, Canada; 2004-06-21/24
SOURCE:	V.S. Umamaheswaran, Recording Secretary, and Mike Ksar, Convener
PROJECT:	JTC 1.02.18 – ISO/IEC 10646
STATUS:	SC 2/WG 2 participants are requested to review the attached unconfirmed minutes, act on appropriate noted action items, and to send any comments or corrections to the convener as soon as possible but no later than 2004-06-07.
ACTION ID:	ACT
DUE DATE:	2005-01-15
DISTRIBUTION:	SC 2/WG 2 members and Liaison organizations
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Mike Ksar
Convener – ISO/IEC/JTC 1/SC 2/WG 2
Microsoft Corporation   **Phone: +1 425 707-6973**
One Microsoft Way   **Fax: +1 425 936-7329**
Bldg 24/2217   **email: mikeksar@microsoft.com**
Redmond, WA 98052-6399   **or   mikeksar@10646.com**

ISO
International Organization for Standardization
Organisation Internationale de Normalisation

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

ISO/IEC JTC 1/SC 2/WG 2 N2753

Date: 2004-12-26

Title:	Unconfirmed minutes of WG 2 meeting 45
	IBM Software Lab, Markham, Ontario, Canada; 2004-06-21/24
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

Mr. Mike Ksar convened the meeting at 10:05h. He welcomed the delegates and described the set of documents that have been distributed. All the documents that were needed for the meeting have been distributed. They are all accessible on line from WG2 site as well. If anyone wants a copy of any of the document that is not distributed in hard copy they should contact Dr. Umamaheswaran, our host.

Dr. Umamaheswaran welcomed the delegates on behalf of Standards Council of Canada, the Canadian member body, and on behalf of the Canadian Advisory Committee for Coded Character Sets (CAC/SC2). IBM Software Lab provided the meeting facilities. He introduced Ms. Carol Stock of IBM Software Lab.

Ms. Carol Stock welcomed the delegates to IBM Toronto facilities, presented a short overview of the new lab facilities and the key development activities taking place in the lab and wished the delegates a successful meeting and an enjoyable visit to Markham and Toronto.

Dr. Umamaheswaran went over the logistics, the LAN facilities, phone number for remote calling in, security-related information, refreshment arrangements and timings, and the support staff arrangements. The delegates were also invited to a dinner hosted by CAC SC2 and SCC on Tuesday 18th of June at a nearby restaurant.

A group photo was taken and has been posted to the WG2 web site. A guided tour of the facilities was conducted for those delegates who were interested after the meeting ended.

1.1   Roll Call

Input document:
2751   WG2 Mailing List – post-meeting 44 – Mountain View, CA October 2003; Ksar; 2004-05-21

Document N2751 containing the latest list of experts, their addresses, phone numbers and email ids, was circulated with a request to delegates to verify and update as needed.

59 delegates (listed in the table below) representing **14** National Bodies -- Canada, China, Finland, Germany, Iran, Ireland, Japan, Korea (Republic of), Lithuania, Mongolia, Morocco, Norway, Poland and the USA, **3** Liaison Organizations – SC22/WG20, TCA, the Unicode Consortium; including **7** Guests – from Canada, Myanmar and the USA, and **8** members from the Host organization, were present at different times during the meeting.

Name	Representing	Affiliation
Alain LaBonté	Canada	Secrétariat du Conseil du trésor du Québec
Patrick Andries	Canada	Conseils Hapax
V. S. (Uma) Umamaheswaran	Canada; Recording Secretary Host	IBM Canada Ltd.
He LIFENG	China	Yunnan Ethnic and Language Affairs Committee
He Xi Ge Du Ren	China	Inner Mongolia Ethnic and Language Affairs Committee
Jia La SEN	China	Inner Mongolia University
Li LAN	China	Institute of Linguistics of Chinese Academy of Social Sciences
Shen MING	China	Institute of Linguistics of Chinese Academy of Social Sciences
Su GUOPING	China	Informationization Office of Xinjiang Autonomous Region
Sun JIANGUO	China	Yunnan Ethnic and Language Affairs Committee
Tan YUTING	China	Yunnan Ethnic and Language Affairs Committee
Wang CUIYE	China	Department of Language Information Administration, Ministry of Education
Wushouer SILAMU	China	Computer department, Xinjiang University
Yin JIANGHONG	China	Beijing Founder Electronic Co., Ltd.
Zhao QINGLIAN	China	Yunnan Ethnic and Language Affairs Committee
Qin LU	China (HKSAR)	Hong Kong Polytechnic University
Chen ZHUANG	China Contributing Editor	Chinese Electronics Standardization Institute
Zhang ZHOUCAI	China; IRG Rapporteur Contributing Editor	UniHan Digital Technology Co. Ltd
Erkki Kolehmainen	Finland	Consultant
Reinhold Heuvelmann	Germany	Die Deutsche Bibliothek
Karljürgen Feuerherm	Guest, Canada	Wilfrid Laurier University
Ngwe Tun	Guest, Myanmar	Myanmar Unicode and NLP Research Center
Tun Tint	Guest, Myanmar	Myanmar Language Commission
U Thein Oo	Guest, Myanmar	Myanmar Computer Federation
Zaw Htut	Guest, Myanmar	Myanmar Unicode and NLP Research Center
Dean Snyder	Guest, USA	Johns Hopkins University
Peter Constable	Guest, USA	Microsoft Corporation
Alan Heighway	Host, Canada	IBM Canada Ltd.
Carol Stock	Host, Canada	IBM Canada Ltd.
Ibrahim Meru	Host, Canada	IBM Canada Ltd.
Larisa Iankelevitch	Host, Canada	IBM Canada Ltd.
Nancy MacIver	Host, Canada	IBM Canada Ltd.
Philips Benjamin	Host, Canada	IBM Canada Ltd.
Polina Gohshtein	Host, Canada	IBM Canada Ltd.
Terry Wessner	Host, Canada	IBM Canada Ltd.
Behdad Esfahbod	Iran	Sharif FarsiWeb, Inc.
Michael Everson	Ireland; Contributing Editor	Everson Typography
Kazuhito OHMAKI	Japan	National Institute of Advanced Industrial Science and Technology
Masuhiro SEKIGUCHI	Japan	Fujitsu Japan
Taichi KAWABATA	Japan	Nippon Telephone and Telegraph Corporation
Tatsuo L. KOBAYASHI	Japan	Justsystem Corporation
Yasuhiro ANAN	Japan	Microsoft Japan
Dae Hyuk AHN	Korea (Republic of)	Microsoft Korea
Kyongsok KIM	Korea (Republic of)	Pusan National University
Lin-Mei WEI	Liaison, TCA	Chinese Foundation for Digitization Technology
Shih-Shyeng TSENG	Liaison, TCA	Academia Sinica Computing Centre
Vladas Tumasonis	Lithuania (O-member)	Vilnius University, Lithuania
Domi TUMURTOGOO	Mongolia	Mongolian Agency for Standardization and Metrology
Aïcha Bouhjar	Morocco (O-member)	Institut Royal de la Culture Amazigh
Keld Simonsen	Norway	RAP

Name	Representing	Affiliation
Elżbieta Broma-Wrzesień	Poland	Telekomunikacja Polska, Poland
Kohji SHIBANO	SC2 Chair, Japan	Tokyo University of Foreign Studies
Toshiko KIMURA	SC2 Secretariat	JISC/ITSCJ
Asmus Freytag	USA Liaison - The Unicode Consortium; Contributing Editor	Unicode Inc.
Ken Whistler	USA; Contributing Editor; Convener – SC22/WG20	Sybase Inc.
Mike Ksar	USA; Convener	Microsoft Corporation
Michel Suignard	USA; Project Editor	Microsoft Corporation

Messrs. Umamaheswaran, Mike Ksar and Michel Suignard were assigned to the drafting committee.

2   Approval of the agenda

Input document:
2798   Updated Agenda with links Meeting # 45, in Markham, Ontario, Canada 21 – 24 June 2004; Ksar; 2004-06-20

The agenda in document N2798 was reviewed. The following are some of the changes identified:
- a.   Dr. Ken Whistler: I have SC22/WG20 liaison report. Added as agenda item 14.6
- b.   Mr. Michael Everson: I have contributions on 'Invisible Letter'. Change Maoretic to Masoretic in agenda item 7.10.
- c.   Dr. Ken Whistler: Agenda item 9.3 (Bhutanese characters) is a duplicate of 7.1.18. Item 9.3 was removed. Also item 7.1.20 (Combining Right Dot Above) is a duplicate of 7.1.11. Item 7.1.20 is removed.
- d.   Mr. Alain LaBonté: There may be a need for ad hoc on Tifinagh.
- e.   Mr. Chen Zhuang: Do we need an ad hoc for IPA extensions? Possibly not.

Mr. Mike Ksar: After we go through the agenda I will talk about ad hoc meetings. I will add new topics to the agenda only after I see the contributions.

The priority at this meeting will be for items 7.1, 7.2, and 9. Document N2773 has the disposition of comments in response to ballot comments on PDAM1. The project editor will go through the proposed disposition of comments in document N2773 – the first pass – dispose of those that do not require further discussion / ad hoc meetings, and identify those that need further discussion. We will revisit document N2773 at the end of all the relevant discussions. I have been requested to hold several ad hoc meetings. IRG and Defect report will be taken up on Wednesday. Some of the IRG items are related to disposition of comments. We can pick them up during the discussion of disposition of ballot comments. Agenda item 6 will be later. Item 5 contains documents mostly FYI and probably will be reviewed on Thursday AM, while Dr. Umamaheswaran is preparing the resolutions for us. I have currently ad hoc request for Tifinagh, Phags-pa, and Tai Lue scripts. I would like to know the names of participants for these ad hoc meetings.

Ad hoc groups:

Messrs. Asmus Freytag, Ken Whistler, Peter Constable, Michael Everson, Patrick Andries, Alain LaBonté, and Ms. Aïcha Bouhjar identified themselves as participants for the ad hoc on Tifinagh script. Mr. Patrick Andries will chair the ad hoc. This ad hoc meeting is scheduled for after 4 pm on Monday.

Tai Lue and Phags Pa ad hoc meetings will start at 08:00h on Tuesday. Messrs. Ken Whistler, Peter Constable, Chen Zhuang, Michael Everson, Masuhiro Sekiguchi, and three Chinese experts on Tai Lue, identified themselves as participants for the Tai Lue ad hoc.

Messrs. Ken Whistler, Peter Constable, Chen Zhuang, Michael Everson, Masuhiro Sekiguchi, and three Chinese experts on Phags-pa, identified themselves as participants for the Phags-pa ad hoc. The Phags-pa ad hoc will meet around lunchtime on Tuesday.

The draft agenda in document N2798 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.

3   Approval of minutes of meeting 44

Input document:
2653   Unapproved minutes meeting 44; Uma/Ksar; 2004-06-04

Minutes from the last meeting in document N2653 was reviewed by Dr. Umamaheswaran.

Dr. Umamaheswaran: We had accepted a few characters at the meeting, which are already included in the current amendment text. However, we missed taking relevant resolutions of acceptance of these characters.

Mr. Mike Ksar: We will take resolutions to record the missing items that are in PDAM1 but not in the resolutions set.

No other corrections or amendments were identified to the minutes and was adopted as written.

Relevant resolution:

M45.1 (Characters accepted at Meeting 44):   **Unanimous**
WG2 accepts for inclusion in Amendment 1 to ISO/IEC 10646: 2003 the following **5** characters:
    a. With reference to document N2608R2 to add Georgian characters:
        1D77 LATIN SMALL LETTER TURNED G
        1D78 MODIFIER LETTER CYRILLIC EN
      for encoding in the Phonetic Extensions block with glyphs as shown on page 26 of document N2832.
    b. With reference to document N2630 on Combining Double Ring Below:
        035A COMBINING DOUBLE RING BELOW
      for encoding in the Combining Diacritical Marks block with the glyph as shown on page 6 of document N2832.
    c. With reference to document N2560 on Cyrillic Characters for Siberian Yupik:
        04F6 CYRILLIC CAPITAL LETTER GHE WITH DESCENDER
        04F7 CYRILLIC SMALL LETTER GHE WITH DESCENDER
      for encoding in the Cyrillic block with glyphs as shown on page 10 of document N2832.
(Note: The above 5 characters were already accepted in M44 but missed in the resolutions; they were already included in current PDAM1 text.)

4   Review action items from previous meeting

Input document:
2653   **Unapproved minutes meeting 44; Uma/Ksar; 2004-06-04**

Dr. Umamaheswaran reviewed action items listed in section 16 of document N2653. Out of a total of 45 action items, 24 were completed, 8 were dropped and 13 were carried forward as 'In Progress' items. 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 67 in these minutes

4.1   Action items from previous WG 2 meetings -- M25 to M41

All action items recorded in the minutes of the previous meetings from M25 to M41 have been either completed or dropped. Status of outstanding action items from earlier meetings M42 to M44 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 N2253)
    p. Meeting 40, 2001-04-02/05, Mountain View, CA, USA (document N2353), and
    q. Meeting 41, 2001-10-15/18, Singapore (document 2403)

4.2   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.	Completed; see document N2762.
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.	Dropped.

4.3   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.	Dropped.
AI-43-6	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
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.
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.	Completed; see documents N2777, N2778, N2779, N2780 and N2781.
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.	Completed.
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.

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
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 Ol 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.	Completed; see documents N2774 and N2775
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.	Completed; see document N2776
AI-43-14	**All national bodies and liaison organizations**	
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.	Completed; see document N2776.
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 M44 – in progress.	Dropped.
k	To review and feedback on document N2544 - Revised proposal to encode the Manichaean script in the UCS; Everson; 2002-12-03. M44 – in progress.	Dropped.
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.	Dropped.

4.4 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 - with any corrections in section 3 of document N2753, this document you are reading)	Status
AI-44-1	**Meeting Secretary - Dr. V.S. UMAmaheswaran**	
a	To finalize the document N2654 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N2654R.
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 Ol Chiki script N2572 & N2573 107 compatibility Hanja Updated N2544 Manichaean 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	Completed; see agenda document N2798 for M45.
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	Completed; see resolution document N2654R.
AI-44-3	**Editor of ISO/IEC 10646: 2003 edition with merged parts: Mr. Michel Suignard with assistance from contributing editors**	
	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:	Completed; see SC2 N3714 containing PDAM 1 text.
a	**M44.1 (New Blocks – Scripts and Script Extensions):** 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	

Item	Assigned to / action (Reference resolutions in document N2654, and unconfirmed minutes in document N2653 for meeting 44 - with any corrections in section 3 of document N2753, this document you are reading)	Status
	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.

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.

Item	Assigned to / action (Reference resolutions in document N2654, and unconfirmed minutes in document N2653 for meeting 44 - with any corrections in section 3 of document N2753, this document you are reading)	Status
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.	
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.	

e	**M44.5 (Additions of individual characters):**
	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:	

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	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 2581R2. This character is a combining character. See consolidated chart and names list on pages	

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	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:

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	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 2612-7. 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

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	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 LONG23D4 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.	

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.	

Item	Assigned to / action (Reference resolutions in document N2654, and unconfirmed minutes in document N2653 for meeting 44 - with any corrections in section 3 of document N2753, this document you are reading)	Status
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.	
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: 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.	
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. 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.	
j	**M44.10 (Processing of Amendment 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 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.	
AI-44-4	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
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 - a question on BiDi property for new characters,	In progress. Currently covered by property request.
AI-44-5	**IRG Rapporteur (Mr. Zhang Zhoucai)**	
a	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: 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	In progress: sub item c – completed; sub item a (document N2644), sub item b (document N2659), sub items d and e (document

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	format (such as ddddd.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. 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).	N2807R / IRG 1024).
b	**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.	Completed. See document N2685.
AI-44-6	**The US national body (Ms. Joan Aliprand, Dr. Ken Whistler, Mr. Richard Cook)**	
a	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.	Completed.
b	To act on resolution M44.16 (Names for USIs): 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.	In progress.
c	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.	In progress.
AI-44-7	**The Irish national body (Mr. Michael Everson)**	
a	To update the roadmaps to reflect: - 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.	Completed; see latest roadmap snapshot document N2805.
b	To resolve differences between documents N2619 and N2620 on Saurashtrian script working with the authors of these documents and to submit an updated document.	In progress.
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.	Completed; see document N2713.
b	To take note of resolution M44.20 (Tibetan BrdaRten) 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.	Noted.

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	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.	

AI-44-9	**ROK national body (Professor Kyongsok Kim)**	
a	Act on the following part of resolution 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.	Completed; included in PDAM 1 text.
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.	Completed. Letter of appreciation has been sent.
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.	Completed.
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.	Completed; see documents N2699 and 2770.
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 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	Noted.
b	Review and feedback on Alternate Format Characters in document 2648.	Some feedback received from USA and Unicode.
c	Review and feedback on not-yet-encoded characters from document N2655 – Dictionary Symbols.	Dropped.
d	Review and feedback on Characters with Strikethrough from document N2656.	Dropped.
e	Review and feedback on basic principles for the encoding of Sumero-Akkadian Cuneiform in document N2585.	Completed; see documents N2664, N2698 and N 2786.
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	Completed.

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	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.	Completed.

5 JTC1 and ITTF matters:

5.1 Release of 10646:2003 announcement

Input document:
2742   Notice of Publication: ISO/IEC 10646: 2003, Information technology -- Universal Multiple-Octet Coded Character Set (UCS); SC2 Secretariat; SC 02 N3729   2004-04-16
Abstract   http://www.iso.ch/iso/en/CatalogueDetailPage.CatalogueDetail?CSNUMBER=39921&ICS1=35&ICS2=40&ICS3=

For your information – 10646: 2003 (1st edition of the combined parts 1 and 2) has been published. The abstract is on the ISO web site. There was no discussion.

5.2 Other documents

Documents posted to agenda items 5.xx for information only and on which there were no discussions are collected together in this section, in the same relative order as they appeared on the agenda.

2733   Comments Received on JTC 1 N 7335, Responses on Sophia Resolution #39-Development of a Solution for the Unambiguous Identification and Interworking of Codes Representing Countries, Language and Currencies (prepared on behalf of SC 32/WG 1); JTC1 Secretariat; J1N7409; 2004-03-29

2720   DTR Text for ISO/IEC 19769-Information technology-Programming languages, their environment and system software interfaces-Extensions for the programming language C to support new character data types; SC22 Secretariat; 2003-11-19
2721   Summary of Voting/Table of Replies - Summary of Voting for JTC 1 N 7296, DTR 19769, Information technology-Programming languages, their environments and software interfaces-Extensions for the programming language C to support new character data types; JTC1 Secretariat (N7375); 2004-02-19

2682   JTC1 Plenary 2003 Resolutions – includes approval to transfer project 14651 from SC22 to SC2; JTC1 Secretariat; 2003-11-21

6 SC2 matters:

6.1 Submittals to ITTF: 10646:2003 and proofing

Mr. Mike Ksar: It took us a very long time to proof read the final version of ISO/IEC 10646: 2003 edition of the standard - from summer of last year till physical publication in April 2004. I insisted that the document date is 2003 even though it was published in 2004.

6.2 Ballot results – PDAM 1 10646:2003

Input document:
2757R   Summary of Voting on PDAM1 10646:2003 with extracted attachments including Ethiopia and Tunisia but not WG2 document numbers N2738, N2739 and N2747; SC2 Secretariat SC02n3730; 2004-05-13

Document N2757R contains the summary of voting on ISO/IEC JTC 1/SC 2 N 3714 "Combined PDAM Registration and Consideration Ballot: ISO/IEC 10646: 2003/Amendment 1, Information technology -- Universal Multiple-Octet Coded Character Set (UCS) -- AMENDMENT 1: Glagolitic, Coptic, Georgian and other characters".

Of the total of 32 P-members – **14** Approved: Canada, Finland, France, Germany, Israel, Italy, Japan, RO Korea, Romania, Singapore, Sweden, Thailand and USA; Canada, France and USA had comments; **3** Disapproved: China, Ireland and Morocco; **2** Abstained: Denmark and Mongolia; and,
13 had not voted: Austria, Belgium, Egypt, Greece, Iceland, India, Iran, DPR of Korea, Poland, Russian Federation, Serbia and Montenegro, Slovenia, and Tunisia.

See item 7 on page 25 for disposition of ballot comments.

6.3 Application for registration – Japanese

Input documents:
2697   Application for Registration No. 233, Japanese Graphic Character Set for Information Interchange, Plane 1 (Update of ISO-IR 228); SC2 N3712 - SC2 Secretariat; 2003-12-24
2736   US & Canada National Body Comments on SC 2 N 3712, Application for Registration No. 233, Japanese Graphic Character Set for Information Interchange, Plane 1 (Update of ISO-IR 228); SC2 Secretariat; SC2N3727; 2004-04-06

Document N2697 is the registration proposal from Japan. Document N2736 contains the national body comments from Canada and the USA.

Discussion:
  a. Mr. Masuhiro Sekiguchi: We need that particular character set from JIS X0213 be registered. We don't need to provide any explanation.
  b. Dr. Umamaheswaran: The request from Canada was that the UCS to JIS X0213 mapping be made available as part of the registration.
  c. Mr. Masuhiro Sekiguchi: The JIS X0213 to UCS mapping is part of the standard. That is why we did not submit it as part of the registration proposal. The mapping is part of the standard following the national standardization procedure. The national body has some concern about the official procedure regarding providing the mapping. We have some concerns about the authenticity.
  d. Mr. Erkki Kolehmainen: Could you not attach the Japanese standard to the registration?
  e. Mr. Masuhiro Sekiguchi: The standard is available only as a paper document. It is not easy to attach as part of the registration. Another issue is the price of the standard. JIS standards are sold and not made available free. I can see the benefits of making the mapping information available in machine-readable form.
  f. Dr. Umamaheswaran: The benefits to the customers and vendors to have a SINGLE mapping table in easily accessible form are to avoid inconsistencies in different implementations.
  g. Mr. Mike Ksar: WG2 can take a resolution requesting Japanese national body.
  h. Mr. Yasuhiro Anan: The ISO 2375 procedure did not REQUIRE the mapping table. It was only a suggestion to provide the information. We decided not to include the mapping table.
  i. Mr. Michael Everson: As a member of the RAG my comment was to request the registration sponsor for the X0213 to UCS mapping table; that is the only way I could tell what the registration was about.
  j. Mr. Yasuhiro Anan: The mapping information is in paper form in JIS X0213. The delta / updates were made available.
  k. Mr. Taichi Kawabata: The information is available, but only for sale as part of JIS X0213.

Relevant resolution:

M45.22 (JIS X0213 mapping information):   **Unanimous**

With reference to documents N2697 and N2736, in the interest of consistent interchange and mapping between ISO/IEC 10646 and JIS X0213 and the associated benefits to the users of the standards, WG2 invites Japanese national body to consider adding the mapping information to the registration.

6.4 Proposal for new working group in SC2

Input documents:
2730   Proposal to for a new working group in SC 2 for the ISO/IEC 14651 Ordering Project; Canadian NB; 2004-03-24 (SC2 N3725)
2785   Response to the proposal to form a new Working Group in SC2 for ISO/IEC 14651; Ireland NB; 2004-06-07
2794   US Response to Canadian contribution, SC2 N3725, to create a separate working group under SC2 for ISO/IEC 14651 project; SC2 Secretariat, 02n3741; 2004-06-10

Mr. Mike Ksar: I would like to take a resolution reaffirming our last meeting resolution to transfer to WG2.

Discussion:
  a. Mr. Alain LaBonté: As the editor of ISO/IEC 14651, the transfer was to SC2. There is no need to meet along with WG2. Why is this a matter for WG2? As the editor and as a WG2 expert, I would say NO.
  b. Mr. Mike Ksar: We took a position in WG2 last October via a resolution.

c. Mr. Reinhold Heuvelmann: Can a resolution be revised?
d. Mr. Mike Ksar: Yes.
e. Mr. Michael Everson: I would like to see what the editor has to say.
f. Mr. Alain LaBonté: Most issues identified in the US response are not issues. In fact most contributions to ISO/IEC14651 are about stable references. We don't have to discuss these at every WG2 meeting. All the meetings of the ISO/IEC 14651 working group can be with either SC2 or WG2, we can have flexibility. It is much more flexible to have a different working group.
g. Dr. Asmus Freytag: There are of course additional alternatives – new WG or not. Issue of repertoire extensions and follow on to ISO/IEC 14651 are in close relation to each other. In WG2 we felt that it would be expeditious by not separating these administratively in two different working groups. There are possible alternatives. Need for flexibility is there.
h. Mr. Mike Ksar: I would like to know if we should reaffirm the last meeting in October or modify as Germany suggested.
i. Dr. Asmus Freytag: I am in favour of reaffirming the resolution. There are other means to achieve the flexibility.
j. Dr. Ken Whistler: The US national body is quite clear – it is stated in document N2794. We support the resolution of WG2. We would like to see it reaffirmed.
k. Mr. Michael Everson: Apparently SC2 has modified the scope per WG2 resolution.
l. Dr. Umamaheswaran: There were two resolutions from WG2. M44.13 was on the transfer from SC22 and modifying the scope of SC2, and M44.14 was on working group assignment within SC2. We are discussion only the second resolution - M44.14 here.
m. Mr. Reinhold Heuvelmann: I would like to read the proxy input from Sweden.
n. Mr. Mike Ksar: WG does not have proxies. That would be at the SC2 level.
o. Mr. Erkki Kolehmainen: I am in favour of reaffirming the resolution. We can guarantee the synchronization better. There are mechanisms in the working group to achieve flexibility. We have seen two different working groups in SC2. The same working group means automatic absolute synchronization.
p. Mr. Alain LaBonté: If what you say is true then there is a need only for a single JTC etc. It is not absolutely necessary to have the two standards at the same time. We have to finish the work on ISO/IEC 10646 before we can reference it in ISO/IEC 14651.
q. Dr. Umamaheswaran: Do we want to really reaffirm the resolution?
r. Mr. Mike Ksar: There is no need to have another resolution since the current resolution stands.
s. Mr. Keld Simonsen: Can we make a comment on it?
t. Mr. Reinhold Heuvelmann: Can we modify it? I would like to agree with Mr. Alain LaBonté.
u. Dr. Ken Whistler: In response to the question raised by Dr. Umamaheswaran – it will allow the national bodies in this room to formally express their opinion – since they did not all participate in the October meeting.
v. Mr. Alain LaBonté: We have proxies and we are not allowed to use them in WG2.
w. Dr. Umamaheswaran: I suggest that the current resolution stand on its own. On behalf of Canada I have to say that we cannot support any new resolution; we abstained in October.
x. Mr. Mike Ksar: I will bring it up as part of the convener's report to SC2 at the plenary.

Disposition: No further action is needed. WG2 resolution from meeting M44 (see document N2654) M44.14 (Future assignment of 14651 within SC 2) stands.

6.5   SC22 request to SC2/WG2 to specify which characters are identifiers

Input documents:
2681   Letter Ballot on the Japanese National Body Contribution to JTC 1/SC 22 to Request that JTC 1/SC 2 Consider Putting Specification of the Character Repertoire for Identifier on the SC 2 Programme of Work; SC22 Secretariat; 2003-10-23
2722   N3725-Summary of Voting on N3673, Letter Ballot on the Japanese National Body Contribution to JTC 1/SC 22 to Request that JTC 1/SC 2 Consider Putting Specification of the character Repertoire for Identifier on the SC 2 Programme of Work; SC22 Secretariat (N3725); 2004-03-11
2818   Letter from SC22 to SC2 on language identifiers; SC22, via SC2 Secretariat; 2004-06-18

Mr. Mike Ksar: TR 10176 is currently under SC22/WG20. Document N2681 requests SC2 to add a program of work to specify characters suitable for identifiers. This is NOT a request for transfer of the

work of SC22/WG20. Document N2818 is a letter from the chair of SC22 to SC2 chair and summarizes the SC22 request very well:

> "SC 22 would like to ask SC 2/WG 2 to specify those characters which they believe are suitable for identifiers, leaving each programming language standard (SC 22 and other SCs and work programs generally) free to specify its own identifier-character list after considering the tradeoffs between its requirements and the advantages of a consistent, single, identifier specification in the same manner as the current TR 10176 recommends that programming language standards can extend or restrict the identifier character list."

Discussion:
- a. Mr. Alain LaBonté: I find this strange that SC22 asks SC2 for identifier characters.
- b. Mr. Mike Ksar: This was done by SC22 by a ballot. It is a work item under SC22/WG20 currently.
- c. Mr. Alain LaBonté: I think we should seek input from SC22 for guidelines as to what they want as identifier characters. See Agenda item 6.18 – document N2818.
- d. Dr. Asmus Freytag: It looks like document N2818 is precisely what Mr. Alain LaBonté has referenced and has more details on what SC22 needs regarding classification of characters. In addition they are asking for guidance on transformations similar to case transformations. This is an area in which Unicode consortium has done some work – in the form of UTR#30. We are prepared to provide the input to SC2 or SC22 in a format suitable to them. There are experts here who can give input on the topic.
- e. Dr. Umamaheswaran: If the requirement is to be able to keep the Annex A of TR10176 synchronized with the repertoire of ISO/IEC 10646, WG2 could possibly entertain that. However, if the scope is beyond the synchronization aspect then we have to rethink about it.
- f. Mr. Keld Simonsen: Properties of characters beyond the repertoire has been dealt with by SC22 such as those by POSIX group. SC2 should not go beyond the encoding aspects.
- g. Mr. Mike Ksar: SC22 has taken a decision based on ballot and has requested SC2. I was at the SC22 plenary too.
- h. Mr. Erkki Kolehmainen: The authenticity of this document cannot be questioned any more. WG2 is the arena where both ISO/IEC 10646 and Unicode folks meet and we can give meaningful input to SC22. They will be in synch.
- i. Mr. Keld Simonsen: The discussion on identifiers has been along the lines that it is not necessary to be in synch with 10646. It would be OK to be updated every 3 to 5 years. They need more stability for Programming Languages. ISO and Unicode people also meet in SC22/WG20 – WG2 is not the only arena where they meet.
- j. Mr. Mike Ksar: I would like to recommend to SC2 that we would be more than willing to help out in keeping the Annex A in synch with 10646.
- k. Mr. Erkki Kolehmainen: They expressly state that SC22 wants the synchronization to happen. I am personally aware of situations where the synchronization is necessary. I am glad to see this being requested of SC2.

Disposition: Will recommend to SC2 that WG2 would do the work needed to satisfy the request.
Relevant resolution:

M45.23 (Request from SC22 to SC2/WG2):   **Objection:** Norway
  Accept: Canada, China, Finland, Germany, Iran, Ireland, Japan, Korea (Republic of), Mongolia, Poland and USA
With reference to document N2818, WG2 accepts the request from SC22 to classify characters in ISO/IEC 10646 for their suitability for use in identifiers. WG2 understands the importance that such information is available at the same time characters are added to ISO/IEC 10646. SC22 is invited to contribute to this work.

6.6   Romanian proposal for amendment to ISO/IEC 6937
Input document:
2783   Romanian Proposal for ISO/IEC 6937 Amendment; National Body of Romania; 2004-06-02

Mr. Mike Ksar: This document is on WG2 web site. It is a request from Romania to amend ISO/IEC 6937 to add two characters.

Discussion:
    a. Mr. Erkki Kolehmainen: I would consider this proposal as something SC2 should not do. ISO/IEC 6937 is not kept up to date at all. It is incomplete for all practical purposes – to update this standard for Romanian standard reference purposes would not make sense. We would issue a new version of the standard – implying that the standard is indeed up to date. It is out of date on various other issues and is not covered by the Romanian request.
    b. Dr. Umamaheswaran: WG3 has not been keeping the standards ISO/IEC 6937 and other standards like the different parts of ISO/IEC 8859 in synch. Also ISO/IEC 6937 is not being used in practice. Our recommendation should be for using ISO/IEC 10646, and suggest to SC2 to ask Romania to remove references to ISO/IEC 6937 in their national standards.
    c. Mr. Keld Simonsen: I am the editor of ISO/IEC 6937. We had previous recommendations for updates to ISO/IEC 6937 and SC2 has decided not to pursue the proposed updates. We should suggest they pursue alternate means such as referencing sub repertoires etc.
    d. Dr. Ken Whistler: We are strongly in agreement with Norway on this. We have submitted to SC2 not to entertain Romanian request.
    e. Mr. Michael Everson: The only user of ISO/IEC 6937 that I am aware of is Netherlands Police. We should be encouraging Romanians and others to use ISO/IEC 10646.

Disposition: Request SC2 to communicate to Romania to not entertain the new work item proposal, and to recommend to Romania that they remove the reference to ISO/IEC 6937 from their national standard. Relevant resolution:

M45.21 (Request for revision to ISO/IEC 6937 from Romania):   **Unanimous**
With reference to the Romanian proposal to revise ISO/IEC 6937 in document N2783, WG2 recommends to SC2 not to entertain this request for the following reasons:
    • 6937 is not in wide use
    • ITU Telematics recommendations which used 6937 have been withdrawn
    • 6937 should be considered as one of the stabilized standards encouraging the use of ISO/IEC 10646 as the strategic alternative.
To resolve the problem identified by Romania, instead of requesting a revision to ISO/IEC 6937, SC2 is requested to communicate to Romania, that they consider removing the reference to ISO/IEC 6937 from their national standard.

6.7   Other documents

Documents posted to agenda items 6.xx for information only and on which there were no discussions are collected together in this section, in the same relative order as they appeared on the agenda.

2678   **Project Subdivision Proposal for ISO/IEC 10646: 2003/Amendment 1 (Attachment WG 2 N 2676); SC2 Secretariat; 2003-10-31**
2678b   **Actual ballot for voting on subdivision of work; SC2 Secretariat; 2003-10-31**
2706   **10646:2003 Amendment 1 Subdivision ballot results; SC2 Secretariat; 2004-02-03**

2711   **SC 2 Proposed Modification to the SC 2 Programme of Work [JTC 1 N 7371]; SC2 Secretariat (sc02n3719); 2004-02-23**

SC2 Program of Work: **http://anubis.dkuug.dk/jtc1/sc2/open/pow.htm**
2797   **Secretariat Report to the 13th Plenary meeting of ISO/IEC JTC1/SC2, Markham, Ontario, Canada 2004-06-24/25; SC2 Secretariat, 02n3737; 2004-06-10**

2689   **SC2 ballot statistics - cumulative 5 past years (SC02n3706); SC2 Secretariat; 2003-11-28**

2679   **SC2 Business Plan – JTC1 Plenary – November 2003; SC2 Chair; 2003-10-31**
2688   **SC2 business plan presentation (.ppt) updated for the JTC1 plenary - 2003-11-20; SC2 Chair - Shibano-san; 2003-11-20**

2796   **Report of Registration Authority of ISO/IEC 2375 to the 13th Plenary Meeting of ISO/IEC/JTC1/SCC2; SC2 Secretariat, 02n3738; 2004-06-10**

2749   **WG2 Report to the 13th SC2 plenary meeting in Toronto – June 2004; Ksar; 2004-06-25**

2734   **INCITS response to ISO and ANSI statements concerning availability of ISO Codes; INCITS Secretariat; in031265; 2003-10-17**

2729   **Nomination of Mr. Tatsuo Kobayashi as the new Chairman of SC 2; SC2 Secretariat; SC2 N3726; 2004-03-17**

2727   **List of SC 2 Standards for 2005 Systematic Review; ITTF via SC2 Secretariat; SC2 N3723; 2004-03-17**
2728   **List of SC 2 Standards for 2006 Systematic Review; ITTF via SC2 Secretariat N3724; 2004-03-17**

2726   **Offer from Canada to Establish and Provide Support for a JTC 1 Ad Hoc Group on "JTC 1 Vocabulary" and Call for Participants [JTC 1 N 7380]; SC2 Secretariat; SC2 N3722; JTC1 N7380; 2004-03-17**

2691   **14651 Amendment cover, ballot, text and tables   SC2 Secretariat 023710c, b, text, tables also N2691-fr; SC2 Secretariat; 2003-12-09**
2691-fr   **14651 Amendment cover, ballot and text - French version (023710c, b, text); SC2 Secretariat; 2003-12-09**
2725   **Summary of Voting on SC 2 N 3710: ISO/IEC 14651/PDAM 2, International string ordering and comparison -- Method for comparing character strings and description of the common template tailorable ordering -- AMENDMENT 2; SC2 Secretariat; SC2 N3710; 2004-03-17**

2690   **Proposal for New Work Item on Amendment to ISO/IEC 14651 and SC2 NP letter ballot (02n3707,02n3707b); SC2 Secretariat -; 2003-12-09**
2724   **Summary of Voting on SC 2 N 3707: Proposal for New Work Item on Amendment to ISO/IEC 14651, International string ordering and comparison -- Method for comparing character strings and description of the common template tailorable ordering; SC2 Secretariat; SC2 N 3707; 2004-03-17**

2715   **Ordering rules for Hangul; CTT suggestion - feedback on 14651 Amendment 2; Kent Karlsson; Expert contribution; 2004-03-09**
2716   **Indic scripts collation grouping; CTT suggestion - feedback on 14651 Amendment 2; Kent Karlsson; Expert contribution; 2004-03-09**
2717   **Ordering rules for Khmer, Thai, and Lao; CTT suggestion - feedback on 14651 Amendment 2; Kent Karlsson; Expert contribution; 2004-03-09**
2718   **Ordering rules for Khmer, Thai, and Lao; suggestions for annex C.2 changes and a new annex B.5 - feedback on 14651 Amendment 2; Kent Karlsson; Expert contribution; 2004-03-09**

7   Disposition of Comments on PDAM1

Input documents:
2773   **Draft Disposition of Comments; Michel Suignard, Project Editor; 2004-06-11**
2764   **Provisional Draft of Unicode 4.1 Additions - PDAM; Asmus Freytag, Contributing Editor; 2004-06-07**
Output documents:
2831   **Final disposition of comments Amendment 1; Michel Suignard - Project Editor; SC2 Secretariat Reference 02n3759; 2004-06-23**
2832   **Summary of repertoire for Amd 1 and PDAM 2; Asmus Freytag; 2004-06-23**

Mr. Michel Suignard: Document SC2 N3714 is the PDAM1 text. Document N2773 includes the ballot comments (other than the source references) and proposed dispositions. If there is a specific agenda item related to one of these comments I would defer it till discussion.

General items:
Resolutions 44.7, 44.8 and 44.9 covered the source reference related items. Many of these are from HKSAR. I reference them. CJKU_SR.txt has a number of changes as a result of last meeting including K4 source corrections. These are in the amendment.

Specific comments from national bodies:

Canada (Yes with Comments):
        a. Tifinagh: Accepted in principle. See discussion and disposition under item 7.1.5 on page 34.
        b. Canopy: Withdrawn by Canada. See discussion under item 7.1.6 on page 35.
China (Negative):
        G1 -- BrdaRaten is more important than any of the scripts in this amendment.
                Noted. Relevant WG2 resolution M44.20 on BrdaRaten was quoted in response.
        T1, T2 – importance of Tai Lue and New Tai Lue to the Dai user community in China
                Noted.
        T3 to T6 - Tai Lue related
                An ad hoc on Tai Lue discussed and recommended dispositions. Some comments were accommodated others could not be. See discussion on Tai Lue ad hoc in item 7.2.1on page 43.

T7 to T14 – Phags-pa related comments

An ad hoc on Phags-pa discussed and recommended disposition to these comments. Some comments were resolved others were not resolved. The script is moved to Amendment 2 to give more time for national bodies to resolve the open issues. See discussion on Phags-pa in item 7.2.2 on page 43.

Ethiopia (Yes with Comments):

Request for Ethiopic extension based on ES 781: 2002.
See discussion on Extended Ethiopic under item 7.1.4 on page 33.
The comments are accepted in principle - with revisions to positions and names of characters, and will be in Amendment 1.

France (Yes with Comments):

Tifinagh: Accepted in principle.
See discussion and disposition under item 7.1.5 on page 34.

Ireland (Negative):

T1 - Base characters / Format Characters
   Accepted in principle. New definitions, based on Unicode V4.0, are proposed.
T2 and T3– related to Coptic
   Accepted in principle. See discussion and disposition under item 7.2.3 on page 44.
T4 (also US T.1) – 0238 Latin Small Letter TH with Strikethrough
   Accepted – moved to 1D7A.
T5 to T7 – Rename 03FD, 03FE, 03FF – from 'Reversed Greek … ', to 'Greek .. Reversed …'.
   Accepted.
T8 and T9 – Remove DOT ABOVE in names for 0767 and 0768 Arabic Noon characters with Dots Below. Noon implies the Dot Above.
   Accepted.
T10 – Rename 097D to Devanagari Letter Glottal Stop.
   Accepted.
T11 – Tai Lue related
   Accepted in principle. See discussion on Tai Lue ad hoc in item 7.2.1on page 43.
T12 – Rename 0279 to Latin Small Letter Insular G
   Accepted.
T13 – Add Hryvnia and Cedi currency symbols
   Accepted – based on discussion in item 7.1.16 on page 39.
T14 (also US comment T10) – rename 0279 to Hammer and Pick
   Accepted
T15 – Rename 2695 to STAFF of Aesclepius and fix its glyph to be erect.
   Discussion:
      a. Dr. Asmus Freytag: the Latin transliteration is more often is used.
      b. Mr. Michael Everson: English dictionary uses STAFF instead of ROD.
      c. Dr. Umamaheswaran: Does the name change warranted?
      d. Mr. Michael Everson: Yes.
   Accepted
T16 -- Ireland withdrew the comment.
T17 -- Glagolitic related.
   Name changes (also US comment T.8)
   Accepted in principle. 'TROKUSTASTI' should be 'TROKUTASTI'. The following
   Name changes are accepted:
         2C0C GLAGOLITIC CAPITAL LETTER DJERVI
         2C23 GLAGOLITIC CAPITAL LETTER YU
         2C2D GLAGOLITIC CAPITAL LETTER TROKUTASTI A
         2C3C GLAGOLITIC SMALL LETTER DJERVI
         2C5D GLAGOLITIC SMALL LETTER TROKUTASTI A.
   New character 'Glagolitic Suspension Mark'

Accepted in principle. See item 7.1.20 on page 41.
1DC2 Combining Suspension Mark was accepted.
T18 – Coptic related
Accepted in principle. See discussion and disposition under item 7.2.3 on page 44.
T19 – Phags-pa related
See discussion on Phags-pa in item 7.2.2 on page 43.
T20 – 6 Additional Phonetic Symbols
Partially accepted. See discussion and disposition under item 7.1.7 on page 36.
T21 – Combining Right Dot Above
Accepted in principle. See discussion and disposition under item 7.1.11 on page 37.
T22 – Additional Hebrew Characters
Accepted in principle. See discussion and disposition under item 7.1.10 on page 36, and under item 7.1.12 on page 37.
T23 – Two Bhutanese punctuation signs
Accepted in principle. See discussion and disposition under item 7.1.17 on page 39.

E1 to E3 and E5
All Accepted.
E4 related to Coptic
Based on ad hoc discussion, proposed glyph changes were accepted.
Dr. Asmus Freytag: If the glyph changes are accepted --- these should be published as a CORRIGENDUM.
Mr. Michel Suignard: It will be identified as a change in the Amendment text.

Morocco (Negative):
Tifinagh: Accepted in principle.
See discussion and disposition under item 7.1.5 on page 34.

Tunisia (Yes with Comments):
Tifinagh: Accepted in principle.
See discussion and disposition under item 7.1.5 on page 34.

USA (Yes with Comments):
T1 (also Ireland T4) – Move 0238 to 1D7A.
Accepted.
T2 Correct the glyph for 21E45 to what it was in 10646-2: 2001.
Accepted – also part of IRG document.
T3 – Annex E on Mirrored Characters – Informative Annex – not kept up to date. These changes are needed to synchronize with the corresponding Unicode BiDi mirroring-related specification.
Accepted in principle. New Annex E.1 will reflect the changes (list of character names and code positions).
T4 – HKSCS uses the PUA for many characters they need. US is requesting accelerating these for adding several of these to avoid using the PUA.
Accepted in principle. See discussion and dispositions under item 7.1.1 on page 29, and under item 7.1.2 on page 30.
T5a (also Ireland T12) – Change name for 1D79 LATIN SMALL LETTER INSULAR G
Accepted.
T5b – Phonetic extensions – changes and additions are proposed.
Accepted in principle. See discussion and dispositions under item 7.1.19 on page 41.
The final outcome affects new collections and some collections becoming full and thence fixed.
T6 – Annex L - Character naming guidelines – enhance to allow Minus in different places – arising out of Phags-pa.
Accepted.
T7a - Coptic ---US withdrew this comment.

T.7b (also Ireland T18) – Coptic – change KHRISTOS to STAUROS in name of 2CBD.
>   Accepted in principle. It was moved to 2CE7 to resolve the Irish comment on Coptic.
>   See also the discussion and disposition under item 7.2.3 on page 44.

T.8 (also Ireland T17) - Glagolitic name changes – accepted (see under Ireland T17 above).

T9 – Greek Zero Sign
>   Accepted in principle. See discussion and disposition under item 7.1.15 on page 39.

T10a (also Ireland T14) – Rename 2692 to Hammer and Pick
>   Accepted.

T10b – Four additional Math Symbols
>   Accepted in principle. See discussion and disposition under item 7.1.13 on page 38.

T11 – Five new Arabic characters
>   Accepted. See discussion and disposition under item 7.1.14 on page 39.

T12 – New Tamil Digit Zero
>   Accepted. See discussion and disposition under item 7.1.8 on page 36.

T13 – Alternate Format Characters – document N2648 authored by Dr. Umamaheswaran –
identified a number of inconsistencies. US proposes the following changes to the standard.
>   A formal definition of Alternate Format Characters – is proposed to be Format
>   Characters. Some of the proposed changes are in response to Irish comments. Read
>   the proposed changes and get back to the editor. Annex U is removed and the material
>   merged – some will go to clause 26.1 and other parts to Annex F.6. Clarification is made
>   to current text and list of characters under different categories. Also include Irish T1 on
>   Format Characters in new wording.

Accept – assuming there is no objection to the proposed wordings by the editor.

T14 – CJK Source references to the revised JIS X0213 is requested.

There was extensive discussion on this subject – see item 7.1.3 on page 31.

Japan, US, the editor should ad hoc to come to an understanding on the underlying principle.

See document N2831 for the final disposition of the US comment.

T15 – Order of Tai Lue. China comments T1 to T4 address these as well.
>   Accepted in principle. See discussion on Tai Lue ad hoc in item 7.2.1 on page 43.

E.1 – Glyph at 031A in charts is wrong during Chart creation.
>   Accepted.

Prior to the review of draft resolutions, Mr. Michel Suignard went through text covering repertoire
addition/modification, covering explicitly:
>   Tifinagh
>   Tai Lue (now new Tai Lue)
>   Phags-pa - now in Amendment 2
>   Ethiopic extension in Amendment 1
>   Coptic
>   Hebrew characters
>   HKSCS and GB18030 PUA characters
>   Phonetic symbols
>   Math
>   Arabic etc.

>   JIS X 0213 source information:

Mr. Michel Suignard: Disposition of US T14 concerning this topic now describes the need for a
new J-source reference for 8 of the 10 that had no J reference yet in ISO/IEC 10646. For the two
others a note will be drafted to explain the difference between source and mapping purposes.

Mr. Masuhiro Sekiguchi: I agree with the disposition.

Mr. Michel Suignard: Now after the above disposition I think that all negative votes have been
accommodated. I would like to ask experts from China, Morocco and Ireland to confirm.

Ms. Aïcha Bouhjar: I agree (for Morocco).
Mr. Michael Everson: I agree (for Ireland).
Mr. Chen Zhuang: I agree (for China).

Mr. Michel Suignard: (Seeking further comments and getting none), I expect the disposition to be adopted unanimously.

Disposition: Progress Amendment 1 to next stage; Final dispositions of comments are in document N2831.
Relevant resolutions:

M45.14 (Disposition of ballot comments):   **Unanimous**
With reference to the PDAM1 ballot comments and their proposed dispositions in document N2737, and based on the discussion at the meeting, WG2 accepts the final disposition of comments in document N2831, which includes the responses to ballot comments having corresponding proposals for new scripts or characters, several of which are captured in individual resolutions in this document. *(Note: a total of **515 new** characters added, **52 characters moved** to Amendment 2 from the current **810,** leaving a net of **1273** additions in Amendment 1.)*

M45.15 (Progression of Amendment 1):   **Unanimous**
WG2 instructs its editor to prepare the FPDAM text based on the disposition of comments in document N2831 and the various resolutions from this meeting for additional characters and scripts for inclusion in Amendment 1 to ISO/IEC 10646: 2003, and forward to SC2 secretariat for FPDAM processing, with unchanged schedule.

7.1   Repertoires not originally in PDAM1 - requested for inclusion in ballot comments

7.1.1   HKSCS and GB18030 PUA characters

Input documents:
2757R   Summary of Voting on PDAM1 10646:2003 with extracted attachments including Ethiopia and Tunisia but not WG2 document numbers N2738, N2739 and N2747; SC2 Secretariat SC02n3730; 2004-05-13
2807   HKSCS and GB 18030 PUA characters, background document; Michel Suignard; 2004-06-17
2808   HKSCS and GB 18030 PUA characters, request for additional characters and related information including the proposal summary form; Michel Suignard; 2003-06-17
2791   Evidence for the Earth and Fuse proposed characters; Eric Muller; 2004-06-10

Mr. Michel Suignard. Document N2807 is the background document. Document N2808 proposes the additions. The goal is to provide standardized code positions for the current HKSCS and GB18030 characters that are currently mapped to PUA code positions of ISO/IEC10646 in these standards, to be able to use them in open interchange. A new block containing basic CJK Unified Stroke Characters in CJK Unified area is proposed. See discussion under item 7.1.2 on page 30. Others are being proposed as regular CJK Unified ideographs. Four characters are proposed to be USIs. Two others are for encoding in the Miscellaneous Tech Block. Tables on pages 2-3 show suggested encodings for the PUA-mapped characters. Page 4 talks about HKSCS proposed extensions, and GB18030 PUA characters. The characters are organized into CJK Basic Strokes, CJK Unified Ideographs, Latin letter, and various symbols. Note that many of PUA characters look like other existing characters but they have a different position within a character box. The above is the summary of what needs to get done to remove the dependency on PUA and improve the interchange for Asian community, we should get these in the standard without delay. The US Technical Comment T.4 also addresses this topic.

Discussion:
  a. Mr. Yasuhiro Anan: There are characters submitted by HKSAR for inclusion in ext C. 8CBB – mapping is wrong --- the glyph has to be checked with HKSAR.
  b. Dr. Qin Lu: Proposed 8CBB to 9FAB – HKSCS – mapping is OK, Glyph has to be corrected – the left half. The glyph error was fixed in code position 9FAB.
  c. Dr. Qin Lu: If this proposal is accepted, we are recommending to HKSCS that we will not accept these characters in CJK Extension C. If there is a character under Big-5, the migration to ISO/IEC 10646 via mapping was provided. The characters not in UCS were in PUA.
  d. Mr. Michael Everson: We don't see any problem in putting these in Amendment 1. It is not a new script.

e. Mr Taichi Kawabata: Why not move 9FA6—etc. out of BMP? These characters are in Extension C – and being moved out?

f. Mr. Michel Suignard: There is room in the BMP for these. There is some urgency for these characters and cannot wait maturing of Extension C. If IRG wants to put some Extension C characters on the remaining positions in the BMP, that is fine too.

g. Mr. Mike Ksar: These are stable and discussed in IRG as well.

Disposition: Accept the proposed additions for HKSCS and GB18030 support. Ballot comment T.4 from the US is resolved – Accepted in principle.

Two characters 23DA EARTH GROUND, 23DB FUSE are proposed --- glyphs in document N2808.
Disposition: Accept the CJK Unified Ideographs proposed 9FA6—9FB1; move up 9FB3-9FB4 by one to 9FB2 and 9FB3. Correct the glyph for 8CBB in U+9FAB. Source references will be updated to H- (Third column) in CJKU_SR.txt file.

Table on top of page 2 top: Accept 4491 and 23551 – update glyph for 23551 to look like what is in Extension B for the corresponding ideograph.
Change code positions in Table 2 on page 3 from 9FB5-9FBC to 9FB4-9FBB, with G9-FE59 --- for source references in CJKU_SR.txt.

Table 3 on page 3 --- Add G9-source references for 20087 --- 241FE. They are already encoded.

A new Block called 'Vertical Forms' from FE10 to FE1F.
Code positions and names on pages 3 and 4 FE10—FE19 (use document N2764 instead of document N2808 due to some errors that have crept in).
No impact on Source References because these have names.
The glyphs may look like other characters in the standard, but they are in different positions within the character bounding boxes.
Action item: Roadmap to be updated to reflect new blocks.

Second table has USIs. Accepted these in principle. We will await more text around the USIs to be able to process in current amendment.

Action item: Editor to make note to ensure these USIs are in the standard when more USI text has been approved for inclusion.

Relevant resolution:

RESOLUTION M45.8 (PUA characters from HKSCS-2001 and GB18030):   **Unanimous**
With reference to the ballot comments and proposals in documents N2757R, N2807, N2808 and N2817, on encoding of existing PUA characters from HKSCS-2001 and GB18030, WG2 accepts the proposed characters for inclusion in Amendment 1 of ISO/IEC 10646: 2003, modified during the discussion and as documented on pages 11 to 13 of disposition of comments document N2831. The corresponding CJK source references from document N2808 are also accepted. See also charts on pages 53, 54, 72, 75, 76, 85 and 86 in document N2832. *(Note: total of **50 new** characters.)*

7.1.2   CJK Basic Strokes

Input documents:
2757R   **Summary of Voting on PDAM1 10646:2003 with extracted attachments including Ethiopia and Tunisia but not WG2 document numbers document N2738, document N2739 and document N2747; SC2 Secretariat SC02n3730; 2004-05-13**
2817   **Proposal to add a block of CJK Unified Basic Strokes to the UCS; Thomas Bishop and Richard Cook; 2004-06-07**

Mr. Michel Suignard: Document N2817 is a proposal from Thomas Bishop and Richard Cook consists of Unified basic Strokes to UCS. It is based on the work of CDL – CJK Unified Ideographic Glyph Description language.   The proposal in documents N2807 and N2808 is a subset of what is in document

N2817. Same terminology and names are used between the papers. The code positions in document N2817 are xx values, whereas those in document N2808 are suggested code positions.

Discussion:
  a. Mr. Yasuhiro Anan: The CDL was demonstrated to IRG. It was not evaluated by any of the IRG members – I would like to hear from the HKSAR representatives.
  b. Dr. Qin Lu: We have not seen document N2817.
  c. Mr. Zhang Zhoucai: The national body feedbacks were supposed to be given to me as the IRG Rapporteur on this topic. Most feedback is positive – CJK Strokes should be encoded separately. What needs further study is the components, and mixing with other ideographs.
  d. Mr. Yasuhiro Anan: Recognizing these as basic strokes has been done. But further research is needed.
  e. Dr. Qin Lu: The set that is proposed is NOT complete. For the interest of IRG we need a more complete set.
  f. Mr. Michel Suignard: Can we have two-staged approach --- go with a subset needed to solve for the PUA problem first?
  g. Dr. Qin Lu: It is only my personal opinion. All the HKSCS strokes are there. However, the order may be questioned --- for some it may be important.
  h. Mr. Mike Ksar: Is there any way we can get these verified by other interested parties like HKSAR. Should we leave holes?
  i. Dr. Ken Whistler: There is no well-defined universal approach for ordering these strokes. It is not a good idea to leave any holes at this time. We have to get agreement that a block be reserved. IRG should take a look at the ordering and populating.
  j. Mr. Yasuhiro Anan: If we take a decision on a new block, the name Unified may not be appropriate.
  k. Dr. Ken Whistler: CJK Basic Strokes – would be a better name.
  l. Mr. Zhang Zhoucai: Are these components or basic strokes?
  m. Mr. Michel Suignard: There is some interpretation of what is basic what is component etc. If you start going the component route there is NO limit. A consensus on what a basic stroke is needed. As you see in document N2808 some are excluded because they were multiple stroke characters. We should not go the component direction.
  n. Mr. Mike Ksar: The next stage of this amendment is FPDAM. We can still make technical comments on this. We may not have to wait for PDAM2.

Disposition:
      Accept a new block - 31C0 to 31EF (3 columns, 48 characters) named CJK Basic Strokes.
      Populate with 31C0 to 31CF (see table in document N2808) for names.
      Move up (in document N2808) 9FB2 to position 31C3 moving remainder down. Names to be determined. Remove 'Unified' from names of characters.
See relevant resolution M45.8 on page 30 above.

7.1.3 JIS X-0213: 2004 and CJK source reference file

Input document:
2757R   Summary of Voting on PDAM1 10646:2003 with extracted attachments including Ethiopia and Tunisia but not
             WG2 document numbers document N2738, document N2739 and document N2747; SC2 Secretariat
             SC02n3730; 2004-05-13

Discussion:
  a. Mr. Michel Suignard: There is a US technical comment T.13 - "JIS X0213 has been revised with new CJK source references. These should be added to the appropriate CJK source files."
  b. Mr. Masuhiro Sekiguchi: This document seems to be the same item we discussed earlier (see item 6.3 on page 21). What is expected from Japan?
  c. Dr. Ken Whistler: The US wants the correct source references and the correct mappings – otherwise there will be chaos in interchange.
  d. Mr. Masuhiro Sekiguchi: The source and mapping information were correct before JIS X0213 were updated. Basically these were identical in terms of mappings. In my opinion the reason JIS X0213 does not affect the source information because the new version of JIS X0213 is not the

source. As to the mapping information, I understand the need for revised mapping information for revised JIS X0213. There are 10 additional ideographs --- we can provide the mapping of these.
e. Dr. Ken Whistler: The mapping information is already in the registration document.
f. Mr. Mike Ksar: If we already have the information, the editor can already take it and use it.
g. Dr. Ken Whistler: The point of contention is just that. The original JIS X0213 is the reference version. The revised JIS X0213 should not be used as the reference information.
h. Mr. Masuhiro Sekiguchi: I want to keep the original JIS X0213 as the source reference. Mapping information can change with revised information.
i. Dr. Ken Whistler: Can we withdraw the technical comment and get the issue out of the way? Current J3 reference is to the 2000 version. Japan is correct in their position that the revised version is NOT the reference version.
j. Mr. Michel Suignard: The trouble with that is - an ordinary person would probably trip over the fact that source reference information is kept to the old version even though the standard has been updated.
k. Dr. Ken Whistler: Yes – the problem will be there. But per the standard reference dates etc. Japan is correct. We cannot change the references to the new one.
l. Mr. Michel Suignard: OK. We will not update the source references in CJKU_SR.txt to reflect update of JIS X0213. Add a note to clause 27.1 – to warn the users of the standard of differences between JIS X0213: 2000 and 2004 versions.

Disposition: Accept the note to warn the users of CJK source reference files, about the differences between the old and new versions of JIS X0213 in clause 27.1.

There was another set of discussion on this topic while discussing draft ballot resolution on US ballot comment T.14 in item 7 above.
Discussion (Continued):
a. Mr. Yasuhiro Anan: If additional 10 characters related information is needed Japan can provide it.
b. Mr. Michel Suignard: Annex J.3, J.4 – are JIS X0213 references. If the information is NOT current, complete and up to date, we cannot keep them in the standard.
c. Mr. Masuhiro Sekiguchi: The source references are for the purposes of where the original CJK Ideograph came from. We have not changed current characters or their identity or mapping. The 10 additional characters are in the current UCS. The change in JIS does not change the CJK ideograph character. Regardless of existence of the JIS character the identity does not change. I have no objection to provide the additional J references. The purpose of this is not clear. If US national body wants that we can provide those. However, the identity of the character is not affected.
d. Mr. Michel Suignard: Even if the CJK has other columns such as G, K etc., if the J- information is missing the JIS X0213 to UCS relationship is broken.
e. Dr. Umamaheswaran: Clarification is needed in the standard to ensure that if any of the source standard is extended, a corresponding entry in the source reference must be made in the UCS.
f. Dr. Ken Whistler: The information on JIS X0213 registration proposal has the necessary information.
g. Mr. Masuhiro Sekiguchi: JIS has two standards JIS X0213 and JIS x0208. There are some incompatibilities between the two. Slightly different glyphs are defined in the same code position. JIS X0213 has this character – it maps to UCS - etc. The mapping information for existing x0208 should not change.
h. Dr. Ken Whistler: The ISO/IEC 10646 to J source reference tables must reflect those definitions.
i. Mr. Masuhiro Sekiguchi: JIS X0213 is not the source for THIS PARTICULAR character.
j. Dr. Ken Whistler: JIS X0213 is defined to be A SOURCE for defining the Identities of Characters.
k. Mr. Masuhiro Sekiguchi: If we frequently change the national standards, the identity of the CJK ideograph in UCS will become unambiguous. We should point to the original standard for identity.
l. Mr. Mike Ksar: We need to keep the mapping up to date.
m. Dr. Ken Whistler: J0 source should not be changed. However, J3 source has to be updated to reflect the addition in JIS X0213.

Disposition: Japan, US, the editor should ad hoc to come to an understanding on the underlying principle. See document N2831 for the final disposition of the US comment.

7.1.4   Extended Ethiopic

Input documents:
2747   **Revision of the N1846 Proposal to add Extended Ethiopic to the BMP of the UCS; Quality and Standards Authority of Ethiopia, Ethiopia; 2004-04-23**
2814   **Revisions proposed to document N2747 (Extended Ethiopic); Michael Everson & Daniel Yacob; 2004-06-17**

Mr. Mike Ksar: Documents N2747 and N2814 are contributions on Extended Ethiopic. Ethiopia had sent in their ballot comments requesting addition of extensions to Ethiopic. Mr. Daniel Yacob had presented this document at last week UTC. Document N2814R shows some revisions to this document. Proposes changes to several character names and several characters are moved into the main block. Not sure if this should go into current amendment or next.

Discussion:
   a. Dr. Ken Whistler: The US agrees that this should be encoded. As to the specific changes, regarding item 4 – I agree that there is a position that can be filled, but the character picked should be another one --- with GGWA instead of the GGWAA.
   b. Dr. Umamaheswaran: Total of 4 + 27 + 2 = 33 name changes and 2+1+8 characters moved to the main block.
   c. Dr. Ken Whistler: I would suggest that due to a large number of changes to avoid potential errors going undetected this is a candidate for Amendment 2. After discussing with Mr. Michael Everson, the name question has been resolved. See document N2814R.

Disposition: Two blocks – Ethiopic Extended in the range 2D80-2DDF (6 columns), and Ethiopic Supplement in the range 1380 to 139F (2 columns) are accepted, for inclusion in Amendment 2, with characters in document N2747 with changes identified in document N2814R. Ethiopia's comments are resolved - accepted in principle.

Further discussion:
   a. Mr. Mike Ksar: Last night we received a fax message from Ethiopia. Ethiopia raised the issue of delaying till Amendment 2. Ethiopia wants us to reconsider decision and would like to keep it in Amendment 1.
   b. Mr. Erkki Kolehmainen: Who is the fax submitter?
   c. Mr. Mike Ksar: Standard Authority of Ethiopia.
   d. Mr. Michael Everson: When WG2 document N2747 came out I reviewed out with Mr. Daniel Yacob, we created the revised version in document N2813. It will need a serious review but it is still possible even in Amendment 1 time frame, and therefore, I would support put it back in Amendment 1.
   e. Dr. Ken Whistler: I was the one questioning Ethiopian remaining in Amendment 1 for questions of stability and recommended going to Amendment 2. Since then, I have reviewed the document N2813 and think it would be OK to put it back in Amendment 1 and withdraw the suggestion to go back to Amendment 2.
   f. Dr. Asmus Freytag: I support the move back to Amendment 1 based on the authority of the fax submitter.
   g. Mr. Erkki Kolehmainen: Has Ethiopian Standard seen the revised document N2813?
   h. Mr. Mike Ksar: We think so – since Mr. Daniel Yacob has been in constant communication with Ethiopian Standards.
   i. Mr. Patrick Andries: I support move back to Amendment 1 in line with policy used for Tifinagh.

Disposition: WG2 accepts moving Ethiopic extension back to Amendment1. This amends the previous disposition recorded above.

Relevant resolution:

RESOLUTION M45.7 (Ethiopic Extensions): **Unanimous**
With reference to documents N2747 and N2814 on Ethiopic extensions, WG2 accepts for inclusion in Amendment 1 to ISO/IEC 10646: 2003, to create two new blocks called Ethiopic Extended in the range 2D80 to 2DDF and Ethiopic Supplement in the range 1380 to 139F; add 11 characters in the Ethiopic block, and populate the new blocks with the proposed characters with the glyphs and names as shown in the charts on pages 32 to 35, 36, 68 and 69 in document N2832. *(Note: total of **116 new** characters.)*

7.1.5   Tifinagh script

Input document:
2739 **A proposal to add the Tifinagh script; Canada, Morocco and France; 2004-01-20**
2828 **Report of the ad-hoc committee on Tifinagh; Patrick Andries -Ad hoc on Tifinagh – Morocco, Canada, US, Ireland; 2004-06-22**

An ad hoc group – Messrs. Ken Whistler, Asmus Freytag, Peter Constable, Alain LaBonté, Patrick Andries, Michael Suignard and Ms. Aïcha Bouhjar met and discussed the proposal. Mr. Patrick Andries reported on the discussion.

The ad hoc agreed to accept the proposal with modifications. The block is shifted from the proposal to 2630 to 267F. Agreed to change names of 12 characters. Mr. Patrick Andries will supply the changes.

Discussion:
a.   Mr. Mike Ksar: Should we be including the proposal in this amendment or the next one?
b.   Mr. Michael Everson: That was not discussed in the ad hoc.
c.   Mr. Patrick Andries: It is important for Morocco – several documents are being produced using this encoding from the draft standard. It is also used in schools etc. Their goal is to get schools from 2008/2009 exposed 100% to Tifinagh. Current drive to prepare school texts and other books is ongoing. Old documents were in terms of pictures since there was no encoding available.
d.   Mr. Michael Everson: Everything you say is also applicable to N'Ko. They are using hand written technology etc. You may find the same thing applicable to many other scripts. We have never taken the chance of taking an entire script at its first proposal. Full possibility of review should be given. We should not set a precedence.
e.   Dr. Ken Whistler: The US position is that we prefer to have this done as part of the second amendment. However, we feel that the arguments are cogent. A significant cost is being presented, opportunity lost cost etc. Given that there is no substantial disagreement on the technical content, the ad hoc had no disagreement other than moving the position or changing a few names, the US would not have any problem to consider this as a special case and include in current amendment. The ballot process still allows anyone to comment and request to remove it from the current amendment. We are not at a point of no return. Difference between Amendment 1 and Amendment 2 is about a year. The US will be agreeable to accept in current Amendment. I don't like the precedence of bypassing two full review cycles.
f.   Mr. Alain LaBonté: The best place to put in technical changes would be in PDAM instead of FPDAM. Normally an FPDAM is supposed to be stable.
g.   Dr. Asmus Freytag: There is a tug of war between two principles. The unusual situation here – it is one of the few modern scripts left. It is being implemented, and it is supported by a fair number of national bodies. The principles used by WG2, which are there for a good reason, should take into account the requirements as well. Given that there are no technical issues, responsiveness to user community is important. Unicode's preferred position would be to have two rounds of ballots; but in this case we could make an exception to be responsive to the users.
h.   Mr. Erkki Kolehmainen: I find myself in full agreement with Dr. Asmus Freytag.
i.   Mr. Patrick Andries: A lexical database is being planned between two institutions in Morocco and France. Other experts have reviewed this and accepted the proposal.
j.   Mr. Mike Ksar: You seem to be in touch with other experts on the topic – it is used with other groups in Algeria and France. One of the reasons we have been cautious about proposals of whole scripts has been because of lack of discussions on them. This proposal seems to have been posted on the net and been discussed outside the WG2 by experts, even though it has

been submitted to WG2 the first time. Without such a review I would have had concerns about them too.

k. Mr. Michael Everson: I have nothing against this proposal in principle. I hope such considerations be given for other living scripts as well such as N'Ko – which was prepared in conjunction with UN and Agence Francophonie d'Afrique.

l. Mr. Erkki Kolehmainen: They cannot start working with the encoding without a stable encoding. It is quite possible that this is not a concrete proposal, which may require additional dialogs. This does not bother me since it will satisfy a well-defined need for the user community. I think we should go ahead and accept this for current amendment.

m. Dr. Ken Whistler: With all due respect to Mr. Michael Everson, there is a material difference between this and other scripts. There are four national body votes including one negative ballot that want this script be encoded in this amendment. Under JTC1 rules we should conduct ourselves to get the greatest consensus among the national bodies, and in this case, by accepting the script.

n. Dr. Umamaheswaran: There is also draft national standard awaiting finalizing of this.

o. Mr. Keld Simonsen: I concur with what Dr. Ken Whistler and Dr. Asmus Freytag have said.

p. Mr. Reinhold Heuvelmann: It is well defined and seems to be stable enough, even though it may be the first time.

q. Mr. Mike Ksar: This is an exception than establishing a precedent. It has been posted about 2 months or earlier both in English and French and a draft Moroccan standard has also been made available. We do have one round of review for national bodies to raise concerns or objections on the script. We should include it in current amendment.

r. Dr. Asmus Freytag: The ad hoc did not change either the repertoire or the relative order of the characters from the proposal.

Disposition: Accept the proposed Tifinagh script for encoding with changes accepted in ad hoc, in the new block Tifinagh - 2D30 to 2D3F. The following are the name changes from document N2739:

        2D32 TIFINAGH LETTER SPIRANT YAB to TIFINAGH LETTER YABH
        2D34 TIFINAGH LETTER SPIRANT YAG to TIFINAGH LETTER YAGGH
        2D35 TIFINAGH LETTER ACADEMIE BERBERE YAJ to TIFINAGH LETTER KABYLE YAJ
        2D38 TIFINAGH LETTER SPIRANT YAD (yadh) to TIFINAGH LETTER YADH
        2D3A TIFINAGH LETTER SPIRANT YADD to TIFINAGH LETTER SPIRANT YADDH
        2D3F TIFINAGH LETTER SPIRANT YAK to TIFINAGH LETTER YAKKH
        2D41 TIFINAGH LETTER ACADEMIE BERBERE YAH to TIFINAGH LETTER KABYLE YAH
        2D46 TIFINAGH LETTER TUAREG YAKH-YAQ (Tuareg four-points) to TIFINAGH LETTER TUAREG YAKH (Tuareg four-points)
        2D4C TIFINAGH LETTER TUAREG YAZH-YAZ-YAZZ to TIFINAGH LETTER TUAREG YAZH
        2D53 TIFINAGH LETTER YOU to TIFINAGH LETTER YU
        2D5D TIFINAGH LETTER SPIRANT YAT (yath) to TIFINAGH LETTER YATH
        2D6F TIFINAGH MODIFIER LETTER LABIOVELARISATION to TIFINAGH MODIFIER LETTER LABIALIZATION (tamatart)

See ad hoc report in document N2828. Note: 'tmartart' should be corrected to ' tamatart' in the ad hoc report. Ballot comments regarding Tifinagh script from Canada, France, Morocco (negative ballot) and Tunisia are resolved.
Relevant resolution:

RESOLUTION M45.6 (Tifinagh script – requested as part of PDAM1 ballot comments):   Unanimous
With reference to document N2739 on Tifinagh script, WG2 accepts the proposed **55 new** characters for inclusion in Amendment 1 to ISO/IEC 10646: 2003, with code positions and names changed per ad hoc report in document N2828, to create a new block Tifinagh in the range 2D30 to 2D7F and populate code positions 2D30 to 2D65 and 2D6F as shown on the charts on pages 66 and 67 of document N2832.

7.1.6   Roman Numeral "Canopy" character

Input document:
2738   Proposal to add a Roman Numeral "Canopy" Character; Canada (prepared by P. Andries); 2004-04-19

Mr. Patrick Andries: Canada proposed this character. I understand we have some implementation issues that need to be addressed.

Disposition: Canada withdraws its ballot comment on this proposal. The topic can be brought back to WG2 for a future meeting.

7.1.7 Additional Phonetic Symbols

Input document:
2740 **Proposal to add additional phonetic characters to the UCS; INCITS/L2, UTC, SIL International; 2004-04-19**

Mr. Peter Constable introduced the document. A set of characters used for IPA phonetic extensions and some characters from Africanist conventions are proposed. In the document cells 1D70-1D76, 1DC0, 1DC1 are already in the Amendment 1. x8, x9 and xA and the remainder are proposed.

Discussion:
  a. Mr. Patrick Andries: Why can't we use combining overlay for the letters with Long Stroke?
  b. Dr. Asmus Freytag: There are many characters that could have been analyzed using combining marks; but for phonetic symbols usage we have not used decomposition sequences. The ambiguity abbot which text element is represented depending on the sequence used should also be avoided. That is why we did not use the overlay with Long Stroke.
  c. Mr. Patrick Andries: There should not be ambiguity with the vertical stroke.
  d. Dr. Ken Whistler: The ambiguity will come when the stroke with C can be used with its possible variants in appearance. Also when it was taken up at the UTC, this character was issued as a public review issue. Almost all the comments supported separate encoding of this character.
  e. Mr. Taichi Kawabata: Can these characters be represented as combining sequences?
  f. Mr. Mike Ksar: We did discuss the point just now.

Disposition: Accept 73 new characters for Amendment 1; Latin Extended-B block - 0238, 0239, and 023C (changed from 023A); Phonetic extensions block - 1D7B-1D7F (existing block); New block Phonetic Extension Supplement 1D80-1DBF (Filled); and 1DC2 in Combining Diacritical Mark Supplement block. See relevant resolutions M45.4 item 'b' on page 41.

7.1.8 Tamil Digit Zero

Input document:
2741 **Proposal to add Tamil Digit Zero; International Forum for Information Technology in Tamil (INFITT); 2004-02-01**

Dr. Umamaheswaran introduced the document. The request from INFITT is to complete the set of numerals for Tamil. Historically Tamil did not have a zero digit. Over time, it has been introduced into Tamil and has been used. The character is requested to complete the set of numerals paralleling other Indic scripts to facilitate interchange with them and to avoid mixing up the ASCII zero with other Tamil numerals for writing numeric strings. It is proposed at: 0BE6 TAMIL DIGIT ZERO with Glyph shown in document N2741. Document N2741 also has exhibits on its usage. I propose we accept this character as proposed.

Disposition: Accept 0BE6 TAMIL DIGIT ZERO from document N2741.
See relevant resolutions M45.4 item 'm' on page 41.

7.1.9 Kharosthi script

Input document:
2732 **Proposal to Encode Kharosthi in Plane 1 of ISO/IEC 10646; Andrew Glass, Stefan Baums, Richard Salomon, UTC expert contribution; 2003-09-18**

Document N2732 was submitted for the October meeting, but missed the deadline for that meeting. An older version of it was used for accepting the script. The current PDAM has matching content to what is in document N2732. No discussion was necessary.

7.1.10 Two Masoretic punctuation marks

Input document:
2714 **Proposal to add two Masoretic punctuation marks to the BMP of the UCS; Mark Shoulson, Peter Kirk, John Hudson, Michael Everson, and Peter Constable; 2004-03-04**

Mr. Michael Everson: Two characters used in printing the Bible in Hebrew --- 05C5 Hebrew Mark Lower Dot and 05C6 Hebrew Punctuation Nun Hafukah --- are proposed with background information and justification in document N2714.

Disposition: Accept the two characters from document N2714.
See relevant resolutions M45.4 item 'I' on page 41.

7.1.11 Combining Dot Above Right

Input documents:
2628 Proposal to add COMBINING RIGHT DOT ABOVE as required by Taiwanese Holo language Romanization to ISO/IEC 10646; TCA; 2003-09-29
2699 Response to WG2-document N2669 - Combining Dot Above; TCA (Dr Kaihsu Tai, Dr Pochung Chen, and Dr Henry Tan-Tenn); 2003-10-20
2713 Revised Proposal for encoding A Supplemented Set of IPA Combining Marks, Modifier Letters & Five-Degree Contour Tone Marks in the BMP of the UCS; China National Body; 2004-03-20
2770 Response to WG2-document N2713 - Combining right dot above; TCA (Dr Kaihsu Tai, Dr Henry Tan-Tenn and Dr Pochung Chen); 2004-05-29

Mr. Shih-Shyeng Tseng: We need this additional character for Taiwanese Holo language – we have provided earlier documentation on the topic and have reviewed the comments from China from the last meeting. We can accept its inclusion in the combining diacritics area.

Discussion:
  a. Dr. Ken Whistler: Both TCA and China have requested for this character. We think it is appropriate to put it in the combining diacritics area at 0358 - rather than in the IPA area as proposed in Chinese document.
  b. Mr. Michael Everson: Irish ballot comment has requested for this character – we have been asking for this for over 7 years.
  c. Mr. Chen Zhuang: China proposes to include this character as part of the set we have proposed – because it is also used as part of the IPA symbols for China – see document N2713.
  d. Mr. Mike Ksar: We will address the rest of the characters in document N2713 from China also (see discussion in item 7.1.19 on page 41). For this particular character the proposed location is 0358.

Disposition: Accept Combining Dot Above Right at 0358; in Amendment 1. Name was changed to COMBINING DOT ABOVE RIGHT from Combining Right Dot Above.
See relevant resolutions M45.4 item c on page 41.

7.1.12 Two additional Hebrew characters

Input documents:
2692 Proposal to add ATNAH HAFUKH to the BMP of the UCS; Mark Shoulson, Peter Kirk, Michael Everson; 2003-12-11
2755 Proposal to add QAMATS QATAN to the BMP of the UCS; Michael Everson & Mark Shoulson; 2004-05-03
2821 Clarification on the name QAMATSQATAN; Michael Everson & Mark Shoulson; 2004-06-21

Document N2692 - ATNAH HAFUKH:
Mr. Michael Everson: Hebrew bible is often cantillated for ease of Chanting. There are different systems for doing this. One of the cantillation marks is used 05AA in the phonetic system. There is a requirement to distinguish this from another sound. The proposal is to change the Glyph associated with 05AA and the new glyph being given proposed to the new character.
Discussion:
  a. Dr. Umamaheswaran: Keeping the same glyph would be tantamount to moving the existing character.
  b. Mr. Michael Everson: I do not agree --- the glyphs are wrong.
  c. Dr. Asmus Freytag: In some cases the distinction is made like the other one, in cases of disunification. In this case these are visually distinguishable and we have documented these. We had done similar things in the past. Experts seem to have come back with the feedback confirming what is proposed in the contribution.

d. Dr. Umamaheswaran: Page 3 bottom paragraph in document N2692 suggests that v-shaped glyph be assigned to U+05A2. 05AA loses the stem at the bottom.

Disposition: Add new character 05A2 HEBREW ACCENT ATNAH HAFUKH with a v-shaped glyph; 05AA – correction to existing glyph to remove the stem at the bottom (see pap 3 and 4 of document N2692). Ballot comment T22 from Ireland is accepted in principle.
See relevant resolutions M45.4 item k on page 41.

DocumentsN2755 and N2821 – QAMATS QATAN:
Mr. Michael Everson: Document N2821 was shown on screen only. Hebrew Point Qamats, which looks like a small T mark is sometimes pronounced as A and sometimes as O, when it is called Qamats Qatan. More recently authors using these are distinguishing these in writing as well.   The WIDE and SHORT sound usages are distinguished.
Discussion:
   a. Dr. Asmus Freytag: Unicode had a discussion on the name. The suggestion was to call this Form 2 instead of Qatan. Personally after further discussion with Mr. Michael Everson I am not sure whether to keep Qatan in the name.
   b. Mr. Dean Snyder: Suggestion to change and make the glyph with longer stem.
   c. Dr. Umamaheswaran: I observe that the glyph shapes for GADOL (wide sound) is smaller than the glyph shape for QATAN (short sound).
   d. Dr. Ken Whistler: The existing Qamats should be interpreted only as Gadol. The annotation was to make this disunification clear to the user.

Disposition: Accept the proposal. 05B8 (no change in name or glyph) exists and gets an Annex P annotation (used generically or as Qamats Gadol in orthography which distinguishes it from Qamats Qatan). 05BA (Shape with a longer stem) HEBREW POINT QAMATS QATAN. Irish T.22 Accepted in principle.
See relevant resolutions M45.4 item j on page 41.

7.1.13 Four Additional Math characters
Input document:
2680R   Additional Mathematical Characters; Asmus Freytag; 2003-10-30

Dr. Asmus Freytag: The Unicode committee is in contact with the Mathematical Publishing community and there is a steady stream of characters from them for Math notations. We have not discovered all of them yet and other experts are inventing more. These are TWO pairs being proposed.
Discussion:
   a. Mr. Erkki Kolehmainen: The open superset is not being used --- but for completeness you are adding it. It has not been used now; it may be used in future – correct?
   b. Dr. Asmus Freytag: Yes --- we are adding it for completeness even though it looks odd. It does not make sense to have only one orientation coded and not the other.
   c. Dr. Ken Whistler: Further response to your concern – this is a set of characters, which has to be added for BiDi Mirroring. In terms of Unicode properties, we have to make them mirrored as a pair to each other. That is the additional technical argument in addition to the Math usage argument.
   d. Dr. Asmus Freytag: The glyphs will be improved from the bitmapped images shown in document N2680R.
   e. Mr. Yasuhiro Anan: The reference cited in the document for the Math source does not seem to be working. We would like to be able to get an updated one to check on our own.
   f. Dr. Asmus Freytag: The reference was active when the Unicode committee discussed the topic. Don't know what happened to it. If I find a replacement I will let you know.

Disposition: Accept the proposed characters. Ballot comment T10b from USA is resolved. Accept 27C3 OPEN SUBSET, 27C4 OPEN SUPERSET, 27C5 LEFT S-SHAPED BAG DELIMITER, and 27C6 RIGHT S-SHAPED BAG DELIMITER; see document N2780R for details.
See relevant resolutions M45.4 item 'i' on page 41.

7.1.14 Additional Arabic script characters

Input document:
2723   Proposal to encode additional Arabic-script characters; INCITS/L2; Unicode Technical Committee; Jonathan
              Kew, SIL International; 2004-03-15

Dr. Ken Whistler: Amendment 1 has a collection of Arabic characters used in Africa. Scholars have come up with more characters shown in document N2723. The request is to add three more fully formed Arabic Supplement Block characters, and two vowel marks for African languages using Arabic script to the main Arabic block. We propose these be accepted. It is also one of the US ballot comments.

Discussion:
    a. Mr. Michael Everson: Ireland concurs with adding these.

Disposition: Accept - 065D Arabic Reversed Damma, 065E Arabic Fatha With Two Dots, 076B (Arabic, Combining Characters); Arabic Letter Reh with Two Dots Vertically Above, 076C Arabic Letter Reh with Hamza Above and 076D Arabic Letter Seen with Two Dots Vertically Above (Arabic Supplement).
See relevant resolutions M45.4 item h on page 41.

7.1.15 Greek Zero Sign

Input document:
2708   Proposal to encode the Greek Zero Sign in the UCS; Raymond Mercier - expert contribution; 2004-02-08

Dr. Asmus Freytag: Ancient Greeks did not use Zero explicitly except as a symbol in degrees etc. shown as examples in document N2708. It is not the same as regular zeros. It looks similar to, but is a separate symbol different from the Greek Artabe Sign at 10186. Experts who worked on Ancient Greek Numerals have checked this out. Various glyphs are shown in the picture marked Figure 16 in the document.

Disposition: Accept 1018A GREEK ZERO SIGN from last page of document N2708. The glyph shape will be modified to a straight line with a circle below.

See relevant resolutions M45.4 item g on page 41.

7.1.16 Hryvnia and Cedi – currency signs

Input document:
2743   Proposal to encode the NRYVNIA SIGN and the CEDI SIGN in the UCS; Everson; 2004-04-23

Ukrainian HRYVNIA currency sign and Ghana CEDI currency sign are proposed in document N2743. Mr. Michael Everson described the contents of the document … Nokia contacts are glad to see use of CEDI sign instead of the current Cent sign (fall back use in HTML pages). It can be seen on the bank's web site.

Discussion:
    a. Mr. Erkki Kolehmainen: The new currency sign is not yet in use in Ukraine currency notes and
        other monetary instruments. With the instability of Ukraine, should we wait?
    b. Dr. Asmus Freytag: There is precedence where the currency signs have come ahead in spite of
        uncertainties. You are invited to make comments during the FPDAM ballot stage and advise us
        as to include or not based on doing some research.

Disposition: Irish T.13 comment is accepted. Accept 20B4 HRYVNIA SIGN with the glyph as in page 1, 20B5 CEDI SIGN with 1st glyph on page 2.
See relevant resolutions M45.4 item f on page 41.

7.1.17 Proposal to encode two Bhutanese marks

Input document:
2694   Proposal to encode two Bhutanese marks for Dzongkhain the UCS; Everson and Fynn; 2003-12-30

Mr. Michael Everson: In Bhutan when they write to each other they have signs they use, expressing the relationship of one who writes to the person receiving. For example, one of the signs is used in writing

from the king to a person who is not a king. The second sign is between equals. Other two signs for similar use are already encoded and they are also used in Tibetan. It is also Irish ballot comment T.23.

Discussion:
    a. Mr. Chen Zhuang: Chinese Tibetan experts say that these two marks are acronyms used for quotations. Written for special articles. They are not in Tibetan script --- and are used in very narrow scope --- not used in Tibet. We would like to reject these.
    b. Dr. Asmus Freytag: Unicode has reviewed this proposal last week and we are in favour of adding these characters and see no particular issue with them.
    c. Dr. Ken Whistler: The US national body position is to add these – they are sufficiently justified and use of these in Bhutan is sufficient to use in UCS. We have no knowledge of their use in Tibet or not.
    d. Mr. Michael Everson: The book example published in 1995 for Bhutanese writing shows use of these. We know that many things used in Tibet are yet to be encoded and you may find these symbols too.
    e. Mr. Erkki Kolehmainen: I understand these are not Tibetan characters but Bhutanese characters.
    f. Dr. Ken Whistler: It is used in Bhutan using Tibetan script.
    g. Dr. Umamaheswaran: I would like to understand why China objects to this? It is not used in Tibet – that is a fair statement. The fact is that these are used in Bhutan.

Disposition: T.23 from Ireland is accepted. Accept the following:
    0FD0 TIBETAN MARK BSKA- SHOG GI MGO RGYAN (ka shog gi go gyen)
    0FD1 TIBETAN MARK MNYAM YIG GI MGO RGYAN (nyam yig gi go gyen)
See relevant resolutions M45.4 item e on page 41.

7.1.18 Indo-Europeanist phonetic characters

Input documents:
2705   **Proposal to encode five Indo-Europeanist phonetic characters in the UCS; Deborah Anderson & Michael Everson; 2004-02-03**
2788   **Proposal to encode six Indo-Europeanist phonetic characters in the UCS; Deborah Anderson and Michael Everson; 2004-06-07**

Mr. Michael Everson: Document N2788 replaces document N2705. The proposed characters are in support of Indo European linguistic material. Six characters -- subscript small letters .A, E, O, X and SCHWA and subscript SOLIDUS, are proposed. They are also requested as part of Irish PDAM1 ballot comments.

Discussion:
    a. Dr. Ken Whistler: We studied this document. The Latin subscript characters are justified and can be accepted. The Subscript Solidus needs further study.
    b. Mr. Michel Suignard: The code positions are moved to 2090 to 2094 in superscripts and subscripts block.
    c. Mr. Michael Everson: With regards to the Subscript Solidus we note that there are other similar punctuation characters in the standard. It does not make sense not to add it.
    d. Mr. Mike Ksar: If we accept the first five characters now and would it be acceptable to put the last one in Amendment 2.
    e. Mr. Erkki Kolehmainen: it looks like the US national body is the only one who has looked at it deeply and we cannot ignore the US observation. I suggest the last one should not be in Amendment 1.
    f. Dr. Umamaheswaran: My suggestion is that we agree with five characters only and invite contributors to provide more information regarding the SUBSCRIPT SOLIDUS character.

Disposition: Ireland had requested for subscript small letters A, E, O and X and SOLIDUS were in Irish comment --- reject SOLIDUS for now. Encode A--X at 2090-2093 (moved from 1D7A—1D7E). See document N2788. The new proposed character SCHWA in document N2788 is accepted at 2094.

See relevant resolutions M45.4 item d on page 41 and M45.5 item b (for SCHWA) on page 54.

7.1.19 Additional Phonetic & IPA characters

Input document:
2713   Revised Proposal for encoding A Supplemented Set of IPA Combining Marks, Modifier Letters & Five-Degree
                Contour Tone Marks in the BMP of the UCS; China National Body; 2004-03-20

Ms. Shen Ming introduced the document N2713.

Discussion:
a. Dr. Ken Whistler: The US has reviewed this document and I suggest that we accept these.
b. Mr. Michel Suignard: It satisfies the China comment also.
c. Mr. Mike Ksar: This proposal is the result of an ad hoc out of our last meeting. China has come back with an acceptable proposal.

Disposition: Create a new block - Modifier Tone Letters – A700-A71F (2 cols); move A901-A917 in document N2713 to A700 to A716; move A900 in document N2713 to 0358 renamed COMBINING DOT ABOVE RIGHT (also TCA request – see agenda item 7.1.11 on page 37). Accepted for Amendment 1.

See relevant resolutions M45.4 item c on page 41 and M45.5 item c on page 54.

7.1.20 Glagolitic Suspension Mark

Input document:
2763   Proposal to add COMBINING GLAGOLITIC SUSPENSION MARK; Michael Everson; 2004-05-29

Mr. Michael Everson: Glagolitic Suspension and Contraction are two abbreviation marks. Scholars took more time to back up the Suspension mark. Otherwise it would have been in the original Glagolitic proposal. Code position 1DC2 in the combining marks area is already assigned. Because the character is in the general use area, a name change removing the word Glagolitic is proposed and is acceptable to experts --- 1DC3 COMBINING SUSPENSION MARK with glyph in document N2763; in Combining Diacritical Marks Supplement block.

Discussion:
a. Mr. Erkki Kolehmainen: Who else will be using this --- to be generic?
b. Dr. Ken Whistler: The US is on record as accepting this character as a generic diacritic mark. We had feedback that there is at least one other group – besides Glagolitic – who was looking for a diacritic mark of this shape.

Disposition: Accept the proposed character. Ballot comment T.17 from Ireland is accepted in principle.

Relevant resolution:
See item 'a' in resolution M45.4 below.

RESOLUTION M45.4 (New characters requested in ballot response to PDAM1):   **Unanimous**
WG2 accepts for inclusion in Amendment 1 to ISO/IEC 10646: 2003 the following **98 new** characters:
a. With reference to document N2763 and Irish comment T.17 in document N2773 on Glagolitic Suspension mark:
        1DC3 COMBINING SUSPENSION MARK
for encoding in the Combining Diacritical marks Supplement block with the glyph from document N2773, and as shown in the charts on pages 45 of document N2832.
b. With reference to document N2740 on Additional Phonetic symbols:
        0238 LATIN SMALL LETTER DB DIGRAPH
        0239 LATIN SMALL LETTER QP DIGRAPH
        023C LATIN SMALL LETTER C WITH STROKE
            in Latin Extended-B block
        1D7B LATIN SMALL CAPITAL LETTER I WITH STROKE
        1D7C LATIN SMALL LETTER IOTA WITH STROKE
        1D7D LATIN SMALL LETTER P WITH STROKE
        1D7E LATIN SMALL CAPITAL LETTER U WITH STROKE
        1D7F LATIN SMALL LETTER UPSILON WITH STROKE
            in Phonetic Extensions block,

1DC2 COMBINING SNAKE BELOW
        in Combining Diacritical Mark Supplement block, and,
    Create a new block named Phonetic Extensions Supplement in the range 1D80-1DBF fully
    populated with proposed characters,

as detailed in the charts and names lists (on pages 5, 6, 40, 41, 42, 43, and 45 in document N2832 for the above code positions.

c.   With reference to document N2713 on Phonetic and IPA characters, and ballot comments and documents N2699 and N2770 related to Combining Dot Above Right:
    0358 COMBINING DOT ABOVE RIGHT

in the Combining Diacritical Marks block as shown on pages 7 ad 8 of document N2832

d.   With reference to document N2705 and N2788 on Indo-Europeanist phonetic letters:
    2090 LATIN SUBSCRIPT SMALL LETTER A
    2091 LATIN SUBSCRIPT SMALL LETTER E
    2092 LATIN SUBSCRIPT SMALL LETTER O
    2093 LATIN SUBSCRIPT SMALL LETTER X

for encoding in the Superscripts and Subscripts block with the proposed glyphs, and as shown in the charts on page 48 of document N2832.

e.   With reference to document N2694 for Tibetan characters for Bhutanese:
    0FD0 TIBETAN MARK BSKA- SHOG GI MGO RGYAN (ka shog gi go gyen)
    0FD1 TIBETAN MARK MNYAM YIG GI MGO RGYAN (nyam yig gi go gyen)

for encoding in the Tibetan block with the proposed glyphs, and as shown in the charts on pages 27 and 28 of document N2832.

f.   With reference to document N2743 on two currency signs:
    20B4 HRYVNIA SIGN
    20B5 CEDI SIGN

for encoding in the Currency Symbols block with the proposed glyphs, and as shown in the charts on page 49 of document N2832.

g.   With reference to document N2708 on Greek Zero Sign:
    1018A GREEK ZERO SIGN

for encoding in the Ancient Greek Numbers block with the proposed glyph, and as shown in the charts on pages 86 and 87 of document N2832.

h.   With reference to document N2723 on Arabic characters fro use in African languages:
    065D ARABIC REVERSED DAMMA
    065E ARABIC FATHA WITH TWO DOTS
    combining characters, in the Arabic block, and,
    076B ARABIC LETTER REH WITH TWO DOTS VERTICALLY ABOVE
    076C ARABIC LETTER REH WITH HAMZA ABOVE
    076D ARABIC LETTER SEEN WITH TWO DOTS VERTICALLY ABOVE
    in the Arabic Supplement block,

with the proposed glyphs, and as shown in the charts on pages 15 to 18 of document N2832.

i.   With reference to document N2680R on Additional Math characters:
    27C3 OPEN SUBSET
    27C4 OPEN SUPERSET
    27C5 LEFT S-SHAPED BAG DELIMITER
    27C6 RIGHT S-SHAPED BAG DELIMITER

for encoding in the Miscellaneous Mathematical Symbols-A block with the proposed glyphs, and as shown in the charts on page 57 of document N2832.

j.   With reference to document N2755 and N2821 on Qamats Qatan characters:
    05BA HEBREW POINT QAMATS QATAN
    and
    Add annotation to 05B8 in Annex P on its use as Qamats Gadol in an orthography which
    distinguishes it from Qamats Qatan

for encoding as a combining character in the Hebrew block with a glyph with an extended stem, as shown in the charts on pages 13 and 14 of document N2832.

k.   With reference to document N2692 on Atnah Hafukh character:
    05A2 HEBREW ACCENT ATNAH HAFUKH

for encoding as a combining character in the Hebrew block with a v-shaped glyph, as shown in the charts on pages 13 and 14 of document N2832.

l.   With reference to document N2714 on Masoretic punctuation marks:
    05C5 HEBREW MARK LOWER DOT,
    a combining character, and,
    05C6 HEBREW PUNCTUATION NUN HAFUKHA

for encoding in the Hebrew block with a v-shaped glyph, as shown in the charts on pages 13 and 14 of document N2832.
m. With reference to document N2741 on Tamil digit zero:

        0BE6 TAMIL DIGIT ZERO

for encoding in the Tamil block with the proposed glyph, as shown in the charts on pages 25 and 26 of document N2832.

7.2 Repertoires in PDAM1

Input documents:
2707   **Amendment 1 10646:2003 - source and reference documents need to be downloaded; SC2 Secretariat - 02n3714; 2004-02-04**
2735R   **Summary of Repertoire Additions Amendment 1 - 10646:2003; Uma; 2004-04-05**
2757R   **Summary of Voting on PDAM1 10646:2003 with extracted attachments including Ethiopia and Tunisia but not WG2 document numbers document N2738, document N2739 and document N2747; SC2 Secretariat SC02n3730; 2004-05-13**

Ballot comments were received on the scripts from Amendment 1 listed in this section.

7.2.1 Tai Lue script

Input documents:
2748   **Proposal on encoding New Tai Lue; China - expert contribution; 2004-04-29**
2761   **On the ordering of the Tai Lue script in the PDAM code chart; Ireland - Everson; 2004-05-13**
2825   **Consensus on the encoding of the New Tai Lue script in the PDAM code chart – ad hoc results; Ad hoc on New Tai Lue - China, Ireland, Japan, USA; 2004-06-22**
2826   **Evidence Regarding Decomposition of the VA Mark in Tai Lue Script – input to Tai Lue ad hoc; Peter Constable; 2004-06-15**

Mr. Peter Constable: The report from the ad hoc group in Tai Lue is in document N2825. Page 4 of this document has wrong names for B5-B8, BD-BE; use names from page 2. There is no change to repertoire from the current amendment. Changes to the order of the characters and some names are proposed. U+198B renamed LOW TSA from LOW CA; U+19B5, 19B6, 19B7, 19B8, 19BD, 19BE changed the names from current PDAM1. Block name changed to NEW TAI LUE, and all the character names have 'NEW' added in front of 'TAI'.

Mr. Zhang Zhoucai: Chinese experts on Tai Lue agreed to the report's recommendations.
Relevant resolution:

RESOLUTION M45.3 (Tai Lue – changes requested in ballot response to PDAM1):   **Unanimous**
With reference to changes requested to Tai Lue encoding in PDAM 1 ballot comments, and the details given in documents N2748 and N2761, WG2 accepts the ad hoc group recommendations in document N2825. WG2 accepts the revised encoding and name change of the characters and the block to "New Tai Lue" as shown in document N2825, and on pages 37 and 38 in document N2832. *(Note: no additions to the repertoire.)*

7.2.2 Phags-pa script

Input documents:
2745   **Phags-pa script encoding - update from China and Mongolia; China, Mongolia; 2004-04-22**
2719   **Response to Comments on Phags-pa in document N2706 (subdivision ballot results); Andrew West; 2004-03-10**
2771   **Comments on the Chinese-Mongolian HPhags-pa proposal (document N2745); Andrew West; 2004-06-01**
2829   **Consensus on the encoding of the Phags-pa script in the PDAM code chart; Ad hoc on; Phags-pa; 2004-06-22**
2764   **Provisional Draft of Unicode 4.1 Additions - PDAM; Asmus Freytag, Contributing Editor; 2004-06-07**

Mr. Mike Ksar: The ad hoc group has met and has summarized their discussion. The Chinese comments will not be accommodated --- for this amendment. The script will be looked at for PDAM 2. The ad hoc group will not be meeting again in this meeting.

Mr. Peter Constable presented the ad hoc report contained in document N2829. Not all the issues were resolved by the ad hoc at this meeting. Additional discussion will be needed between now and the next meeting. The recommendation is to move Phags-pa from current amendment to next amendment.
Discussion:
a. Dr. Ken Whistler: The report is structured in such a way that we include Phags-pa in Amendment 2 and not to hold it back. The second part of the report contains suggested dispositions of various ballot comments to assist the editor in responding to the ballot comments. The overall disposition would be to attempt to meet the comments from China – we could accept it in principle

– by accepting to include it in Amendment 2. The end of the document is an attempt to enumerate various technical issues that have to be resolved that arose out of discussions on documents document N2755 and document N2771. These technical issues, which were not part of the ballot comments was the reason for recommendation to postpone to next amendment.

    b. Mr. Michel Suignard: I am glad that the report is structured the way it is; it makes the editor's job easier. Is there anything that would affect PDAM2 text?
    c. Dr. Asmus Freytag: The ad hoc recommends that the Chinese comment be accepted in principle.
    d. Dr. Ken Whistler: In response to T.11 there are some items – changes in shape of some characters, these have been given to the contributing editor --- there is still an open question on Typeface. No changes to names. A851 and A86C will have changed glyphs (see document N2764). Our suggestion is to take all T7 to T14 as Accepted In Principle and note that the script is moved to Amendment 2.
    e. Mr. Zhang Zhoucai: Chinese experts agree with the recommendation.

Disposition: Accept the ad hoc recommendation document; postpone encoding the script to Amendment 2.
Action item: Editor to take note and include in disposition of comments. National bodies and experts are invited to continue the dialog to resolve the identified technical issues.
Relevant resolution:

RESOLUTION M45.16 (Phags-Pa – changes requested in ballot response to PDAM1):   Unanimous
With reference to changes requested to Phags-Pa encoding in PDAM 1 ballot comments, and the details given in document N2745 and associated documents N2719 and N2771, WG2 accepts the ad hoc group recommendations in document N2829. WG2 accepts the revised encoding of the **52** characters as shown on pages 79 to 81 in document N2832 for inclusion in Amendment 2 to ISO/IEC 10646: 2003 (removing it from Amendment 1). National bodies and liaison organizations are invited to provide feedback on the various open issues identified in document N2829.

7.2.3   Coptic script

Input document:
2744   **Revision of the Coptic block under ballot for the BMP of the UCS; Michael Everson &Stephen Emmel; 2004-04-20**

Mr. Michael Everson: Minutes of the last meeting also indicate that more characters will be needed and we allocated more space to accommodate them. Further work has been done on this topic. 46 letters and 8 other characters for non-ecclesiastical use, old Coptic use characters have been proposed. Details for use of each of the characters has been provided in the document. Additional Glyph changes have been provided.

Discussion:
    a. Dr. Asmus Freytag: We should reorder these characters in such a way that ecclesiastical use is at the beginning and the others at the end.
    b. Mr. Mike Ksar: What I hear is that – the repertoire is OK but encode somewhere else.
    c. Dr. Asmus Freytag: No. The request is to rearrange the characters to suit the majority users of Coptic today.
    d. Mr. Michel Suignard: There is conflict between the PDAM1 ballot comments T 7 from the US and T.18 from Ireland on Coptic.
    e. Dr. Asmus Freytag: Unicode decided to replace the entire Coptic block.
    f. Dr. Ken Whistler: The resolution to this conflict would be to withdraw the US comment T.7.
    g. Mr. Dean Snyder: Some of these symbols look like abbreviations --- than symbols. Perhaps these should not be encoded now.
    h. Mr. Michael Everson: In ecclesiastical use that is how they use these – as single symbols. It could be composed of all kinds of pieces. However we decided to keep them as symbols.
    i. Mr. Mike Ksar: Experts have looked at these and have agreed these can be treated as a set of symbols.
    j. Dr. Ken Whistler: As you see further below uses of combining marks have been acknowledged for other uses. The above set is a small set of symbols due to their frequent use.

Disposition:
Replace the existing Coptic assignment in the Amendment with new one proposed in document N2824. With New Names and New Code Positions. Accept the glyph changes proposed in column 3E in document N2744. RO with Stroke small and capital – Removed or Renamed to SAMPIs. Rename KHRISTOS to STAUROS. All code positions are changed by reshuffling old and mixing new and rearranging the whole set.

Relevant resolution:

RESOLUTION M45.2 (Coptic – changes requested in ballot response to PDAM1):   Unanimous
With reference to changes requested to Coptic encoding in PDAM 1 ballot comments, and the details given in document N2744, WG2 accepts replacing the existing Coptic encoding for inclusion in Amendment 1 to ISO/IEC 10646: 2003 with the changes detailed in document N2831 and as shown in the charts in document N2824 (also on pages 62 to 64 in document N2832). *(Note: 55 new characters were added to the 59 in current PDAM1 in Coptic block.)*

8   Old business – open action items

Input documents:
2505	Revised proposal for encoding the Ol Chiki script in the UCS; Michael Everson, R. C. Hansdah & N. C. Murmu; 2002-11-03
2544	Revised proposal to encode the Manichaean script in the UCS; Everson; 2002-12-03
2619	Saurashtra Script Encoding; Rick McGowan – personal contribution; 2003-09-18
2556	Revised proposal to encode the Avestan and Pahlavi script in the UCS; Michael Everson; 2002-12-04
2655	Proposal — Symbols used in Dictionaries; Asmus Freytag; 2003-10-15

The following scripts were carried forward to the next meeting pending feedback on them.
   a. Ol Chiki script – document N2505
   b. Manichaean script – document N2544
   c. Saurashtra script – document N2619
   d. Avestan and Pahlavi – document N2556
   e. Dictionary Symbols – document N2655

9   New Repertoire proposals

9.1   Phoenician script

Input documents:
2746R2	Final proposal for encoding the Phoenician script in the UCS; Everson; 2004-04-26
2772	Additional Support for Phoenician; Debbie Anderson; 2004-06-04
2787	Additional examples of the Phoenician script in use; Michael Everson; 2004-06-06
2792	Response to the Proposal to encode Phoenician in Unicode; Dean Snyder; 2004-06-08
2793	Response to the revised "Final proposal for encoding the Phoenician script in the UCS" (L2/04-141R2); Peter Kirk; 2004-06-07

Mr. Michael Everson: Document N2745 proposes to encode a set of 27 characters for writing several alphabets from different sources. It can be transliterated to many other scripts like Greek, Hebrew etc. Document N2772 contains additional support from different sources for Phoenician script. A wide variety is shown some of which is used for Grammar for Phoenician. Document N2787 gives more examples of use of Phoenician script.

Document N2792 was introduced by Mr. Dean Snyder --- this topic of encoding Phoenician raised about 1100 emails on this topic. Most of the scholars familiar with Phoenician are against it. It is not a separate script. It has the same phonemics as in Hebrew. It is an ancient script. We have to deal with it as an issue. One of the major issues is – use of an encoded Phoenician – it is an attempt to unify old Hebrew. Old Hebrew is written using two separate fonts -- this proposal would pose a fragmentation of existing corpus of old Hebrew material. Deborah Anderson has listed a number of experts' names in document N2772. I am one of those scholars.

Discussion:
   a. Mr. Mike Ksar: Where is information about the scholars you claim are against the current proposal.
   b. Mr. Dean Snyder: It is in document N2772 for example.

c. Mr. Erkki Kolehmainen: It makes me uncomfortable at this time to be able to analyze the pros and cons.

d. Dr. Asmus Freytag: At the last week UTC meeting, members of UTC who have been watching all the discussion between the scholars on the email felt they were extremely informed of the various pros and cons. There was a unanimous decision to accept the proposal. I understand where you are coming from. With all due respects, the noise that was going on the email list --- was quite a bit. I can understand that if a proposal comes in just now then a delay may be warranted. If it is a different type of issue --- for example Han ideographs --- we may have to discuss this off line. Our position has been that the discussion was openly available in a transparent manner --- we feel that the issues have been aired and it is time to make a decision.

e. Mr. Michael Everson: I will disagree with Mr. Dean Snyder's assertion that there is some unified corpus, that everything is in Hebrew script. Much of the documents are in Latin script. The repertoire and names have been stable for over 12 years. There is more than one flavour of scholars. Making these a Font Variant of Hebrew does not make sense to many. Five of these experts are listed in the first proposal document --- they want to use the Phoenician font for the alphabet.

f. Mr. Erkki Kolehmainen: I do not want to make any decision today.

g. Dr. Umamaheswaran: I would like to understand where there is harm --- Latin script and Hebrew script seems to have been used for corpuses -- why not the Phoenician script?

h. Mr. Dean Snyder: There are already existing corpuses. One would endanger the encodings of these. You will fragment these by encoding the Phoenician script.

i. Dr. Umamaheswaran: You seem to be claiming that – if I may use an analogy -- that the encoding of Ol'Chiki will harm the existing Oriya or Bengali corpuses.

j. Mr. Mike Ksar: Latin, Hebrew etc. do have unique Unicode encodings.

(The agenda item was revisited on another day)

k. Mr. Erkki Kolehmainen: I have no objection to this proposal.

Disposition: Accept as is document N2746R2 in Amendment 2. No changes.
Relevant resolution:

RESOLUTION M45.18 (Phoenician script): **Unanimous**
With reference to proposal in document N2746 and associated discussions in documents in N2772, N2787, N2792 and N2793, WG2 accepts the proposal with no changes for inclusion in Amendment 2 to ISO/IEC 10646: 2003, to create a new block named Phoenician in the range 10900 to 1091F and populate the code positions 10900 to 10919 and 1091F with the **27** proposed characters and glyphs as in document N2746 and as shown in charts on page 89 of document N2832.

9.2 Cuneiform script

Input documents:
2664 Proposal to encode the Cuneiform script in the SMP of the UCS; Michael Everson, Karljürgen Feuerherm, Steve Tinney; 2003-11-03
2698 Revised proposal to encode the Cuneiform script in the SMP of the UCS (Replaces document N2664R); Michael Everson, Karljürgen Feuerherm, Steve Tinney; 2004-01-29
2786 Final proposal to encode the Cuneiform script in the SMP of the UCS; Everson, Feuerherm, Tinney; 2004-06-08

Mr. Michael Everson: Document N2786 contains the refinement over earlier documents after consultations and consolidations with various experts --- including Mr. Karljürgen Feuerherm who is attending as a guest here. I would like to see this included in Amendment 2. 988 characters (885 plus 103) are proposed.

Discussion:
a. Mr. Dean Snyder: I support this one. It is oldest script in the world. This particular proposal is consolidation from the practice by different experts. The first time it is being put together.

b. Dr. Ken Whistler: The US national body has studied this and would support inclusion of this in Amendment 2.

c. Mr. Reinhold Heuvelmann: 122BB --- is this a glyph error?

d. Mr. Michael Everson: The black circle is the correct glyph – caused by the indenting with the back end of a stylus.

Disposition: Accept to include in PDAM2 in two blocks. 12000 – 123FF CUNEIFORM (12000-12373 assigned); 12400-1247F Cuneiform Numbers and Punctuation (12400-1246F and 12470-12473 assigned).

Relevant resolution:

RESOLUTION M45.19 (Cuneiform script):   **Unanimous**
With reference to document N2786 on Cuneiform script WG2 accepts for inclusion in Amendment 2 to ISO/IEC 10646: 2003, to create two new blocks named Cuneiform in the range 12000 to 123FF and Cuneiform Numbers and Punctuation in the range 12400 to 1247F and populate these blocks with **987** characters and glyphs in code positions 12000 to 12373, 12400 to 12462 and 12470 to 12473 as proposed in document N2786, and as shown in the charts on pages 92 to 107 of document N2832.

9.3   Four new SENĆOŦEN Latin Characters

Input document:
2784   Proposal to Add Four SENĆOŦEN Latin Characters; John Elliot, Peter Brand, and Chris Harvey; Saanich Native Heritage Society and First Peoples' Cultural Foundation; 2004-05-05

Mr. Peter Constable: The proposal is to add four characters -- 023A Latin capital letter A with stroke, 023B C with stroke, 023D L with Stroke, and 023E T with Diagonal Stroke. A brief background of these characters was also presented.

Discussion:
   a. Dr. Ken Whistler: The US is strongly in favour of adding these characters.
   b. Dr. Asmus Freytag: Unicode concurs.
   c. Mr. Vladas Tumasonis: Why can't we decompose A with combining stroke? It is similar to Accent combinations with Letters.
   d. Dr. Asmus Freytag: Overlays of letters with Strokes etc. have to be carefully considered. We do not do the overlaying with strokes for LETTERS because of decomposition / other normalization problems.
   e. Mr. Patrick Andries: It is not obvious as to when the combining overlays can be used and why not with letters etc. It has to be documented somewhere.
   f. Mr. Mike Ksar: We can add a note to the P&P to document the practice of not using the overlays with letters.
   g. Dr. Umamaheswaran: We can add the practice to principles and procedures – the rationale is needed. It is based on normalization problems it can create otherwise.

Disposition: Accept the four stroked characters for SENĆOŦEN for Amendment 1.
See relevant resolution M45.5, item ' h' on page 54.

Action item: Dr. Umamaheswaran to get Principles and procedures document updated to highlight the problem with normalization when overlays are used with letters.

9.4   Two new Africanist phonetic characters

Input document:
2799   Proposal to add two Africanist phonetic characters to the UCS; Michael Everson, Peter Constable; 2004-06-12

Mr. Michael Everson: Two characters from earlier proposal from Mr. Peter Constable on phonetic characters were deferred for further study. They are used to denote labio-alveolar fricatives. Background and evidence are provided in the document N2799. These are:
       023F LATIN SMALL LETTER S WITH SWASH TAIL
       0240 LATIN SMALL LETTER Z WITH SMASH TAIL
in Latin Extended-B, with glyphs as on page 1 of document N2799.

Discussion:
- a. Dr. Ken Whistler: The US has reviewed this and is in favour of encoding these.
- b. Mr. Erkki Kolehmainen: I have a question – on the last page – about disadvantage shown within the oval shape.
- c. Mr. Michael Everson: These were used in Rhodesia – but spelling reform changed to sv and zv.

Disposition: Accept the two characters.
See relevant resolution M45.5 item g on page 54.

9.5   Additions to Myanmar repertoire

Input documents:
2769   Proposal of Myanmar Currency Sign; Myanmar Unicode and NLP Research Center; 2004-05-31
2768   Proposal of Myanmar Script Extensions: Mon, Shan, and Karen (Kayin); Myanmar Unicode and NLP Research Center; 2004-05-31
2827   Proposal of 4 Myanmar semivowels; Myanmar Unicode & NLP Research Center; 2004-06-21

Kyat sign:
Mr. U Thien Oo: Document N2769 requests for Kyat – currency sign. It is used in manual and banking systems.

Discussion:
- a. Dr. Asmus Freytag: Which code system is used to represent this sign? There are other systems in which we have usages like SKr – Swiss Kroners etc. I am trying to figure out what is special about Kyat sign --- why this cannot be K s.
- b. Mr. U Thein OO: We are using K and s in sequence now. If we can use it as a single character we can use it as a CURRENCY SYMBOL etc. in locale settings.
- c. Dr. Asmus Freytag: Vendors providing support for Currency Signs do support strings for Currency Signs. Asking for the single currency sign you will be asking for some software to stop working and asking for a single Glyph in the implementation etc. If you look at the locale definitions a string is acceptable. If that will satisfy the requirement you stated, may be we should reconsider your proposal.
- d. Mr. U Thein OO: When we type for the currency amount we want the currency sign to show up automatically as a single currency sign.
- e. Mr. Michael Everson: I discussed this with two of the members from Myanmar. Currently you are using K plus s for your currency sign. In the currency sign block there are symbols like Rs for Rupees, Pts for Pesetas etc. Nobody is using these and we should not have encoded these.
- f. Mr. Erkki Kolehmainen: You have no need for the symbol. We used to have Mk in Finland --- we used M and k in locales.
- g. Mr. Peter Constable: In MS windows and am sure in other platforms there is no difficulty in using sequences like K and s for currency sign.
- h. Mr. Zaw Htut: Our purpose was to be able to use a single sign in the locales. If the locales can satisfy that requirement by accepting sequences we don't need the sign. We will withdraw the proposal.

Relevant resolution:

RESOLUTION M45.25 (Myanmar KYAT currency sign):   **Unanimous**
With reference to document N2769 proposing a KYAT currency sign, WG2 notes that as result of discussion in WG2 Myanmar is satisfied that their needs to represent their currency in text and software can already be met and therefore have withdrawn the proposal.

Additional characters for Mon, Shan and Karen languages
Mr. U Thein Oo: Document N2768 proposes to add 30 more characters to support additional languages like Mon, Shan and Karen used in Myanmar. Need to print books etc. for these languages. More details are provided in the document.

Discussion:
   a. Dr. Ken Whistler: There seems to be an error in Annex 2 Mon Extensions – name is 1065 MON MEDIAL LA. The glyphs shown for MON and KAREN at 1065 are different --- need to open a discussion on whether these are different or same.
   b. Mr. Michael Everson: There are several other points to be clarified as well.

Action Item: National bodies to feedback.
See relevant resolution M45.26 below.

Four Myanmar semi-vowels:
Mr. U Thein OO: Document N2827 – proposes 4 Myanmar Semi Vowels. We have identified 4 semi vowels that were thought to be unified with something standardized, and are problematic. They are identified with more research and proposed.

Discussion:
   a. Mr. Michael Everson: The four characters proposed would pose problems for existing implementations. We have to study the identified requirement and see if alternatives exist.
   b. Mr. Peter Constable: We need to study --- ask whether the cases presented are presentation variants of existing characters, or other encoding solutions are possible.
   c. Mr. Mike Ksar: Myanmar to work with other experts and explore consolidating the document including answering the concerns of the type raised above, and feedback received in ad hoc meeting with other experts.

Relevant resolution:

RESOLUTION M45.26 (Myanmar extensions):   **Unanimous**
With reference to proposed additions to Myanmar in documents N2768 and N2827, WG2 invites national bodies and liaison organizations to review and provide feedback to the authors by 2004-10-31 for consideration of a revised proposal at its next meeting in January 2005.
Action item: National bodies are invited to feedback before next meeting.

9.6   German Umlaut

Input documents:
2766   Definition of a Code Position for German Umlauts in ISO/IEC 10646 / Unicode; DIN Information Technology Standards Committee (NI); Subcommittee 29.1 "Codierte Zeichensätze"; 2004-05-28
2819   Response to DIN request regarding umlaut and tréma; US NB; 2004-06-20

Mr. Reinhold Heuvelmann: The request in document N2766 from Germany is based on the requirement from German Libraries to be able to make a distinction between German Umlaut and not-German Umlaut --- these are unified at 030A. The distinction is needed for indexing, sorting and searching. We made a proposal for a combining Umlaut character. The US has responded to our request in document N2819.

Discussion:
   a. Dr. Ken Whistler: document N2819 is an analysis of document N2766. We do agree with the statement of the problem – to distinguish between Umlaut and Tréma in German bibliographic records. The assessment after discussion in detail in the US national body was that disunification at this stage would cause lot of difficulty with existing implementations and serious problems with interoperability especially with those that are based 8859 series. Interchange with other systems will be a problem. There is a way around it --- we present an analysis and a solution using CGJ (already encoded in the standard). CGJ + U+0308 to represent Tréma allows to distinguish the Umlauts and Trémas. The Umlaut is much more frequently used so the sequence with CGJ is proposed to represent Tréma. When it is converted to or transmitted to another system it permits the other system not to be affected. CGJ can be ignored during sorting searching etc. in those systems that do not distinguish between the two. The suggested solution permits meeting the stated German problem and allows existing systems not to break.
   b. Mr. Erkki Kolehmainen: I have to congratulate the US national body to have come up with this innovative solution to the problem.

c. Dr. Ken Whistler: The reason CGJ was invented in the first place was to be able to distinguish between two things in sorting / searching. The first time it was for Czech/Slovak for CH versus C plus H. Introducing CGJ allows us to distinguish between the two cases. It was also mentioned for Maltese, which has a similar problem.

d. Mr. Keld Simonsen: This solution could work for the problem for DIN. I have some concerns --- this is not a Tréma, this is not a Umlaut etc --- couldn't we solve this problem in 10646 in another way. This solution seems to be a fix for a small problem.

e. Mr. Mike Ksar: I want to stress --- that interoperability would be an issue and is a great concern to implementers and users of 10646.

f. Mr. Dean Snyder: The perverse case --- do you get Tréma and Umlaut together?

g. Mr. Reinhold Heuvelmann: No. The use of Umlaut itself is restricted to six letters.

h. Dr. Asmus Freytag: There is a possibility in principle --- somebody could create an artificial word that requires the distinction between the two. They are not used in Bibliographic records. As to Mr. Keld Simonsen's comment, it looks like that Norway can live with the solution. In 8859 parts and 6937 etc. the problem already exists --- it would be wishful thinking to update those.

i. Mr. Reinhold Heuvelmann: We are satisfied with the solution proposed by the US national body.

j. Mr. Mike Ksar: As soon as I received I posted it to the web site.

k. Mr. Reinhold Heuvelmann: Where can this solution be documented so the question will not arise again?

l. Mr. Mike Ksar: In 10646 we can entertain adding a note in Annex P. As to the Unicode standard it is up to UTC.

m. Mr. Erkki Kolehmainen: Would like to point out technically misleading typo in the document – ä = ä plus combining diacritic.

n. Mr. Reinhold Heuvelmann: In Unicode Glossary – Umlaut and Diaeresis are equated --- would like to get that fixed.

o. Dr. Asmus Freytag: Please propose specific changes to Unicode and we can entertain changes.

p. Dr. Umamaheswaran: We could entertain an editorial note in Annex P in this current document.

q. Mr. Michel Suignard: It could also be a note as an informative note in Annex F describing use of CGJ as an example

r. Dr. Asmus Freytag: It belongs with all the details in sorting related standards. More details can be found in other documentation.

s. Mr. Keld Simonsen: There is a bibliographic standard 5426 with both in the standard. What can we do to interchange with that standard? Are there other instances of these?

t. Dr. Asmus Freytag: The answer – the distinction is made in the environment in that standard. We can convert that from that standard to either the sequence CGJ + Umlaut or Umlaut as needed.

u. Dr. Umamaheswaran: Indic is full of these.

v. Mr. Reinhold Heuvelmann: Let me express my thankfulness.

Disposition: Accept the CGJ + umlaut as the solution to the problem. Add an informative note in the standard to capture this solution where distinction is needed.

Relevant resolution:

M45.13 (Request for encoding German Umlaut): **Unanimous**
With reference to documents N2766 and N2819 on German Umlaut, WG2 recommends the use of Combining Grapheme Joiner (CGJ, 034F) + Combining Diaeresis (0308) to represent the Tréma character where such distinction is needed. WG2 instructs its editor to include an appropriate informative note with CGJ description in Annex F, in Amendment 1 to ISO/IEC 10646: 2003.

9.7 N'Ko script

Input document:
2765   **Proposal to add the N'Ko script to the BMP of the UCS; Michael Everson, Mamady Doumbouya, Mamadi Baba Diané, & Karamo Jammeh; 2004-06-08**

Mr. Michael Everson: N'Ko was invented in the 20th century. It was written for Manden. It became popular in many regions -- in New Guinea, Mali and other nearby areas. This is a RTL script. Often it is used with Latin script in a bidirectional manner. Currently many of them are using Arabic code points to

encode their texts. Document N2765 gives details on the various diacritic marks used, punctuation etc. We propose this script to be added and request to process this in most expeditious way.

Discussion:
a. Mr. Patrick Andries: I have studied this script. I have questions on three characters named OLD – would have thought these are glyph variants. The second problem I have is to giving the script specific umlaut etc. for specific reason of font bindings. The combining properties should take them from the base characters. Finally they are given the same combining class as those in Unicode etc. My suggestion is to use existing diacritics instead of new ones.
b. Mr. Peter Constable: Nine of the diacritic marks could be construed as being already encoded elsewhere. For example combining diaeresis, dot below, etc. There seem to be only two of these that appear to be unique for N'Ko.
c. Mr. Michael Everson: All these questions have been raised and discussed with the user community. They do understand what can be and what cannot be unified with existing characters. As far as the OLD characters --- the experts are aware of these. A fairly large body of literature contains examples of these characters being used --- appear in dictionaries etc. They represent the same sound etc. but the experts consider these to be different. One could use Variation Selector etc., but still it is a pseudo code of some sort. As to the diacritic marks --- the line above, the dot above may look the same. The Tilde and Breve, possibly not because they can appear in many different shapes. Reverse Tilde --- is font-design dependent. The tone marks 07F1 etc. originated from ligatures. They feel very strongly that the essential features of their own writing systems as script specific. The Tone apostrophes are to have the tones preserved. They recommend the set of enclosed symbols be script specific too. Some characters have been suggested to some other generic locations.
d. Dr. Ken Whistler: The US national body has reviewed this. We can agree that this needs encoding. However not to be rushed in PDAM1. Should be for next amendment.
e. Dr. Asmus Freytag: UTC has studied this as well. We can go along with including in PDAM 2 if WG2 decides to do so.
f. Mr. Michael Everson: One of the US feedbacks was that the names for combining marks be translated to more generic names. UNESCO has funded to carry out the work to prepare this proposal.
g. Mr. Mike Ksar: We have consensus to include in PDAM2.
h. Dr. Ken Whistler: The left and right paraphrase marks should be moved to other locations.
i. Dr. Asmus Freytag: For those two – the UTC has accepted them to be generic punctuations. The reason we are doing this to make them in the group of similar characters in Amendment 1. I would like to personally discuss whether to move these two characters into Amendment 1. It may be cleaner solution. It will make life easier.
j. Dr. Umamaheswaran: I would request a revised document that reflects the acceptance of the suggested changes; splitting the proposal to Amendment 1 and Amendment 2 candidates. Then we could entertain adding a resolution to progress the item based on the revised document.

Disposition: Accept the script for encoding in two phases. The two Left and Right Low Paraphrase brackets were for Amendment 1 at 2E1C and 2E1D. These accepted names causes name changes to 2E0C and 2E0D to Left and Right Raised Omission Brackets in the Punctuation block that were accepted for Amendment 1.

See relevant resolutions – M45.5 item 'f' on page 54 and M45.17 below.

M45.17 (N'Ko script):   **Unanimous**
With reference to document N2765 on N'Ko script and its revised proposal in document N2833, WG2 accepts for inclusion in Amendment 2 to ISO/IEC 10646: 2003, to create a new block named N'Ko in the range 07C0 to 07FF and populate it with **59** characters and glyphs in code positions 07C0 to 07FA as shown in the charts on pages 19 and 20 of document N2832.

9.8   Bengali character Khanda Ta

Input documents:
2809   **Proposal to Encode Bengali Khanda Ta in the UCS (=L2/04-264; Peter Constable; 2004-06-17**
2810   **Encoding of Bengali Khanda Ta in Unicode (= L2/04-262); Peter Constable; 2004-02-17**

2811   **Feedback on PR-30: Encoding of Bangla Khanda Ta in Unicode (= L2/04-192); Gautam Sengupta; 2004-06-17**
2812   **Letter to Mark Davis re Bengali Khanda Ta (= L2/04-233); Om Vikas; 2004-06-10**

Mr. Peter Constable: Khanda Ta is used in Bengali to represent Ta with no inherent vowel. In terms of rendering it can take on one of many multiple forms. It has been assumed that this text element was simply a presentation form for TA + Virama. For several years users in India as well as Government of India have been asking for a separate encoding of Khanda Ta. So far it was not entertained because adequate rationale was not documented along with explanation why the distinction is needed and why a separate encoding is needed for Bengali text. The proposal from the US and the UTC is to encode a new character. The rationale is given in document N2809.

Discussion:
    a. Dr. Ken Whistler: This proposal is coming form the US and UTC, clearly we have documented extensive support both by the Government of India and users in Bangladesh where this character is mostly used.
    b. Mr. Mike Ksar: Document N2812 contains the letter from Government of India to the UTC.
    c. Mr. Patrick Andries: The letter from GOI says Khand Ta instead of Khanda Ta.
    d. Dr. Umamaheswaran: I think it is a transliteration related problem.
    e. Mr. Peter Constable: There are other documents from the same department showing Khanda.

Disposition: Accept 09CE KHANDA TA in Bengali block - glyph from N2809.
See relevant resolution M45.5 item 'e' on page 54.

9.9   Korean character Postal Code Mark

Input document:
2815   Proposal to add Postal Code Mark to BMP of UCS; Korea NB - Dae Hyuk Ahn; 2004-06-18

Mr. Dae Hyuk Ahn: We added this character in our KS X:1001: 2002 standard based on user requirements. The name in the proposal is following the convention in the Unicode standard using the Hangul name. 327E is proposed location. The name could be either one.

Discussion:
    a. Dr. Asmus Freytag: We have not reviewed this proposal in Unicode – our preference is Circled Hangul IEUNG U to be consistent with other similar characters in the code chart. Annotation is for Unicode. I will need the FONT for the character. Just to let you know that if we cannot provide the font we may have to postpone the inclusion.

Disposition: Accept the character 327E CIRCLED HANGUL IEUNG U with from document N2815 for Amendment 1.
See relevant resolution M45.5 item 'd' on page 54.
Action item: Font to be sent to Dr. Asmus Freytag by Mr. Dae Hyuk Ahn, Republic of Korea.

9.10   Counting Rod Numerals

Input document:
2816   Proposal to add counting rod numerals to Unicode and ISO/IEC 10646

Discussion:
    a. Mr. Michael Everson: It is a fine proposal and I have technical comments on the names.
    b. Dr. Ken Whistler: We have reviewed this proposal and we are in favour of including this in Amendment 2.
    c. Mr. Zhang Zhoucai: This kind of input affects classical text and feedback from our Mathematical experts in China. We would like to study this topic. It is an older counting system. We would like to postpone to next meeting.
    d. Dr. Ken Whistler: The US national body will not object to make more time available to Chinese experts to study them.
    e. Mr. Zhang Zhoucai: If we could set aside some time at or before the next meeting we can get the right experts to participate. We can set a deadline for receiving comments / feedback to authors and consider at the next meeting.

Relevant resolution:

M45.27 (Counting rod numerals):   **Unanimous**
With reference to document N2816 on counting rod numerals WG2 invites China and other national bodies and liaison organizations to review and provide feedback to the authors by 2004-10-31 for consideration at its next meeting in January 2005.

9.11 Invisible Letter

Input document:
2822   **Proposal to add INVISIBLE LETTER to the UCS; Michael Everson, Peter Constable, Rick McGowan, &Ken Whistler; 2004-06-21**

Mr. Peter Constable: Use of SPACE before combining marks has been recommended to display stand alone combining marks. This poses some problems for the users because of behaviour of some applications in dealing with spaces. For example, SPACE gets collapsed in HTML XML etc. into a single SPACE>

A new character called INVISIBLE LETTER is proposed instead of using SPACE to be able to Visualize Standalone Combining mark, problems with line breaks etc.

Discussion:
  a. Dr. Umamaheswaran: We have to make some recommendations to the current practice of use of SPACE + Diacritic implementers.
  b. Dr. Asmus Freytag: Unicode has not seen this contribution yet. Processes Line Breaking etc. have to be examined. The property for this character could be Letter. It is proposed to be included in the CONTROL PICTUREs block. For example 25CC dotted circles etc. If we are adding to control pictures we should give ourselves a control picture for the dotted circle that we use in the standard to show the combining diacritics.
  c. Dr. Ken Whistler: As an author of this proposal, I would like to see either this solution or something similar to this is pursued. On behalf of the US national body – we have not seen this proposal and studied it. This character has significance to the architecture of the standards and need understanding of its ramifications to implementations. I would oppose inclusion of it in current amendment if WG2 goes in that direction. I would like this to be for further study.
  d. Mr. Michael Everson: Adding a control picture for dotted circle is a red herring. The proposed glyph has a dotted circle, a dashed box and smudge in the middle.
  e. Dr. Asmus Freytag: As a contributing editor, we have been using dashed box to represent characters with no visible representation --- using the dotted circle for this symbol along with dashed boxes needs some examination. As to legacy data there are many solutions being currently used.
  f. Mr. Dean Snyder: How will it work in the BiDi situations?
  g. Mr. Peter Constable: This character will have the BiDi neutral property.
  h. Mr. Erkki Kolehmainen: Why not call it Invisible Base letter instead?
  i. Dr. Ken Whistler: That would beg the question what is an invisible non-Base letter.
  j. Mr. Mike Ksar: The image blown up has some unacceptable content in it. I don't want to see such contributions presented to WG2. It is not mature enough. The proposal needs further discussion and study.

Action item: National bodies to review and feedback.

9.12 Latin letter Upper Case Glottal Stop

Input document:
2789   **Revised Proposal to Encode Orthographic Glottal Stops in the UCS; SIL International (contact: Jonathan Kew), Peter Constable; Expert contribution; 2004-06-08**

Mr. Peter Constable: The standard has U+0294 Latin letter Glottal stop. In practice, even though case distinction is not to be made, in some languages the distinctions is being made. The glyphs could be multiple - the current one is being used for upper case usage. The proposal simply provides a lower case equivalent of the upper case recognizing the current upper case usage. Other issues are identified in the contribution.

Discussion:
- a. Dr. Ken Whistler: The US national body has studied this proposal and have no particular concerns about this.
- b. Mr. Michael Everson: We had met with Mr. Chris Harvey at the last week's meeting. He was able to explain to the user community about the use of these characters. The Tall Glottal Stop that looks almost the same height as the Capital Latin Glottal Stop. The potential confusion between the IPA glottal stops has to be resolved. It may be better to recommend a separate pair of these.
- c. Dr. Asmus Freytag: The UTC did study the proposal – and have taken a decision on accepting this character. It looks like there is some continuing disagreement in this group, and it makes me wonder if we should run with it very quickly.
- d. Mr. Mike Ksar: Can this wait till a future amendment – further study?
- e. Mr. Peter Constable: It could wait.
- f. Mr. Patrick Andries: Are there any electronic documents using either of these shapes and if so in what context are they using it – lower or uppercase glottal stops?
- g. Mr. Peter Constable: I don't have that information. One point I have to emphasize is that the issues are documented and not all can be resolved.
- h. Dr. Ken Whistler: The US national body is against postponing it till the next meeting.
- i. Dr. Umamaheswaran: We could consider including it in PDAM2.
- j. Mr. Michael Everson: I don't see any reason we cannot put it in PDAM2. The issue is that the IPA glottal stop is left alone and a pair of Latin Letters small and uppercase Glottal Stop be used to solve the problem.
- k. Dr. Asmus Freytag: From Unicode point of view we could put it in PDAM2. It will be the first case where the pairs of lower case and uppercase will be in two different blocks.
- l. Dr. Ken Whistler: There is no question on whether the Upper Case letter Glottal stop is required. The only question is whether a future character is required or not. I suggest that this character belongs in Amendment 1.
- m. Mr. Peter Constable: Would the Canadian national body take it upon itself to contact the native communities to get their feedback?
- n. Dr. Umamaheswaran: Yes we do intend to do that.

Disposition: Accepted LATIN CAPITAL LETTER GLOTTAL STOP at 0241 for Amendment 1.
Relevant resolution:
(Item 'a' in resolution M45.5 below).

M45.5 (New characters for Amendment 1):   **Unanimous**
WG2 accepts for inclusion in Amendment 1 to ISO/IEC 10646: 2003 the following **35 new** characters:
- a. With reference to document N2789 on Glottal Stop character:
        0241 LATIN CAPITAL LETTER GLOTTAL STOP
    for encoding in the Latin Extended-B block with the proposed glyph, and as shown in the charts on pages 5 and 6 of document N2832.
- b. With reference to document N2705 and N2788 on Indo-Europeanist phonetic letters:
        2094 LATIN SUBSCRIPT SMALL LETTER SCHWA
    for encoding in the Superscripts and Subscripts block with the proposed glyph, and as shown in the charts on page 48 of document N2832.
- c. With reference to document N2713 on Phonetic and IPA characters:
    Create a new block named Modifier Tone Letters in the range A700 to A71F; populate code positions A700 to A716 with characters shown as A901 to A917 in document N2713, and as shown on page 77 in document N2832.
    (See also resolution M45.4-c above for 0358 Combining Dot Above Right character).
- d. With reference to document N2815 on Postal Code mark:
        327E CIRCLED HANGUL IEUNG U
    for encoding in the Enclosed CJK Letters and Months block with the proposed glyph, and as shown in the charts on pages 73 and 74 of document N2832.
- e. With reference to documents N2809, N2810, N2811 and N2812, on Bengali Khanda Ta:
        09CE BENGALI LETTER KHANDA TA
    for encoding in the Bengali block with the proposed glyph, and as shown in the charts on pages 23 and 24 of document N2832.
- f. With reference to Left and Right Paraphrase marks in document N2765 on N'Ko script:

2E1C LEFT LOW PARAPHRASE BRACKET

2E1D RIGHT LOW PARAPHRASE BRACKET

and, the name changes caused by the above allocation to the following PDAM1 characters:

2E0C LEFT RAISED OMISSION BRACKET

2E0D RIGHT RAISED OMISSION BRACKET

for encoding in the Supplemental Punctuation block with the proposed glyph, and as shown in the charts on pages 70 and 71 of document N2832.

g.   With reference to document N2799 on Africanist phonetic characters:

023F LATIN SMALLLETTER S WITH SWASH TAIL

0240 LATIN SMALL LETTER Z WITH SWASH TAIL

for encoding in the Latin Extended-B block with the proposed glyph, and as shown in the charts on pages 5 and 6 of document N2832.

h.   With reference to document N2784 on SENĆOȽEN Latin characters:

023A LATIN CAPITAL LETTER A WITH STROKE

023B LATIN CAPITAL LETTER C WITH STROKE

023D LATIN CAPITAL LETTER L WITH BAR

023E LATIN CAPITAL LETTER T WITH DIAGONAL STROKE

for encoding in the Latin Extended-B block with the proposed glyph, and as shown in the charts on pages 5 and 6 of document N2832.

9.13 Additional Uighur characters

Input document:
2820   **proposing to supplement with the special script and character for Uighur, Kazakh, And Kirghiz in BMP; China NB; 2004-05-17**

Professor Wushauer Silamu presented document N2820. In the past we proposed additional presentation forms and were rejected. In this proposal we are proposing eight nominal forms for Uighur, Kazakh and Kirghiz in BMP. Their presentation forms are variants --- and causes some inconsistencies. This proposal addresses the problems for Uighur etc.

Discussion:
   a.   Dr. Ken Whistler: We need to study this proposal further. It can have potential impact on Arabic script implementations. We have to get feedback from the Arabic script experts.
   b.   Mr. Behdad Esfahbod: They are requesting in table 1-2 asking for characters that has eight shapes. The current model has only four shapes. It is left to the implementation to pick the correct form either in the IME or shaping engine. The rules in Uighur are context sensitive.
   c.   Mr. Mike Ksar: You have a feedback from Iran stating that these characters can already produced using existing encoding forms. If that is the case, there is no need to encode separately any characters.
   d.   Ms. Aïcha Bouhjar: I agree with the Iranian comment that these characters are already encodable.
   e.   Dr. Qin Lu: Possibly not all forms are encoded.
   f.   Mr. Behdad Esfahbod: All of them are encodable. The others can be composed.

An ad hoc group met on Thursday morning and reported the following:

"Source: Ad-hoc on Uighur: Wushauer Silamu (China), Qin Lu (China), Behdad Esfahbod (Iran), Aïcha Bouhjar (Morocco), Patrick Andries (Canada)

"The document in the current form cannot be accepted since a letter proposed (U+076E) is already encoded in ISO/IEC 10646 as ALEF MAKSURA U+0649. Moreover, in the current proposal there are characters proposed with eight different contextual forms, but the logic behind to choose one of this eight forms is not provided.
(Recommendation to the proposer:) "Please consider ISO/IEC 10646's direction to use USI (Unique Sequence Identifiers) as a solution for Uighur letters when updating the document."

Mr. Mike Ksar: No additional feedback was received to change current WG2 consensus on the subject.
Action item: China is invited to provide a revised version of document N2820 at the next WG2 meeting.

9.14 Six Hexadecimal digit characters

Input document:
2677   **Proposal for six Hexadecimal digits; Ricardo Cancho Niemietz – individual contribution; 2003-10-21**

Discussion:
   a. Dr. Ken Whistler: The US national body is strongly opposed to do this. The use of existing Latin characters is so prevalent that it will disrupt everything.
   b. Mr. Erkki Kolehmainen: I am surprised at the expressed requirement.
   c. Mr. Michael Everson: This is a remarkable proposal for disunification and will invalidate oceans of existing data. We should not accept duplicate encoding.

Disposition: Not accepted – disunification with Latin A to F will be disruptive to all existing implementations.
Relevant resolution:

M45.24 (Hexadecimal Digits):   **Unanimous**
WG2 rejects the proposal for six hexadecimal digits in document N2677 for the reason that the proposed disunification from Latin Letters A to F is disruptive to all existing implementations which use the current encoding of these letters to represent Hexadecimal Digits.

9.15 Items carried forward to next meeting

The following documents (that were assigned to different 9.xx items on the agenda) are carried forward to next meeting.

2758   **Proposal for an additional 12 Hebrew characters; Elaine Keown - individual expert; 2004-05-12**
2759   **Proposal to add Babylonian Pointing to ISO 10646; Elaine Keown; 2004-05-14**
2760   **Proposal to encode dominoes and other game symbols; Everson; 2004-05-18**
2790   **Proposal to add Bantu phonetic click characters to the UCS; Everson; 2004-06-10**

10   Architecture & Processes

10.1 Roadmap snapshot

Input document:
2805   **Snapshot of Pictorial view of Roadmaps to BMP, SMP, SIP and SSP; Ad hoc group on Roadmaps (Michael Everson, Rick McGowan, and Ken Whistler); Adapted by: V.S. Umamaheswaran; 2004-06-11**

Dr. Umamaheswaran: Document N2805 is a snapshot as of two weeks ago. However several changes have been identified during this meeting and WG2 can decide to update this based on outcome at the end of this meeting and post to SC2 site.

Action item: The roadmap committee to ensure proceedings of this meeting are reflected in any updates to the roadmap.

10.2 Proposed update to P & P– CJK Compatibility ideographs sources

Input document:
2806   **Updated Principles & Procedures – Sources for CJK Compatibility ideographs - CJK; Eric Mueller, Uma; 2004-06-17**

Dr. Umamaheswaran introduced the document.
Discussion:
   a. Mr. Masuhiro Sekiguchi: I would like to know what is the problem being addressed by such more detailed information?
   b. Dr. Umamaheswaran: The last paragraph in document N2806 explains the purpose.
   c. Mr. Michel Suignard: I would like to avoid situations like we had with DPRK proposals for compatibility ideographs etc. arising out of not having such information. We want to ensure that the information is complete.
   d. Dr. Ken Whistler: If I give you a glyph equivalent to CJK unified U+xxxx would that be sufficient to document that and accepting the compatibility character? The reason we need to know the requested information is when the standard has two characters, char XXXX is mapped to U+xxxx and char YYYY is to be mapped to new compatibility character. With such complete information

we can get all the interchange of these information correctly. This will allow complete information for implementers to go away and do the right thing for their users.

e. Mr. Yasuhiro Anan: When we asked for JIS X0213 compatibility ideographs --- we provided exactly the information requested – correct? (YES). DPRK has proposed a new set of 106 compatibility ideographs --- the document contains the source references, the unified code points and glyphs etc. It was delayed because of lack of such information.

f. Dr. Ken Whistler: This proposal is to simply bring P&P document to clarify what is required in more detail to avoid delays in evaluating the proposal; to allow proposals to be well formed.

g. Mr. Masuhiro Sekiguchi: This information is needed to make sure that the Compatibility Ideograph is absolutely necessary – whether it could map to a unified ideograph or not.

h. Dr. Ken Whistler: Once it is determined that a group of experts that there is a compatibility ideograph – all the information is required for the standardization to go through. Whether a particular character is unified or compatibility is separately needed. When someone claims that it is a compatibility character and has been determined it is a compatibility character, then such information is required.

i. Mr. Mike Ksar: Lack of such information has caused much of the delay in evaluation of and acceptance of DPRK compatibility proposal. This is not a retroactive requirement.

j. Mr. Masuhiro Sekiguchi: I was wondering why this information was needed. It is clear now.

Action item: Accept the proposed update --- and Dr. Umamaheswaran to update the P&P expanding item 8.
Relevant resolution:

M45.29 (Source information for CJK compatibility ideographs):   Unanimous
WG2 accepts the proposal in document N2806 for additional details on source information for CJK compatibility ideographs for inclusion in its Principles and Procedures document.

10.3 Updated Principles and Procedures

Input document:
2652R   Updated Principles & Procedures, link page and .doc and .pdf formats; Uma; 2003-11-25

Dr. Umamaheswaran: There was no update presented at this meeting – current document is valid. Several suggestions for improvement have been made to me and some additional items have to be added to P&P from the previous meetings. These are to make explicit the kind of additional information needed.

Action Item: To add text to clarify the rules on Fixed versus Open Collections.

11 IRG status and reports

11.1 IRG meeting 21 & 22 Resolutions

Input documents:
2683   Resolutions of IRG #21; IRG Rapporteur; 2003-11-20
2767   IRG # 22 Resolutions; IRG; 2004-05-27

Documents that were under 12.xx but were not discussed under any agenda item are listed below:

2686   List of Participants - ISO/IEC/JTC1/SC2/WG2/IRG#21 Meeting; IRG Rapporteur; 2003-11-20

2685   Minutes of the Editorial Group Ad Hoc Discussion on WG2 #44 Resolutions (IRG N978r); IRG Rapporteur; 2003-11-20

2684   Draft Agreement on Old Hanzi Encoding; IRG Rapporteur; 2003-11-20
2782   Resolution from the Old Hanzi Interest Group; IRG; 2004-05-26

IRG Meeting 22 resolutions are recorded in document N2767. Mr. Zhang Zhoucai, the IRG Rapporteur, presented these resolutions. (Note: Several documents from IRG, which were on the agenda, but were not discussed, or are discussed under other agenda items, are in the above list of documents. The corresponding non-discussed agenda item has been removed from these minutes.)

M22.1 – meeting 23 in Jeju, Korea is confirmed. We need WG2 approval. Future meetings are tentative.

M22.2 is for information.

M22.3 - Dr. Lu Qin was nominated as next IRG rapporteur. Also appointments were made of Mr. Chen Zhuang as Chief Editor and Ms. Wang Xiao Ming as Technical Editor.

M22.4 - International Ideographic Core (IICore) ad hoc group of IRG has produced document N2780. It is almost mature and is ready to be processed in WG2. We need instructions from WG2 as to how to process it further as a named subset in the standard. There are several other resolutions available. (See agenda item 11.6 on page 60 for discussion and disposition of IICORE documents.)

M22.5 to M22.8 are for information.

M22.9 – IRG is proposing to have a sub group on Old Hanzi (pre-Qin) for encoding. IRG would like to have approval for setting up a sub group in IRG.
Discussion:
   a. Mr. Mike Ksar: My suggestion is that IRG create an ad hoc sub group of experts instead of a formal sub-group of IRG. The experts can work together and report their work to IRG and IRG can bring it back to WG2.
   b. Dr. Ken Whistler: Does the report from Old Han work group include any recommendation on whether the Greater and Lesser Seals are to be unified or not.
   c. Mr. Zhang Zhoucai: The Greater and Lesser Seals are considered to be separate for encoding. There are some issues:
        Old Hanzi is considered to be a separate script – different from Unified CJK ideographs. Currently it is not part of IRG scope. It was considered Related to CJK Unified Ideographs. But there is argument in the IRG whether the work is within the scope of IRG or not – but these should be separately encodable.
   d. Professor Kohji Shibano: If IRG's scope is expanded then there is no separate approval required from SC2.
   e. Dr. Asmus Freytag: You could identify as Old Hanzi repertoire and declare that IRG has found this to be non-unifiable ideographs. As to the working group you could create an ad hoc group within IRG and make it report to IRG.
   f. Dr. Lu Qin: In IRG there was discussion as to whether Old Hanzi was within its scope of work or not. If the scope is expanded we may not need to create a separate group. Old Hanzi is to be recognized as a separate set of ideographs and is not part of unifiable one.
   g. Mr. Yasuhiro Anan: How should the unification rules apply in all cases?
   h. Dr. Lu Qin: Whether unification rules can be applied to Old Hanzi or not is open.
   i. Mr. Mike Ksar: Are the Old Hanzi experts from other IRG national members or they are all from a small number of IRG members.
   j. Mr. Zhang Zhoucai: As far as I know the new leader of Japanese IRG group is an expert on Old Hanzi.
   k. Dr. Ken Whistler: We have Old Hanzi experts in USA also.
   l. Mr. Michael Everson: How many are we talking about?
   m. Mr. Zhang Zhoucai: Probably 10000 characters or so. I prefer to have a formal sub group within IRG to establish some responsibility, and it falls within the Asian method of working.
   n. Mr. Mike Ksar: Any additional level of bureaucracy can kill the effort.
   o. Dr. Ken Whistler: One advantage is that there is no urgency for this set.
   p. Mr. Zhang Zhoucai: Some danger exists – if we don't encode Old Hanzi, users are making them FONTS and it will make applications more complicated.
   q. Dr. Ken Whistler: I agree that there is urgency related to that --- so that we won't end up in Font solutions. It would relate to the Seals-related scripts. But there are other Old Hanzi subsets that there may not be urgency.

M22.11 -- CJK Strokes exists as a topic delegated to IRG for experts' opinion on Strokes. Please add this also to IRG's scope.
Relevant resolutions:
<<Note: Resolution M45.34, while including CJK Strokes in the IRG scope expansion, missed referencing the associated IRG resolution M22.11 from document N2767 --- Recording secretary.>>

M45.34 (Expansion of IRG scope): **Unanimous**

With reference to IRG resolution M22.9 in document N2767, WG2 proposes an expansion of the scope of IRG to include Old Hanzi and CJK Strokes as additional topics in its deliberations, and requests SC2 to approve this expansion in scope.

M45.35 (IRG appointments): **Unanimous By Acclamation**

WG2 endorses the IRG nomination of Dr. Lu Qin as the next IRG Rapporteur, and requests SC2 to approve this appointment. WG2 notes the IRG appointments of Mr. Chen Zhuang as the Chief Editor and Ms. Wang Xiao Ming as the Technical Editor.

M45.40 (Appreciation to past IRG Rapporteur): **By Acclamation**

WG 2 thanks Mr. Zhang Zhoucai for his excellent service to WG2 as its past IRG Rapporteur from February 1995 to June 2004.

See also resolution M45.36 under agenda item 14.4 Future Meetings on page 65 regarding approving the next IRG meeting.

11.2 China's confirmation of fonts for CJK-B

Input document:
2695   China's confirmation on fonts for CJK_B 21E2D and 21E45; China - Mr. Zhang; 2003-12-12

Document N2695 is in response to an IRG action item from resolution M44.17 to verify the correct glyphs for 21E2D and 21E45.

Discussion:
   a. Mr. Michel Suignard: We should add the information provided and include it in the appropriate file.
   b. Mr. Zhang Zhoucai: In IRG we did not have enough time to verify this. However, Mr. Yasuhiro Anan had helped in reviewing and ensuring consistency.

Disposition / **action item**: A note should be added to the standard capturing the information given in document N2695 regarding the correct glyphs to use for 21E2D and 21E45.

11.3 Six additional KP source references

Input document:
2774   Proposal to add 6 KP source references to existing CJK Unified Ideographs; DPRK via IRG; 2004-05-25

DPRK requests that 6 KP1 source information be added to CJKU_SR.txt in Amendment 1.

Disposition: Accepted.
See relevant resolution under agenda item 11.4 below.

11.4 Thirteen additional KP source references to compatibility characters

Input document:
2775   Proposal to add 13 KP source reference to existing CJK Compatibility Characters; DPRK via IRG; 2004-05-25

The above two agenda items are related. The previous one was for Unified ideographs, whereas this one is for Compatibility ideographs. DPRK requests 13 KP1 sources be added to CJK_C_SR.txt in Amendment 1.

Disposition: Accepted.
Relevant resolution:

M45.9 (Addition of CJK source references from DPRK):
Unanimous

With reference to IRG resolution M22.8 in document N2767, and documents N2774 and N2775, WG2 accepts the 6 KP source references in document N2774 and 13 KP source references in document N2775, for inclusion in CJKU_SR.txt and CJKC_SR.txt in Amendment 1 to ISO/IEC 10646: 2003.

11.5 Additional 106 Compatibility Hanja characters

Input document:
2776   Proposal to add 106 Compatibility Hanjas of D P R of Korea to CJK Compatibility Ideographs; DPRK via IRG; 2004-05-25

Mr. Yasuhiro Anan: All the information is correct in here as well.

Dr. Asmus Freytag: If the consensus is to review the gaps etc. in document in the production version we can go ahead.
Disposition: Accepted.
Relevant resolution:

M45.10 (106 compatibility Hanja characters from DPRK): **Unanimous**
With reference to IRG resolution M22.8 in documents N2767 and N2776, WG2 accepts the **106 new** Compatibility Ideographs and their mappings for encoding in the CJK Compatibility Ideographs block, in code positions FA70 to FAD9, as shown on pages 82 to 84 in document N2832, for inclusion in Amendment 1 to ISO/IEC 10646: 2003.

11.6 IICORE – CJK

Input documents:
2687   **IRG #21 Summary report of IICore Ad Hoc Group; IRG Rapporteur; 2003-11-20**
2777   **IICore V2.1 – CJK Basic – first 50 pages; IRG N1052; 2004-05-26**
2778   **IICore V2.1 – CJK Basic – second 50 pages; IRG; 2004-05-26**
2779   **IICore V2.1 – CJK Basic – last 64 pages; IRG; 2004-05-26**
2780   **Request for Collection Identifier for International Ideograph Core (IICore) Subset in 10646; IRG; 2004-05-27**
2781   **IICore 2.1 Mapping Tables; IRG; 2004-05-27**

IICORE – International Ideograph Core - is the new name for the International ideographic basic subset.

a. Mr. Masuhiro Sekiguchi: In IRG we discussed the normalized name for the collection - IICORE was the agreed name for it. We need approval of the name. The second question was to get the format required by the editor for inclusion in the standard. There are no version numbers.

b. Dr. Asmus Freytag: If there are any amendments, corrections etc. then one must have versions. Even if there is a possibility that some errors need to be corrected then we need a version number to distinguish one from another. The alternative to version number will be a different name – that would be equally acceptable.

c. Mr. Michel Suignard: In the charts in document N2777 etc. there are two glyphs.

d. Mr. Masuhiro Sekiguchi: It is the tradition in the IRG to show both glyphs.

e. Mr. Yasuhiro Anan: The request could be in the form of a plain text form .as an attachment to the set of documents produced by IRG. As to the version, when you discussed in UTC about it, is it on the assumption of being a fixed set or open set? The recommendation from IRG was not to bring up different sets, but ONE basic set. For implementers no one can force more than one basic set. They can have any characters they need on top of the basic set.

f. Dr. Qin Lu: the idea of the basic set is that there are characters that are not in the CORE set. Conceptually we don't want give the impression that there are versions 1, 2 etc. If we do make a mistake and we do need a version that would be a separate thing. The CJK Ideographs is the complete collection. The name needs to be approved by WG2.

g. Dr. Umamaheswaran: I had sent information about the format for collections to Mr. Zhang Zhoucai.

h. Mr. Michel Suignard: Document N2780 contains the suggested format. But I do not want the collection in this set. The source information is a problem. You are adding Macau, but not enough information for Singapore or Vietnam. I would prefer the source information for the information set in the standard; otherwise it can cause conflicts if there are errors. We don't need to repeat the information.

i. Dr. Qin Lu: The data we supplied is approved as to where they are collected from. That member body has given us the input. That does not mean that characters that are not in H column are not used in HKSAR.

j. Mr. Masuhiro Sekiguchi: The information called Source in IICORE Text file is NOT a duplicate of CJK Source Reference information. It includes some classification of amount of importance for that region. For the user of the subset the list of code points is not sufficient. The regional use information may also be needed.

k. Mr. Michel Suignard: Are you submitting any characters that were not in the original source?

l. Dr. Qin Lu: No - except from Macau.

m. Mr. Michel Suignard: Part of the source identification is the shape related information. We have to ensure that there is no conflict between the sources.

n. Mr. Yasuhiro Anan: There is a note in document N2680 -- it has IICORE additional information. Beyond that if question like what glyph shape is needed or not etc. we would need a new P&P document item.

o. Mr. Michel Suignard: You don't need the shape information if it is not different from the CJK multi column information in the standard.

p. Dr. Umamaheswaran: The P&P document --- clearly states the format that is required is just the row number and a set of code positions for each row. IICORE is a fixed collection. It is clearly spelled out in the P&P how to mark a fixed collection.

q. Dr. Ken Whistler: I agree that this document should be of a Collection, documented as a sequence of code points. I agree with Dr. Umamaheswaran on that. All the other information is subject of a separate discussion. On the question of stability, versioning etc., with about 9600 or so entries in it, I would guarantee that there will be errors. Once a collection is fixed nothing can be taken out of it. A correction can be made only by means of adding something to it as well as giving it a different name. This is the stability guarantee we need.

r. Dr. Qin Lu: Our intention is not to add anything and not to take anything out. Can we start IICORE?

s. Dr. Asmus Freytag: As long as we have the consensus that we do not make silent updates we can go out with IICORE.

t. Mr. Erkki Kolehmainen: I would like to understand why something cannot be removed in forming a new subset.

u. Dr. Asmus Freytag: Interoperability is the main guarantee for others.

v. Mr. Michel Suignard: In future we can add years, versions etc.

w. Mr. Mike Ksar: What is needed is what Dr. Umamaheswaran mentioned. At this point in time what we need is the list of code positions with IICORE is the label.

x. Mr. Zhang Zhoucai: The collection is needed. Name is accepted as IICORE. No versioning. A simple format is needed.

Relevant resolutions:

M45.11 (IICORE collection):   **Unanimous**
With reference to document N2780 on International Ideograph Core subset, WG2 accepts to create a new fixed collection named IICORE, and instructs its editor to prepare the collection definition in the appropriate format for inclusion in Amendment 1 to ISO/IEC 10646: 2003.

M45.32 (Stability of IICORE collection):   **Unanimous**
With reference to document N2780 on International Ideograph Core subset, WG2 accepts that any future amendments of the International Ideograph Core should be recorded as new collections with their own unique collection names. The new collection must be a true superset of all existing IICORE and any of its amended collections in an upwardly compatible manner.

11.7 CJK Ideographs - Source Visual References Information

Input document:
2830   CJK Ideograph source visual references information; Michel Suignard; 2004-06-23

Mr. Michel Suignard: When we published Part 2 there was a concern about page count. Now the standard is published only in electronic form, and the page count is less of a concern. The exact shape information is there only for the BMP. Not adding similar information in supplementary planes has been a problem for implementers to determine what is really needed for the customers just looking at 10646. What I am discussing in this document is to make such information available for Plane 2 also. I understand that IRG has the needed information and the visual information of the sources is available in IRG archives. By making the visual source information available in some machine-readable format it will be of great benefit to the users and vendors providing solutions. It could be a Technical Report, or a new Annex or a new format for Extension B charts. I am willing to provide the textual component for such information. We can choose the format similar to what we have for the BMP. For the compatibility ideographs also we may need such information, with the exceptions of some ideographs that are in the CJK compatibility area but are considered to be part of the unified collection. Again if there is a single source it is less of a problem.

Discussion:
a. Mr. Mike Ksar: If it is a Technical Report it could be a potential maintenance problem.

b. Dr. Asmus Freytag: One thing we should not do is to replace the chart portion directly. One of the difficulties is to select the glyph to choose for the Unicode book. Unlike 10646 we are unable to document multiple columns for these. I don't have any problem of having an Annex in the standard, as long as there is at least a single column version of the charts for synchronization purposes.

c. Dr. Ken Whistler: US national body is in general support of what is proposed by the editor. There are some questions on how to work out the publication related problem etc. Personally I think the best solution would be to print a single column version and a multi column version of all unified characters. So both charts will be available for all code positions.

d. Mr. Alain LaBonté: Would that annex be a separate part? If it is a part of the standard we could look at a bilingual title.

e. Mr. Yasuhiro Anan: The whole intention for multi-column version for extension B is usability in terms of assisting in Unification. The original version had the unification information. The culturally correct glyph shapes may not be the desired result out of that. There are already differences in the glyphs between the published standards and the glyphs used in the multicolumn formats.

f. Mr. Michel Suignard: At lest we would have a starting point and ask the question against that reference point.

g. Mr. Mike Ksar: Such an annex would be Informative any way.

h. Mr. Masuhiro Sekiguchi: Japanese NB would like to have multicolumn code charts for all CJK Unified Ideographs; however at that time the consensus was for single column code chart. I would like to support your idea of multi column work. However, after Extension B was published and being in the middle of Extension C work, it is not such an easy job to produce such a code chart. In Extension B the collection was based on input from national bodies. During the process of unification, the glyphs have been adjusted along the way, and we do not have the glyphs or font that was used in the original submissions. In the IRG Super CJK used internally in their work, the quality of glyphs / fonts used there is not appropriate for the publication purposes. Even though it is a good idea, it would be difficult to get the quality glyphs. My suggestion is to submit the proposal to IRG to get an evaluation.

i. Dr. Ken Whistler: If we publish this as a multicolumn chart for Extension B or Extension C, it should be NORMATIVE and exactly the same status as the BMP. The whole point is to normally document what is the shape. As to the comment on culturally correct aspects of the glyphs, it should be documented – that one cannot create a culturally acceptable font simply by picking the set of glyphs from the individual columns. It is not the same thing as having the right font that is culturally acceptable.

j. Mr. Mike Ksar: I stand corrected in terms of normativeness.

k. Dr. Asmus Freytag: I agree with most of what has been said here. While the information made available would be free, the work needed to prepare the information is not free. I would need more feedback on who needs this format to engage in some resource planning exercise because the resource available are limited and we would need to have tradeoffs. We should document also the precise nature of the multicolumn format we already have – along the lines of what Dr. Ken Whistler has stated. We should understand what we are getting into.

l. Mr. Michel Suignard: Cultural correctness is something we have to be careful and there should be no such implications from the standard document.

m. Mr. Mike Ksar: I would like to instruct the IRG to evaluate this and come back with a possible schedule etc. and report back to WG2 at the next meeting.

n. Dr. Qin Lu: We will come back with a plan.

o. Mr. Zhang Zhoucai: It is doable – it can be prepared; however, the workload to verify the accuracy and consistency is another thing.

Disposition: Accept the request and request IRG to assess and propose and implementation plan.
Relevant resolution:

M45.33 (CJK Ideograph source visual reference information):   **Unanimous**
WG2 accepts the proposal to add visual reference information requested in document N2830, for those CJK unified ideographs that do not currently have it, similar to the information in the standard for the 'CJK unified ideographs' block. Further, WG2 instructs the IRG to prepare an assessment report including a proposed implementation plan for discussion at the next WG2 meeting in January 2005.

12 Defect reports

12.1 Missing entries in collection 340 definition

Input document:
2693   Proposed Technical Corrigendum to 10646: 2003 - Missing cell entries in collection 340; Canada; 2004-01-05

Dr. Umamaheswaran described the defect outlined in document N2693. The correction required is to a normative section. It is a technical error and should be fixed.

Disposition: The proposed corrigendum was accepted for inclusion in Amendment 1.
Relevant resolution:

M45.12 (Technical Defect):   **Unanimous**
WG2 acknowledges the technical defect in the definition of collection 340 - Combined First Edition reported in document N2693 (SC 2 N3711) and accepts the proposed correction for inclusion in Amendment 1 to ISO/IEC 10646: 2003.

13 Liaison reports

13.1 Unicode Consortium

Input document:
2762   Unicode Liaison Report; Unicode Consortium; 2004-05-18

Dr. Asmus Freytag summarized document N2762.

Loose Matching for Character names
Dr. Asmus Freytag: Phags-pa has names of characters with –A and A- etc. This entails a change in the current name-matching rules that we have in the standard. Originally we thought we can take all the hyphens out and the names will still be unique. However the use of hyphens in Tibetan etc. cause the rule to break.
Discussion:
   a. Mr. Reinhold Heuvelmann: What would be an example of such a Hangeul name?
   b. Mr. Alain LaBonté: are there any cases that were found with exceptions
   c. Dr. Ken Whistler: Hangul Jungsong OE and O-E are different (116C and 1180). The above item is already in the US ballot comments T.6 – though phrased differently.

Font Policy
Dr. Asmus Freytag: Unicode has adopted a policy for receiving FONTS and FONT data for publication purposes. However, it is very unclear as to what the rights are in terms of usage of these. A minimum set of license rights etc. to enable Unicode to get the work done has been stated in the font policy. If you submit a font to Unicode, the default license would be applied and if you disagree with that default the supplier can send your own license etc. If a proposal has been accepted and a suitably licensed font is not made available, the script may be withdrawn from the publications. It is documented on the Unicode web page.
Relevant resolution:

M45.30 (Font submissions policy):   **Abstain:** China
   Accept: Canada, Finland, Germany, Iran, Ireland, Japan, Korea (Republic of), Mongolia, Norway, Poland and USA

With reference to document N2762 WG2 resolves to support the Unicode Consortium's font submissions policy documented at http://www.unicode.org/policies/font_policy.html for the preparation and publication of ISO/IEC 10646 and its Amendments.
Action item: Dr. Umamaheswaran is to add appropriate text to Principles and Procedures document.

Common Locale Data Repository - CLDR
Dr. Asmus Freytag: This is a new project Common Locale Data repository - CLDR run by a new Technical Committee called CLDR-TC. Its goal is to provide collection of data to describe locale information (cultural elements) with two major efforts:
         - identify what is currently implemented
         - identify best practice

Operating mode of the CLDR-TC:
- frequent teleconference meetings -- every 2 weeks
- submission by online contribution (forum based)
- data is in XML format (LDML format documented by UTS 35 available in Unicode web site)

The CLDR committee would like to know national body preferences on cultural information and is seeking input from these bodies through establishment of liaison between these bodies and the Unicode Consortium concerning this effort. CLDR is not a prescription, but identifies locales used by governments and implementers. This results in useful resources for users as well as implementers.

Discussion:
    a. Mr. Alain LaBonté: Nothing against CLDR, but isn't ISO already covering this?
    b. Mr. Keld Simonsen: Yes, ISO is. Should be cooperation with ISO, same as between WG2 and UTC.
    c. Dr. Asmus Freytag: Intend is to cooperate with ISO. I cannot be specific.

Script code
Dr. Asmus Freytag: Unicode is the ISO Registration Authority for ISO 15924 concerning Script Codes. Mr. Michael Everson (Evertype) is the registrar. Details are available on the Unicode Web site.

13.2 IETF

Mr. Michel Suignard: IRI (Internationalized Resource Identifier) is being developed after International Domain Name (IDN) was standardized. It is now in last call and should become a Recommendation soon. It can be seen as an extension of IDN as making multilingual URI possible.
Mr. Erkki Kolehmainen: European countries are already implementing IDN and quick progress is being made.

Mr. Mike Ksar: RFC3066 (language tag) is being revised as 3066bis; it is now in its 4th draft.

13.3 SC22

Mr. Mike Ksar: There is ongoing relationship as shown by the request by SC22 to SC2/WG2 to describe character identifiers usable by languages in the context of SC22.

13.4 SC22/WG20

Dr. Ken Whistler: The working group has not met recently for lack of work items, now that ISO/IEC 14651 is no longer a WG20 project and that the disposition for last ballot of ISO/IEC 15987 (cultural registry) is not yet available. The current effort is to get that disposition done.

13.5 W3C

Input document:
2712   Character Model for the World Wide Web 1.0: Fundamentals - last call; Character Model for the World Wide Web 1.0: Normalization - first working draft; W3C-I18N - Martin Duerst; 2004-02-25

Mr. Mike Ksar: Liaison report from W3C is in document N2712. *CharMod* document is now split between Fundamentals (last call) and Normalization (working draft).

13.6 CEN-CDSG

Input document:
2731   Minutes CDSG meeting 2004-03-12 in Paris; CDSG Secretariat; CDSG N123; 2004-03-13

Mr. Mike Ksar: Document N2731 contains the meeting minutes of the last CDSG meeting. CEN TC304 is now in dormant status; Sweden is maintaining a web site (mentioned in the report).

14 Other business

14.1 Sri Lanka Standard SLS 1134 on Sinhala

Input document:
2737   Sinhala character code for information interchange - SLS 1134 - Second Revision; SRI LANKA STANDARDS; 2004-04-15

This document was for delegates' information and for feedback to Sinhalese national standards organization by experts.

Dr. Umamaheswaran: I encourage you to read this document - at least for educational purposes.

14.2 Web Site Review

Mr. Mike Ksar: The WG2 website is still at dkuug and maintained, and dkuug has assured us that they will keep their support. I will post the documents and maintain web site. A resolution to thank Mr. Keld Simonsen for his past effort and new situation will be prepared.

Discussion:

    a. Mr. Keld Simonsen: I want to move the site to my new location, since I was appointed Webmaster.

    b. Mr. Mike Ksar: As far as we can look in our archives we cannot find any past resolution on WG2 appointing any web master.

    c. Dr. Asmus Freytag: I have a concern. WG2 must agree to insure URI stability for documents given the large content of data referencing WG2 documents. Should be added to WG policy.

Action item: Dr. Umamaheswaran to include appropriate text from the above in Principles and Procedures document.

Relevant resolutions:

M45.31 (Stability of URLs for the web site):   **Unanimous**
WG2 notes the critical importance of stable URLs for the existing collection of electronically available working group documents and authorizes its convener to take the necessary precautions and steps to ensure that all past, current and future URLs for working group documents remain stable.

M45.37 (Appreciation to Web master):   **By Acclamation**
WG 2 thanks Mr. Keld Simonsen for many years of his excellent service to WG2 as its web master from May 1995 to May 2004.

RESOLUTION M45.38 (New Web master):   **By Acclamation**
WG 2 appoints Mr. Mike Ksar, its convener, as the new web master for its web site.

RESOLUTION M45.39 (Appreciation to DKUUG for web services):   **By Acclamation**
WG 2 thanks DKUUG, for its continued support of the web site for WG 2 document distribution and the e-mail server.

14.3 Other documents

Input documents:
2700   **Updated Document Register – thru document N2687 and updated document N2652R (Principles & Procedures) plus document N2662R (Roadmap); Mike Ksar; 2003-11-26**
2750   **Document Register document N2650 - document N2750; Ksar; 2004-04-21**
2696   **Presentation Foils from National Workshop on Unicode, New Delhi, Sept 24-26, 2003 - Unicode and 10646 processes; Uma; 2004-01-22**
For your information – there was no discussion at the meeting.

14.4 Future Meetings

    a. #46 – January 2005 – Xiamen (Amoy), Fujian Province, China
       Mr. Mike Ksar: Next WG2 meeting is confirmed by China to be in Xiamen (in Southern China) fro five days from January 24 to 28, 2005. We are still looking for host in Europe for summer 2005. The hosting requirements are – a conference room with Internet connection, and rooms for ad hoc meetings; food and special events are not required. ISO likes to have some pre-announcement of the date and location.

    b. #47 – Summer 2005 – Soliciting host in Europe

    c. #48 – January 2006 – Soliciting host in North America

    d. #49 – Summer 2006 – Soliciting host in Asia

    e. #50 - January 2007 – Soliciting host in Europe

Relevant resolution:

M45.36 (Future meetings):   **Unanimous**
WG 2 meetings:

        Meeting 46 – 2005-01-24/28 in at Xiamen (Amoy), Fujian Province, China (Location to be confirmed)
        Meeting 47 – July 2005, Hosts are needed preferably from Europe
        Meeting 48 – January 2006, North America

IRG meeting:

        Meeting 23 – Jeju, Korea, 2004-11-29 to 2004-12-03

15 Closing

15.1 Approval of Resolutions of Meeting 45

Output document:
2754   Resolutions of Meeting 45; Uma/Ksar; 2004-06-24.

The draft resolutions prepared by the drafting committees were reviewed. Experts from Canada, China, Finland, Germany, Iran, Ireland, Japan, Korea (Republic of), Lithuania (Guest) Mongolia, Morocco (Guest) Norway, Poland, TCA (liaison), Unicode Consortium (liaison) and the USA were present when the resolutions were reviewed and adopted. Since the meeting was late starting the resolutions review, the delegates were requested to inform the recording secretary of all minor corrections after the meeting. Some corrections were made along the way for some resolutions. Please note that the resolutions were renumbered after the meeting.

- Resolutions 45.17 and 45.18 were related to input from DPR of Korea. These inputs were presented to WG2 by IRG on behalf of DPRK. Their submissions were accepted for inclusion in Amendment 1. IRG convener was requested to convey the acceptance of these contributions to DPRK.
- Progression of new Amendment is captured in Resolution M45.20 below:

M45.20 (Amendment 2 – subdivision and PDAM text):   **Unanimous**
WG2 instructs its editor to prepare a project sub division proposal and PDAM text based on the various resolutions from this meeting accepting characters for inclusion in Amendment 2 to ISO/IEC 10646: 2003, and forward them to the SC2 secretariat for simultaneous ballot of sub division approval and PDAM registration (see documents N2835 and N2836). The proposed completion dates for the progression of this work item are: PDAM 2004-12-15, FPDAM 2005-06-15, and FDAM 2005-12. *(Note: A total of **1125** characters were accepted for inclusion in Amendment 2 at this meeting.)*

- Resolution 45.22:
    - Mr. Alain LaBonté: We should request SC22 to specify the criteria. It was pointed out that document N2810 contains sufficient details for WG2 to proceed and the rest can be dealt with the usual liaison relationship that exists with SC22.
    - Norway objected to resolution 45.22 on accepting the request to provide specifications to SC22 by SC2/WG2.
- Resolution 45.30: China abstained on acceptance of the Fonts submission policy; they need more time to study the policy.

A total of 41 resolutions were adopted at the meeting – see document N2754. A total of **515 new** characters were added, **52** characters were **moved** to Amendment 2 from the current **810,** leaving a net of **1273** additions in Amendment 1. A total of **1125** characters (including the **52** characters that were moved from Amendment 1) were accepted for inclusion in Amendment 2. Amendment 1 was progressed to FPDAM balloting. Amendment 2 was progressed to simultaneous sub-division approval and PDAM registration.

Appreciation to the host:
Relevant resolution:

RESOLUTION M45.41 (Appreciation to Host):   By Acclamation
WG 2 thanks the hosts -- the Canadian national body and IBM Toronto Lab, in particular Ms. Carol Stock and her
staff, for hosting and providing the excellent meeting facilities and outstanding administrative support. WG2 also
appreciates the kind hospitality extended by the Canadian national committee for Coded Character Sets.

15.2 Adjournment

The meeting adjourned around 13:00h.

16 Action items

All action items recorded in the minutes of the previous meetings from M25 to M42 have been either
completed or dropped. Status of outstanding action items from earlier meetings M43 to M44, and new
action items from the latest meeting M45, 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 N2253)
   p. Meeting 40, 2001-04-02/05, Mountain View, CA, USA (document N2353), and
   q. Meeting 41, 2001-10-15/18, Singapore (document 2403)
   r. Meeting 42, 2002-05-20/23, Dublin, Ireland (document N2453)

16.1 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-43-6	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
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, M45 – 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, M45 – in progress.	In progress.
d	With reference to document N2571, IRG is encouraged filter the input on Ancient Ideographs before WG2 considers them. M44, M45 – in progress.	In progress.
AI-43-9	**The Irish national body (Mr. Michael Everson)**	
d	To update the roadmap to provide some guidelines for differentiating Ideographic Strokes from Ideographs addressing concerns expressed in document N2526. M44, M45 – 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
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, M45 – 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, M45 – in progress.	In progress.
j	To submit a revision of document N2505 on Ol Chiki script based on comments received at the meeting and any other feedback received before the next meeting. M44, M45 – 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, M45 – in progress.	In progress.

16.2 Outstanding 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, with any corrections noted in section 3 of document N2753 from meeting 45).	Status
AI-44-4	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
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 - a question on BiDi property for new characters M45 – In progress	In progress. Currently covered by property request.
AI-44-5	**IRG Rapporteur (Mr. Zhang Zhoucai)**	
a	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: f. … g. … 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 ddddd.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. M45 – In progress	In progress: sub item c
AI-44-6	**The US national body (Ms. Joan Aliprand, Dr. Ken Whistler, Mr. Richard Cook)**	
b	to act on resolution M44.16 (Names for USIs): 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. M45 – In progress	In progress.
c	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. M45 – In progress	In progress.
AI-44-7	**The Irish national body (Mr. Michael Everson)**	
b	To resolve differences between documents N2619 and N2620 on Saurashtrian script working with the authors of these documents and to submit an updated document. M45 – In progress	In progress.

16.3 New action items from meeting 45, 2004-06-21/24, Markham, Ontario, Canada

Item	Assigned to / action (Reference resolutions in document N2654, and unconfirmed minutes in document N2653 for meeting 44 - with any corrections noted in section 3 of document N2753 from meeting 45)	Status
AI-45-1	**Meeting Secretary - Dr. V.S. UMAmaheswaran**	
a.	To finalize the document N2754 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed; see document N2754.
b.	To finalize the document N2753 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	Completed; see document N2753.
AI-45-2	**Convener - Mr. Mike Ksar**	
a.	To add the following carried forward scripts to next meeting agenda: f. Ol Chiki script – document N2505 g. Manichaean script – document N2544 h. Saurashtra script – document N2619 i. Avestan and Pahlavi – document N2556 j. Dictionary Symbols – document N2655 k. Myanmar Additions – documents N2768, N2827 l. Invisible Letter – document N2822 m. Counting Rod Numerals – document N2827 n. Babylonian Pointing characters – document N2759 o. Bantu Phonetic Click characters – document N2790 p. 12 Hebrew characters – document N2758 q. Dominoe Tiles and other Game symbols – N2760	
AI-45-3	**Editor of ISO/IEC 10646: Mr. Michel Suignard with assistance from contributing editors**	
	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:	
a.	M45.2 (Coptic – changes requested in ballot response to PDAM1): With reference to changes requested to Coptic encoding in PDAM 1 ballot comments, and the details given in document N2744, WG2 accepts replacing the existing Coptic encoding for inclusion in Amendment 1 to ISO/IEC 10646: 2003 with the changes detailed in document N2831 and as shown in the charts in document N2824 (also on pages 62 to 64 in document N2832). *(Note: 55 new characters were added to the 59 in current PDAM1 in Coptic block.)*	
b.	M45.3 (Tai Lue – changes requested in ballot response to PDAM1): With reference to changes requested to Tai Lue encoding in PDAM 1 ballot comments, and the details given in documents N2748 and N2761, WG2 accepts the ad hoc group recommendations in document N2825. WG2 accepts the revised encoding and name change of the characters and the block to "New Tai Lue" as shown in document N2825, and on pages 37 and 38 in document N2832. *(Note: no additions to the repertoire.)*	

c.	M45.4 (New characters requested in ballot response to PDAM1):
	WG2 accepts for inclusion in Amendment 1 to ISO/IEC 10646: 2003 the following **98 new** characters:
	n. With reference to document N2763 and Irish comment T.17 in document N2773 on Glagolitic Suspension mark:
	         1DC3 COMBINING SUSPENSION MARK
	for encoding in the Combining Diacritical marks Supplement block with the glyph from document N2773, and as shown in the charts on pages 45 of document N2832.
	o. With reference to document N2740 on Additional Phonetic symbols:
	         0238 LATIN SMALL LETTER DB DIGRAPH
	         0239 LATIN SMALL LETTER QP DIGRAPH
	         023C LATIN SMALL LETTER C WITH STROKE
	                 in Latin Extended-B block
	         1D7B LATIN SMALL CAPITAL LETTER I WITH STROKE	

Item	Assigned to / action (Reference resolutions in document N2654, and unconfirmed minutes in document N2653 for meeting 44 - with any corrections noted in section 3 of document N2753 from meeting 45)	Status
	1D7C LATIN SMALL LETTER IOTA WITH STROKE 1D7D LATIN SMALL LETTER P WITH STROKE 1D7E LATIN SMALL CAPITAL LETTER U WITH STROKE 1D7F LATIN SMALL LETTER UPSILON WITH STROKE in Phonetic Extensions block, 1DC2 COMBINING SNAKE BELOW in Combining Diacritical Mark Supplement block, and, Create a new block named Phonetic Extensions Supplement in the range 1D80-1DBF fully populated with proposed characters, as detailed in the charts and names lists (on pages 5, 6, 40, 41, 42, 43, and 45 in document N2832 for the above code positions. p. With reference to document N2713 on Phonetic and IPA characters, and ballot comments and documents N2699 and N2770 related to Combining Dot Above Right: 0358 COMBINING DOT ABOVE RIGHT in the Combining Diacritical Marks block as shown on pages 7 ad 8 of document N2832 q. With reference to document N2705 and N2788 on Indo-Europeanist phonetic letters: 2090 LATIN SUBSCRIPT SMALL LETTER A 2091 LATIN SUBSCRIPT SMALL LETTER E 2092 LATIN SUBSCRIPT SMALL LETTER O 2093 LATIN SUBSCRIPT SMALL LETTER X for encoding in the Superscripts and Subscripts block with the proposed glyphs, and as shown in the charts on page 48 of document N2832. r. With reference to document N2694 for Tibetan characters for Bhutanese: 0FD0 TIBETAN MARK BSKA- SHOG GI MGO RGYAN (ka shog gi go gyen) 0FD1 TIBETAN MARK MNYAM YIG GI MGO RGYAN (nyam yig gi go gyen) for encoding in the Tibetan block with the proposed glyphs, and as shown in the charts on pages 27 and 28 of document N2832. s. With reference to document N2743 on two currency signs: 20B4 HRYVNIA SIGN 20B5 CEDI SIGN for encoding in the Currency Symbols block with the proposed glyphs, and as shown in the charts on page 49 of document N2832. t. With reference to document N2708 on Greek Zero Sign: 1018A GREEK ZERO SIGN for encoding in the Ancient Greek Numbers block with the proposed glyph, and as shown in the charts on pages 86 and 87 of document N2832. u. With reference to document N2723 on Arabic characters fro use in African languages: 065D ARABIC REVERSED DAMMA 065E ARABIC FATHA WITH TWO DOTS combining characters, in the Arabic block, and, 076B ARABIC LETTER REH WITH TWO DOTS VERTICALLY ABOVE 076C ARABIC LETTER REH WITH HAMZA ABOVE 076D ARABIC LETTER SEEN WITH TWO DOTS VERTICALLY ABOVE in the Arabic Supplement block, with the proposed glyphs, and as shown in the charts on pages 15 to 18 of document N2832. v. With reference to document N2680R on Additional Math characters: 27C3 OPEN SUBSET 27C4 OPEN SUPERSET 27C5 LEFT S-SHAPED BAG DELIMITER 27C6 RIGHT S-SHAPED BAG DELIMITER for encoding in the Miscellaneous Mathematical Symbols-A block with the proposed glyphs, and as shown in the charts on page 57 of document N2832. w. With reference to document N2755 and N2821 on Qamats Qatan characters:	

Item	Assigned to / action (Reference resolutions in document N2654, and unconfirmed minutes in document N2653 for meeting 44 - with any corrections noted in section 3 of document N2753 from meeting 45)	Status
	05BA HEBREW POINT QAMATS QATAN and Add annotation to 05B8 in Annex P on its use as Qamats Gadol in an orthography which distinguishes it from Qamats Qatan for encoding as a combining character in the Hebrew block with a glyph with an extended stem, as shown in the charts on pages 13 and 14 of document N2832. x. With reference to document N2692 on Atnah Hafukh character: 05A2 HEBREW ACCENT ATNAH HAFUKH for encoding as a combining character in the Hebrew block with a v-shaped glyph, as shown in the charts on pages 13 and 14 of document N2832. y. With reference to document N2714 on Masoretic punctuation marks: 05C5 HEBREW MARK LOWER DOT, a combining character, and, 05C6 HEBREW PUNCTUATION NUN HAFUKHA for encoding in the Hebrew block with a v-shaped glyph, as shown in the charts on pages 13 and 14 of document N2832. z. With reference to document N2741 on Tamil digit zero: 0BE6 TAMIL DIGIT ZERO for encoding in the Tamil block with the proposed glyph, as shown in the charts on pages 25 and 26 of document N2832.	
d.	M45.5 (New characters for Amendment 1): WG2 accepts for inclusion in Amendment 1 to ISO/IEC 10646: 2003 the following **35 new** characters: i. With reference to document N2789 on Glottal Stop character: 0241 LATIN CAPITAL LETTER GLOTTAL STOP for encoding in the Latin Extended-B block with the proposed glyph, and as shown in the charts on pages 5 and 6 of document N2832. j. With reference to document N2705 and N2788 on Indo-Europeanist phonetic letters: 2094 LATIN SUBSCRIPT SMALL LETTER SCHWA for encoding in the Superscripts and Subscripts block with the proposed glyph, and as shown in the charts on page 48 of document N2832. k. With reference to document N2713 on Phonetic and IPA characters: v block named Modifier Tone Letters in the range A700 to A71F; populate code positions A700 to A716 with characters shown as A901 to A917 in document N2713, and as shown on page 77 in document N2832. solution M45.4-c above for 0358 Combining Dot Above Right character). l. With reference to document N2815 on Postal Code mark: 327E CIRCLED HANGUL IEUNG U for encoding in the Enclosed CJK Letters and Months block with the proposed glyph, and as shown in the charts on pages 73 and 74 of document N2832. m. With reference to documents N2809, N2810, N2811 and N2812, on Bengali Khanda Ta: 09CE BENGALI LETTER KHANDA TA for encoding in the Bengali block with the proposed glyph, and as shown in the charts on pages 23 and 24 of document N2832. n. With reference to Left and Right Paraphrase marks in document N2765 on N'Ko script: 2E1C LEFT LOW PARAPHRASE BRACKET 2E1D RIGHT LOW PARAPHRASE BRACKET and, the name changes caused by the above allocation to the following PDAM1 characters: 2E0C LEFT RAISED OMISSION BRACKET 2E0D RIGHT RAISED OMISSION BRACKET for encoding in the Supplemental Punctuation block with the proposed glyph, and as shown in the charts on pages 70 and 71 of document N2832. o. With reference to document N2799 on Africanist phonetic characters: 023F LATIN SMALLLETTER S WITH SWASH TAIL 0240 LATIN SMALL LETTER Z WITH SWASH TAIL	

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	for encoding in the Latin Extended-B block with the proposed glyph, and as shown in the charts on pages 5 and 6 of document N2832.	
	p. With reference to document N2784 on SENĆOŦEN Latin characters:	
	023A LATIN CAPITAL LETTER A WITH STROKE	
	023B LATIN CAPITAL LETTER C WITH STROKE	
	023D LATIN CAPITAL LETTER L WITH BAR	
	023E LATIN CAPITAL LETTER T WITH DIAGONAL STROKE	
	for encoding in the Latin Extended-B block with the proposed glyph, and as shown in the charts on pages 5 and 6 of document N2832.	
e.	M45.6 (Tifinagh script – requested as part of PDAM1 ballot comments): With reference to document N2739 on Tifinagh script, WG2 accepts the proposed **55 new** characters for inclusion in Amendment 1 to ISO/IEC 10646: 2003, with code positions and names changed per ad hoc report in document N2828, to create a new block Tifinagh in the range 2D30 to 2D7F and populate code positions 2D30 to 2D65 and 2D6F as shown on the charts on pages 66 and 67 of document N2832.	
f.	M45.7 (Ethiopic Extensions): With reference to documents N2747 and N2814 on Ethiopic extensions, WG2 accepts for inclusion in Amendment 1 to ISO/IEC 10646: 2003, to create two new blocks called Ethiopic Extended in the range 2D80 to 2DDF and Ethiopic Supplement in the range 1380 to 139F; add 11 characters in the Ethiopic block, and populate the new blocks with the proposed characters with the glyphs and names as shown in the charts on pages 32 to 35, 36, 68 and 69 in document N2832. *(Note: total of **116 new** characters.)*	
g.	M45.8 (PUA characters from HKSCS-2001 and GB18030): With reference to the ballot comments and proposals in documents N2757R, N2807, N2808 and N2817, on encoding of existing PUA characters from HKSCS-2001 and GB18030, WG2 accepts the proposed characters for inclusion in Amendment 1 of ISO/IEC 10646: 2003, modified during the discussion and as documented on pages 11 to 13 of disposition of comments document N2831. The corresponding CJK source references from document N2808 are also accepted. See also charts on pages 53, 54, 72, 75, 76, 85 and 86 in document N2832. *(Note: total of **50 new** characters.)*	
h.	M45.9 (Addition of CJK source references from DPRK): With reference to IRG resolution M22.8 in document N2767, and documents N2774 and N2775, WG2 accepts the 6 KP source references in document N2774 and 13 KP source references in document N2775, for inclusion in CJKU_SR.txt and CJKC_SR.txt in Amendment 1 to ISO/IEC 10646: 2003.	
i.	M45.10 (106 compatibility Hanja characters from DPRK): With reference to IRG resolution M22.8 in documents N2767 and N2776, WG2 accepts the **106 new** Compatibility Ideographs and their mappings for encoding in the CJK Compatibility Ideographs block, in code positions FA70 to FAD9, as shown on pages 82 to 84 in document N2832, for inclusion in Amendment 1 to ISO/IEC 10646: 2003.	
j.	M45.11 (IICORE collection): With reference to document N2780 on International Ideograph Core subset, WG2 accepts to create a new fixed collection named IICORE, and instructs its editor to prepare the collection definition in the appropriate format for inclusion in Amendment 1 to ISO/IEC 10646: 2003.	
k.	M45.12 (Technical Defect): WG2 acknowledges the technical defect in the definition of collection 340 - Combined First Edition reported in document N2693 (SC 2 N3711) and accepts the proposed correction for inclusion in Amendment 1 to ISO/IEC 10646: 2003.	
l.	M45.13 (Request for encoding German Umlaut): With reference to documents N2766 and N2819 on German Umlaut, WG2 recommends the use of Combining Grapheme Joiner (CGJ, 034F) + Combining Diaeresis (0308) to represent the Tréma character where such distinction is needed. WG2 instructs its editor to include an appropriate informative note with CGJ description in Annex F, in Amendment 1 to ISO/IEC 10646: 2003.	
m.	M45.14 (Disposition of ballot comments): With reference to the PDAM1 ballot comments and their proposed dispositions in document N2737, and based on the discussion at the meeting, WG2 accepts the final	

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	disposition of comments in document N2831, which includes the responses to ballot comments having corresponding proposals for new scripts or characters, several of which are captured in individual resolutions in this document. *(Note: a total of **515 new** characters added, **52** characters **moved** to Amendment 2 from the current **810**, leaving a net of **1273** additions in Amendment 1.)*	
n.	M45.15 (Progression of Amendment 1): WG2 instructs its editor to prepare the FPDAM text based on the disposition of comments in document N2831 and the various resolutions from this meeting for additional characters and scripts for inclusion in Amendment 1 to ISO/IEC 10646: 2003, and forward to SC2 secretariat for FPDAM processing, with unchanged schedule.	
o.	M45.16 (Phags-Pa – changes requested in ballot response to PDAM1): With reference to changes requested to Phags-Pa encoding in PDAM 1 ballot comments, and the details given in document N2745 and associated documents N2719 and N2771, WG2 accepts the ad hoc group recommendations in document N2829. WG2 accepts the revised encoding of the **52** characters as shown on pages 79 to 81 in document N2832 for inclusion in Amendment 2 to ISO/IEC 10646: 2003 (removing it from Amendment 1). National bodies and liaison organizations are invited to provide feedback on the various open issues identified in document N2829.	
p.	M45.17 (N'Ko script): With reference to document N2765 on N'Ko script and its revised proposal in document N2833, WG2 accepts for inclusion in Amendment 2 to ISO/IEC 10646: 2003, to create a new block named N'Ko in the range 07C0 to 07FF and populate it with 59 characters and glyphs in code positions 07C0 to 07FA as shown in the charts on pages 19 and 20 of document N2832.	
q.	M45.18 (Phoenician script): With reference to proposal in document N2746 and associated discussions in documents in N2772, N2787, N2792 and N2793, WG2 accepts the proposal with no changes for inclusion in Amendment 2 to ISO/IEC 10646: 2003, to create a new block named Phoenician in the range 10900 to 1091F and populate the code positions 10900 to 10919 and 1091F with the 27 proposed characters and glyphs as in document N2746 and as shown in charts on page 89 of document N2832.	
r.	M45.19 (Cuneiform script): With reference to document N2786 on Cuneiform script WG2 accepts for inclusion in Amendment 2 to ISO/IEC 10646: 2003, to create two new blocks named Cuneiform in the range 12000 to 123FF and Cuneiform Numbers and Punctuation in the range 12400 to 1247F and populate these blocks with 987 characters and glyphs in code positions 12000 to 12373, 12400 to 12462 and 12470 to 12473 as proposed in document N2786, and as shown in the charts on pages 92 to 107 of document N2832.	
s.	M45.20 (Amendment 2 – subdivision and PDAM text): WG2 instructs its editor to prepare a project sub division proposal and PDAM text based on the various resolutions from this meeting accepting characters for inclusion in Amendment 2 to ISO/IEC 10646: 2003, and forward them to the SC2 secretariat for simultaneous ballot of sub division approval and PDAM registration (see documents N2835 and N2836). The proposed completion dates for the progression of this work item are: PDAM 2004-12-15, FPDAM 2005-06-15, and FDAM 2005-12. *(Note: A total of **1125** characters were accepted for inclusion in Amendment 2 at this meeting.)*	
t.	To ensure the USIs that have been accepted for encoding in the standard from document N2808 are in the standard when more USI text has been approved for inclusion.	
u.	A note should be added to the standard capturing the information given in document N2695 regarding the correct glyphs to use for 21E2D and 21E45.	
AI-45-4	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
	To take note of and act upon the following items.	
a.	M45.29 (Source information for CJK compatibility ideographs): WG2 accepts the proposal in document N2806 for additional details on source information for CJK compatibility ideographs for inclusion in its Principles and Procedures document.	
b.	M45.30 (Font submissions policy): With reference to document N2762 WG2 resolves	

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	to support the Unicode Consortium's font submissions policy documented at http://www.unicode.org/policies/font_policy.html for the preparation and publication of ISO/IEC 10646 and its Amendments.	
c.	M45.31 (Stability of URLs for the web site): WG2 notes the critical importance of stable URLs for the existing collection of electronically available working group documents and authorizes its convener to take the necessary precautions and steps to ensure that all past, current and future URLs for working group documents remain stable.	
d.	M45.32 (Stability of IICORE collection): With reference to document N2780 on International Ideograph Core subset, WG2 accepts that any future amendments of the International Ideograph Core should be recorded as new collections with their own unique collection names. The new collection must be a true superset of all existing IICORE and any of its amended collections in an upwardly compatible manner.	
e.	To add text to clarify the rules on Fixed versus Open Collections.	
AI-45-5	**Ad hoc on Roadmap (Mr. Michael Everson)**	
a.	to reflect the new blocks and other relevant changes from meeting 45 in the roadmap.	I
AI-45-6	**IRG Rapporteur (Dr. Qin Lu)**	
	To take note of and act upon the following items.	
a.	To take note of M45.32 (Stability of IICORE collection): With reference to document N2780 on International Ideograph Core subset, WG2 accepts that any future amendments of the International Ideograph Core should be recorded as new collections with their own unique collection names. The new collection must be a true superset of all existing IICORE and any of its amended collections in an upwardly compatible manner.	
b.	M45.33 (CJK Ideograph source visual reference information): WG2 accepts the proposal to add visual reference information requested in document N2830, for those CJK unified ideographs that do not currently have it, similar to the information in the standard for the 'CJK unified ideographs' block. Further, WG2 instructs the IRG to prepare an assessment report including a proposed implementation plan for discussion at the next WG2 meeting in January 2005.	
c.	M45.34 (Expansion of IRG scope): With reference to IRG resolution M22.9 in document N2767, WG2 proposes an expansion of the scope of IRG to include Old Hanzi and CJK Strokes as additional topics in its deliberations, and requests SC2 to approve this expansion in scope.	
d.	M45.35 (IRG appointments): WG2 endorses the IRG nomination of Dr. Lu Qin as the next IRG Rapporteur, and requests SC2 to approve this appointment. WG2 notes the IRG appointments of Mr. Chen Zhuang as the Chief Editor and Ms. Wang Xiao Ming as the Technical Editor.	
AI-45-7	**Japanese national body (Mr. Masuhiro Sekiguchi)**	
a.	To take note of M45.22 (JIS X0213 mapping information): With reference to documents N2697 and N2736, in the interest of consistent interchange and mapping between ISO/IEC 10646 and JIS X0213 and the associated benefits to the users of the standards, WG2 invites Japanese national body to consider adding the mapping information to the registration.	
AI-45-8	**Chinese national body (Messrs, Cheng Zhuang, Woushoeur Silamu)**	
a.	To take note of M45.28 (Additional characters for Uighur, Kazakh and Kirghiz): With reference to proposed additions to the Arabic script in document N2820 to support Uighur, Kazakh and Kirghiz, WG2 accepts the ad hoc report in document N2834, which concludes that one of the proposed characters is already encoded and proposes an alternative to those that can be expressed as combining sequences. China is invited to consider the ad hoc recommendations.	
b.	To take note of M45.27 (Counting rod numerals): With reference to document N2816 on counting rod numerals WG2 invites China and other national bodies and liaison organizations to review and provide feedback to the authors by 2004-10-31 for consideration at its next meeting in January 2005.	

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AI-45-9	Korea (Republic of) (Mr. Dae Hyuk Ahn)	
a.	To send appropriate font for 327E CIRCLED HANGUL IEUNG U (Korean Postal mark symbol) to Dr. Asmus Freytag in preparing the charts for the standard.	
AI-45-10	All national bodies and liaison organizations	
	To take note of and act upon the following items.	
a.	M45.21 (Request for revision to ISO/IEC 6937 from Romania): With reference to the Romanian proposal to revise ISO/IEC 6937 in document N2783, WG2 recommends to SC2 not to entertain this request for the following reasons: • 6937 is not in wide use • ITU Telematics recommendations which used 6937 have been withdrawn • 6937 should be considered as one of the stabilized standards encouraging the use of ISO/IEC 10646 as the strategic alternative. To resolve the problem identified by Romania, instead of requesting a revision to ISO/IEC 6937, SC2 is requested to communicate to Romania, that they consider removing the reference to ISO/IEC 6937 from their national standard.	
b.	M45.23 (Request from SC22 to SC2/WG2): With reference to document N2818, WG2 accepts the request from SC22 to classify characters in ISO/IEC 10646 for their suitability for use in identifiers. WG2 understands the importance that such information be available at the same time characters are added to ISO/IEC 10646. SC22 is invited to contribute to this work.	
c.	M45.26 (Myanmar extensions): With reference to proposed additions to Myanmar in documents N2768 and N2827, WG2 invites national bodies and liaison organizations to review and provide feedback to the authors by 2004-10-31 for consideration of a revised proposal at its next meeting in January 2005.	
d.	M45.27 (Counting rod numerals): With reference to document N2816 on counting rod numerals WG2 invites China and other national bodies and liaison organizations to review and provide feedback to the authors by 2004-10-31 for consideration at its next meeting in January 2005.	
e.	M45.30 (Font submissions policy): With reference to document N2762 WG2 resolves to support the Unicode Consortium's font submissions policy documented at http://www.unicode.org/policies/font_policy.html for the preparation and publication of ISO/IEC 10646 and its Amendments.	

f.	M45.36 (Future meetings):
	WG 2 meetings:
	    Meeting 46 – 2005-01-24/28 in at Xiamen (Amoy), Fujian Province, China (Location to be confirmed)
	    Meeting 47 – July 2005, Hosts are needed preferably from Europe
	    Meeting 48 – January 2006, North America
	IRG meeting:
	    Meeting 23 – Jeju, Korea, 2004-11-29 to 2004-12-03	

g.	M45.38 (New Web master): WG 2 appoints Mr. Mike Ksar, its convener, as the new web master for its web site.	

h.	In addition to the proposals mentioned in the items above, the following proposals have been carried forward. All national bodies and liaison organizations are invited to review and comment on them.
	    a. Ol Chiki script – document N2505
	    b. Manichaean script – document N2544
	    c. Saurashtra script – document N2619
	    d. Avestan and Pahlavi – document N2556
	    e. Dictionary Symbols – document N2655
	    f. Invisible Letter – document N2822
	    r. Babylonian Pointing characters – document N2759
	    s. Bantu Phonetic Click characters – document N2790
	    t. 12 Hebrew characters – document N2758
	    g. Dominoe Tiles and other Game symbols – N2760	

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

=============== **END OF DOCUMENT ...** ===============