

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 N1503
Date: 1997-04-01

<p>Title: Unconfirmed Minutes of WG 2 Meeting # 32, Singapore; 1997-01-20--24</p> <p>Source: V.S. UMaaheswaran, Meeting Secretary, Mike Ksar, Convener</p> <p>Action: WG 2 members and Liaison organizations</p> <p>Distribution: ISO/IEC JTC 1/SC 2/WG 2 members and Liaisons</p>
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1. Opening and roll call

Input Documents:

1451 Updated WG 2 Distribution List
1465 Call for Meeting 32 in Singapore - January 1997; Mike Ksar; 1996-11-28

1.1 Opening

The convener, Mr. Mike Ksar, opened the meeting at 10:30h. He welcomed the delegates to Singapore meeting number 32 and introduced the host - the Institute of Systems Science, the National University of Singapore.

Mr. Wilson Lee, IIS - NUS, welcomed the delegates to Singapore and explained the logistics of the meeting -- the meeting facilities and the arrangements for the breaks.

Mr. Saw Ken Wye, Director of Industry and manpower development addressed the meeting. Singapore has four official languages - English, Chinese, Malay and Tamil all of which have to be supported in the electronic age. The effort to support English and Chinese alone is demanding and has a number of challenges. By 1998 - the goal of the Singapore Government is to get the High Speed Infrastructure - in each house, this is the Inet 2000 program. Singapore, could in the past, adopt technology from the West. However, the currently available models are not obvious to select from. The national standards are to aim for Singapore to be not just an island - but connected to the rest of the world. The work of WG 2 is one of the keys in solving some of the problems.

The objective of the meeting was to progress proposals for several new scripts for inclusion in ISO/IEC 10646. The goal would be to finish the agenda items by end of Thursday, and approve all the resolutions on Friday AM, closing the meeting by noon on Friday. In addition to the documents that were mailed prior to the meeting, several new documents were also distributed during the meeting.

1.2 Roll Call

Input Document:

1401 WG 2 distribution list; Mike Ksar

Mr. Mike Ksar requested the attending delegates to introduce themselves, and update the distribution list in document N1401 with corrections, deletions or additions of not only their own information, but also the information for others from their countries. The following thirty four (**34**) delegates representing ten (**10**) member bodies, four (**4**) liaison organizations, and one (**1**) observer was present.

NAME	COUNTRY / LIAISON ORGANIZATION	AFFILIATION
Alain LaBonté	Canada	Treasury Board of Québec Government
V.S. UMamaheswaran	Canada; Meeting Secretary	IBM Canada
Fu Yonghe	China	State Language Commission
Mao Yong Gang	China	Chinese Electronics Standardization Institute
Wang Xiaoming	China	CCID (Research Center of Computer and Microelectronics Industry Development)
Zhang Zhoucai	China, IRG Rapporteur	CCID
Keld Jørn Simonsen	Denmark, CEN/TC 304	Danish UNIX-system User Group
Sven Thygesen	Denmark	Kommunedata
Satoshi Yamamoto	Japan	Hitachi Ltd.
Takayuki K. Sato	Japan	Hewlett-Packard Japan Ltd.
Kyongsok Kim	Korea	Busan National University
Myatavyn Erdenechimeg	Mongolia	International Institute for IT, UN University, Macau
Richard Moore	Observer	International Institute for IT, UN University, Macau
Ngok Hing Leung Derek	Singapore	Star & Globe technologies Pte. Ltd
Peter Oh	Singapore	Star & Globe Technologies Pte. Ltd.
Low Hwee Boon	Singapore	Institute of Systems Sciences, NUS
Saw Ken Wye	Singapore	Singapore - National Computer Board
Wilson Lee	Singapore	Institute of Systems Sciences, NUS
T.C. Kao	Taipei Computer Association	Institute for Information Industry, Taiwan
Yu-Chi Hsu	Taipei Computer Association	Institute for Information Industry, Taiwan
Bruce Paterson	UK; Editor	Consultant
John Clews	UK; TC 46/SC 2	SESAME Computer Projects
Asmus Freytag	Unicode Consortium	Asmus Inc.
Glenn Adams	Unicode Consortium	Spyglass, Inc.
Arnold Winkler	USA	Unisys
John Jenkins	USA	Apple Computers Inc.
Michel Suignard	USA	Microsoft Corp.
Mike Ksar	USA, Convener	Hewlett-Packard Company
Ngô Thanh Nhàn	Vietnam	New York University, NY, USA
Ngô Trung Viet	Vietnam	Steering Committee of National Program on IT
Tran Luu Chuong	Vietnam	Steering Committee of National Program on IT

Messrs. Umamaheswaran, Mike Ksar and Bruce Paterson were appointed to the resolution drafting committee. Messrs. Asmus Freytag and Michel Suignard also assisted.

2. Approval of the agenda

Input Document:

1465 Call for Meeting 32 in Singapore - January 1997; Mike Ksar; 1996-11-28

The draft agenda in document N1465 was reviewed and modified during the meeting. The agenda items are recorded in these minutes per the following table of contents. Individual document numbers are captured as input and output documents under each section.

Agenda Item

1. Opening and roll call
 - 1.1 Opening
 - 1.2 Roll Call
2. Approval of the agenda
3. Approval of minutes of meeting 31, Québec
4. Review action items from previous meetings
5. Status of documents sent to JTC 1 and ITT
 - 5.1 Internet Society - Category A Liaison
 - 5.2 Re-Engineering of JTC 1
6. Status of documents sent to SC 2
 - 6.1 pDAM9 - Unique Identifiers - disposition
 - 6.2 pDAM 10 - Ethiopic script
 - 6.3 pDAM 11 - Canadian Aboriginal Syllabics script
 - 6.4 pDAM 12 - Cherokee script
 - 6.5 Proposed disposition of comments - Character Glyph Model
 - 6.6 Results of SC 2 questionnaire on BMP allocation
 - 6.7 Program of work of WG 2
 - 6.7.1 WG 2 projects

Agenda Item

- 6.7.2 New spread-sheet document
- 7. Non-repertoire issues
 - 7.1 Editorial corrigenda - standing documents
 - 7.2 Editorial corrigenda - arising from French translation
- 8. Repertoire issues
 - 8.1 Roadmap
 - 8.2 Second part of 10646
 - 8.3 Repertoire additions - cumulative list no. 4
 - 8.4 Yi script
 - 8.4.1 Yi syllabary
 - 8.4.2 Yi radicals
 - 8.5 Sinhalese proposal - Everson
 - 8.6 Sinhalese proposal - Sri Lanka
 - 8.7 Supplementing Arabic for Uyghur, Kazakh and Kirghiz
 - 8.8 Function of Identifiers on Mongolian
 - 8.9 Deseret Script
 - 8.10 Kang Xi radicals, TCA
 - 8.11 Romanian - 4 additional characters
 - 8.12 Runic names
 - 8.13 Braille
 - 8.14 Nigerian Yoruba
- 9. IRG status and reports
 - 9.1 Horizontal supplementation
 - 9.2 CJK Vertical extension A
 - 9.2.1 Vertical extension A - allocation
 - 9.3 Composition schemes
 - 9.4 Ideographic radical supplement
 - 9.5 Ideographic variant mark
 - 9.6 Ideographic structure characters
 - 9.7 IRG schedules
- 10. Defect reports status
 - 10.1 Response to defect report N1406 on Indic scripts
 - 10.2 Defect report - Indic scripts - revised
- 11. Liaison reports
 - 11.1 Unicode Consortium
 - 11.2 X Consortium - BMP collection numbers
 - 11.3 TC 46
- 12. Other business
 - 12.1 Web Site Review
 - 12.2 Principles and procedures - an update
 - 12.3 Future meetings
 - 12.4 Miscellaneous
 - 12.4.1 Electrotechnical symbols
 - 12.4.2 BANGJEOM and GUGYEOL characters
 - 12.4.3 Publishing of accepted collections of characters
- 13. Agenda items carried over from action item list of meeting 31
- 14. Closing
 - 14.1 Approval of resolutions
 - 14.1.1 Appreciation
 - 14.2 Adjournment
- 15. Cumulative list of action items
 - 15.1 Outstanding action items from previous WG 2 meetings -- M25 to M28
 - 15.2 Outstanding action items from WG 2 meeting 29, Tokyo, Japan
 - 15.3 Outstanding action items from WG 2 meeting 30, Copenhagen, Denmark
 - 15.4 Outstanding action items from WG 2 meeting 31, Québec City, Canada
 - 15.5 New action items from meeting 32, Singapore

3. Approval of minutes of meeting 31, Québec

Input Document:

1453 WG 2 Minutes - Québec Meeting 31; Ksar, Uma; 1996-12-06

The minutes of meeting 31 were approved with following changes (some of the corrections were communicated off line to the recording secretary):

- a) Page 1, change 'Copenhagen, Denmark' to 'Québec City, Canada' in the Title: of the document

- b) Page 2, change 'thirteen' to 'fourteen' (14) member bodies, and 'two (3)' to 'four (4)' liaison organizations -- in line 4, paragraph 1, under section 1.2 Roll Call.
- c) Page 2, in the table showing attendees, add 'CEN/TC 304' next to Denmark in the country column, corresponding to Mr. Simonsen in the name column.
- d) Page 6, change the status of AI-29-9 Korea in Section 4.5, from 'M31: Dropped' to 'M31: Outstanding'. Copy this action item to section 15.5 on page 52 -- Outstanding action items Japan (for tracking at meeting 32).
- e) Page 17, Paragraph 2, Second sentence: 'India .. standard'. This statement was made by Mr. Mike Ksar. Create a new list item c) above the paragraph marked 'Action Item:', attribute it to Mr. Mike Ksar, and insert this sentence in that list item.
- f) Page 21, paragraph marked 'Disposition:', first line: change 'N420' to 'N1420'.
- g) Page 26, discussion on Armenian, list item a), line 4: change 'Western' to 'Eastern'.
- h) Page 27, list item b), third line: delete the sentence -- 'Armenian script ... annex'.
- i) Page 40: list item (4), second line: change 'structured' to 'variation'.
- j) Page 53, title of section 15.7, change 'Québec' to 'Québec'.

4. Review action items from previous meetings

Input Document:

1453 WG 2 Minutes - Québec Meeting 31; Ksar, Uma; 1996-12-06

Section 15 of document N1453 containing the cumulative list of action items was reviewed. The following tables show the result of the review. Several action items were completed, some are still in progress and others were dropped. All action items that are in progress or outstanding have been carried forward for review at the next meeting - and included in section 15 of this document.

(15.1) Outstanding items from WG 2 meeting 25 Antalya, Turkey

Item	Assigned to / action (Reference document N1034 - resolutions, and document N1033 - minutes of Antalya meeting WG 2-25, and corrections to these minutes in Section 3 of document N1117)	Status
AI-25-6	Korean member body	
	is requested to forward the set of bit maps, and or the outline of the corrected shapes of the characters in defects in document N975, along with a blown-up (96x96 bits) hard copy is needed by the editor. M26, M27: M28, M29: In progress; Korea will attempt to speed up the availability of fonts. M30: Of the 6 characters that had the defective shapes, four have been over-ridden by pDAM-5 on Korean. Professor Kim will investigate the fonts for two remaining shapes in defect. M31: Still in progress.	M32: Completed; See document N1483 - diskette is to be given to the convener.
AI-25-10	Chinese member body	
a	is requested to study this possibility of composition to reduce the number of characters of the Yi script in document N965 that needs coding in the BMP. M26, M27, M28, M29, M30, M31: Under study.	M32: Completed. See documents N1481 and N1482.

(15.2) Outstanding items from WG 2 meeting 26, San Francisco, CA, USA

Item	Assigned to / action (Reference document N1118 - resolutions, and document N1117 - minutes of San Francisco meeting WG 2-26, and corrections to these minutes noted in Section 3 of document N1203)	Status
AI-26-8	Ms. Joan Aliprand - Liaison to TC 46	
	to take parts related to TC 46 in document N1071 for formal submission as liaison document by TC 46 along with the completed Proposal Summary Form. M27, M28: In progress. M29: Mr. Arnold Winkler tried to reach Ms. Aliprand - no success. M30: Mr. Mike Ksar will pursue the item with Ms. Aliprand - target M31. M31: Still Outstanding.	M32: Dropped.

(15.3) Outstanding items from WG 2 meeting 27, Geneva, Switzerland

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Item	Assigned to / action (Reference Meeting 27 Resolutions document N1204, Unconfirmed Meeting 27 Minutes in Document N1203, and corrections noted in document N1253)	Status
AI-27-12	Mr. Johan van Wingen, Netherlands is invited to examine the standard for the need for any statements regarding conventions used for naming characters such as 'digits', 'letters', etc. and propose clarification texts -- see minutes item 6.1.2.2. M28, M29, M30, M31 - No new progress.	M32: Dropped.

(15.4) Outstanding items from WG 2 meeting 28, Helsinki, Finland

NONE

(15.5) Outstanding Action items from WG 2 meeting 29, Tokyo, Japan

Item	Assigned to / action (Reference Meeting 29 Resolutions document N1304 and Unconfirmed Meeting 29 minutes in document N1303 -and corrections to these minutes in section 3 of document N1353).	Status
AI-29-9	Korea b To take note of the following comment from Mr. Zhang Zhoucai: "The latest Korean standard document (from Professor Kim) being published still has one glyph in the Korean column of unified ideograph as a serious defect. The Korean national body has not fixed it nor reported to WG 2". M30: Professor Kim to check; M31: Outstanding.	M32: Completed; See document N1495.
AI-29-10	China a To take comments in document N1246 and comments from this meeting (M29) as feedback to the appropriate experts on Uyghur, Kazakh and Kirghiz. M30, M31: In progress.	M32: In progress.

(15.6) Outstanding Action items from WG 2 meeting 30, Copenhagen, Denmark

Item	Assigned to / action (Reference Meeting 30 Resolutions document N1354 and Unconfirmed Meeting 30 minutes in document N1353 and corrections to these minutes in section 3 of document N1453 -this document you are reading)	Status
AI-30-9	Ireland (Mr. Michael Everson) b To prepare Proposal Summary Forms and proposals for Sinhala, Burmese and Khmer scripts, based on contribution N1321 and N1376 from Mr. Hugh Ross. M31: In progress; Mr. Everson has these on his web page - he is requested to submit them in hardcopy form to the convener.	M32: See document N1473; Sinhala; Burmese and Khmer are in progress.
AI-30-12	Ad Hoc Group on Principles and Procedures (Mr. Sven Thygesen - lead) a To work with Mr. Hugh Ross and document the guidelines / criteria that were used in the creation of the first edition of the standard, for deciding when a pre-composed character was considered for inclusion directly versus when it would be left as Level 3 composition encoding. M31: Outstanding.	M32: In progress. Mr. Hugh Ross is preparing a contribution.
	b To provide some guidelines on when provisional code positions could / should be assigned for new character proposals. M31: Outstanding.	M32: Completed. See document N1402.
AI-30-13	CEN/TC 304 Liaison (Mr. Evangelos Melagrakis) a To provide a more detailed liaison report on CEN /TC 304 activities or projects which are supposed to be joint with WG 2 per the Vienna agreement -- towards avoiding duplication of work in CEN/TC 304 and to communicate the same message to CEN/TC 304. M31: In progress.	M32: was completed in Québec city. See document N1458.
AI-30-16	Latvia, Ireland and Finland	

Item	Assigned to / action (Reference Meeting 30 Resolutions document N1354 and Unconfirmed Meeting 30 minutes in document N1353 and corrections to these minutes in section 3 of document N1453 -this document you are reading)	Status
	<p>a to provide additional supporting documents to address the various concerns expressed on proposal for Livonian characters in document N1322 at this meeting to permit WG 2 to better evaluate the proposal. M31: Outstanding.</p>	M32: Outstanding.
AI-30-17 All member bodies and liaison organizations	<p>d to feedback to Mr. Michael Everson on document N1329 on several questions raised on character naming principles. M31: No feedback.</p> <p>e To submit contributions on ' collection identifiers' - how these should be treated in the standard with each pDAM, repertoire enhancements etc. M31: No feedback.</p> <p>g to feedback on contributions N1320 and N1373 on Level 2 support for Indic & other scripts from Mr. Hugh Ross. M31: Noted. Some feedback from Unicode consortium in document N1462.</p>	<p>M32: Dropped</p> <p>M32: Some feedback from US and Unicode Consortium.</p> <p>M32: Completed; See document N1470.</p>
NOTE: RENUMBERED DUPLICATED AI-30-6 as AI-30-18 and moved to the end of this table -- Uma		
AI-30-18 Greece	<p>a To prepare a revised proposal on Byzantine Musical Symbols addressing the concerns expressed during the discussion at meeting 30, for consideration at meeting 31. M31: In progress.</p>	M32: In progress.

(15.7) New Action items from WG 2 meeting 31, Québec City, Canada

Item	Assigned to / action (Reference Meeting 31 Resolutions document N1454 and Unconfirmed Meeting 31 minutes in document N1453 -this document you are reading)	Status
AI-31-1 Meeting Secretary - Dr. V.S. UMaaheswaran	<p>a To finalize the document N1454 containing the adopted meeting resolutions and send a plain text and word processor source to the convener as soon as possible, for electronic distribution by the convener to the WG 2 membership and to SC 2.</p> <p>b To finalize the document N1354 containing the adopted meeting resolutions and send a plain text and word processor source to the convener as soon as possible, for electronic distribution by the convener to the WG 2 membership and to SC 2.</p>	<p>M32: Completed; See document N1454 distributed at the end of Québec city meeting.</p> <p>M32: Completed; See document N1453.</p>
AI-31-2 Convener - Mr. Mike Ksar	<p>a to send with assistance from Mr. Takayuki Sato, a cover letter to TC 134, with the message that WG 2 has agreed to accept the Braille as symbols - we take a preferred choice - for example, 256 symbols. Attach both 256 and 512 proposals - feedback by November 1 1996 or earlier.</p> <p>b to revise the WG 2 report to SC 2 in document N1394 - prepare N1394R. Dr. Umamaheswaran was delegated to present this to SC 2 plenary next week on behalf of WG 2. The report should capture the messages to be conveyed to SC 2 in the following resolutions:</p>	<p>M32: No response from TC 134; Fall back to 256 character proposal. Added to agenda at SGP meeting. See document N1409R.</p> <p>M32: Completed; See document N1394R. Also, SC 2 Resolutions from Québec Plenary (document N1508).</p>

Item	Assigned to / action (Reference Meeting 31 Resolutions document N1454 and Unconfirmed Meeting 31 minutes in document N1453 -this document you are reading)	Status
	<p>RESOLUTION M31.1 (Character Glyph Model):</p> <p>With reference to document N1411 on the Character Glyph Model:</p> <ul style="list-style-type: none"> a) WG 2 requests that SC 2 assign NP 15285 to WG 2. b) WG 2 requests that SC 2 appoint Messrs. Edwin Hart and Alan Griffiee as co-editors of the TR. c) WG 2 requests that SC 2 distribute the current working draft (an updated document N1411) of the TR to SC 2 members and liaisons, for comments to be returned to the convener of WG 2 and to the co-editors prior to 30 November, 1996, to enable preparation of a draft PDTR for consideration at the WG 2 meeting 32 in January, 1997. <p>WG 2 requests that SC 2 approve a concurrent ballot on registration and approval of the PDTR that will be prepared by WG 2.</p> <p>RESOLUTION M31.11 (CJK Unified Ideograph Extension A Version 1.1):</p> <p>WG 2 requests SC 2 to forward the following question to national bodies and liaisons for a response by 15 November 1996: "Do you agree with the IRG recommendation to encode the 6585 characters of the CJK Unified Ideograph Extension A Version 1.1, in the Basic Multilingual Plane, with the understanding that IRG will not request any more unified Ideographs to be encoded in the BMP?"</p> <p>RESOLUTION M31.14 (Additional parts of 10646):</p> <p>WG 2 requests SC 2 to create a sub-division of its project to create Part 2 of ISO/IEC 10646, to enable it to populate supplementary planes of UCS.</p> <p>RESOLUTION M31.12 (IRG related):</p> <p>WG 2 accepts the nomination of Mr. Zhang Zhoucai to continue as the IRG rapporteur.</p> <ul style="list-style-type: none"> c to communicate to the Asian Classics Input Project (ACIP) that DAM6 is for ballot, and that ACIP should communicate through the appropriate NB to get their feedback in. d to inform SC 22 WG 3 that their proposal for APL Function Symbol Quad has been accepted and will be processed along with other symbols in the Symbols collection. (See also note from the editor on allocating a different code position to the symbol than in the resolution M31.5 (... "So I have put QUAD in the next available place - x2395" -- Mr. Paterson)). e to send the feedback on documents to Armenia / ASEA for their consideration and response prior to attending the Singapore meeting. f to prepare a document, with assistance of Mr. Sven Thygesen, extracting a summary of current allocations, space to be used by all the accepted characters for inclusion, space expected to be used by characters that are still under consideration, and the remaining space in the BMP. This summary document is to accompany the question to national bodies on whether or not they agree with the IRG recommendation to encode the characters of IRG Vertical Extension A version 1.1, all in the BMP. 	<p>M32: Completed; See documents N1477 and N1478.</p> <p>M32: Completed. See document N1479.</p> <p>M32: Completed. See document N1484.</p> <p>M32: Completed.</p> <p>M32: Outstanding.</p> <p>M32: Completed; Uma sent the information to .Mr. Leigh Clayton, convener of APL group.</p> <p>M32: Completed; Mr. Michel Suignard has sent the information in N1446.</p> <p>M32: Completed; See document N1464.</p>
AI-31-3	<p>Editor - Mr. Bruce Paterson</p> <p>To prepare the appropriate pDAM texts and entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following WG 2 resolutions:</p>	<p>M32: See below for each sub item.</p>

Item	Assigned to / action (Reference Meeting 31 Resolutions document N1454 and Unconfirmed Meeting 31 minutes in document N1453 -this document you are reading)	Status
a	<p>RESOLUTION M31.3 (Additional Cyrillic characters): WG 2 provisionally accepts the proposed code positions for the following four Cyrillic characters:</p> <ul style="list-style-type: none"> a) x0400 for CYRILLIC CAPITAL LETTER IE WITH GRAVE b) x0450 for CYRILLIC SMALL LETTER IE WITH GRAVE c) x040D for CYRILLIC CAPITAL LETTER I WITH GRAVE d) x045D for CYRILLIC SMALL LETTER I WITH GRAVE <p>in accordance with document N1407, and instructs its editor to add these characters along with their previously accepted shapes (at WG 2 meeting 30), to the cumulative list of characters for future inclusion in ISO/IEC 10646-1.</p>	M32: Completed; See document N1467.
b	<p>RESOLUTION M31.4 (Ethiopic script):</p> <p>WG 2 accepts the set of 346 characters of the Ethiopic script, their shapes and code positions in the range x1200 to x137F, in accordance with document N1420, and instructs its editor to prepare the pDAM text, with assistance from the US national body and the Unicode Consortium, and forward it to SC 2 secretariat for an SC 2 ballot.</p>	M32: Completed; pDAM - 10 text was sent to SC 2 secretariat December 6, 1996. Expected to be sent out first week of January 1997. See document N1485. M32: Duplicate - delete.
c	<p>RESOLUTION M31.4 (Ethiopic script):</p> <p>WG 2 accepts the set of 346 characters of the Ethiopic script, their shapes and code positions in the range x1200 to x137F, in accordance with document N1420, and instructs its editor to prepare the pDAM text, with assistance from the US national body and the Unicode Consortium, and forward it to SC 2 secretariat for an SC 2 ballot.</p>	
d	<p>RESOLUTION M31.5 (APL Function Symbol Quad):</p> <p>WG 2 accepts the name - APL FUNCTIONAL SYMBOL QUAD, its proposed code position x237B and its proposed shape, in accordance with document N1419, and instructs its editor to add it to the cumulative list of symbols for future inclusion in ISO/IEC 10646-1.</p>	M32: Completed; was added to cumulative list. Editor will update the list in document N1416. Position x2395 is the correct position.
e	<p>RESOLUTION M31.6 (Canadian Aboriginal Syllabics):</p> <p>WG 2 accepts the set of 623 characters for the Canadian Syllabics script, their names (as revised at meeting 31), and their shapes, for allocation in the range x1400 through x167F, in accordance with document N1441. WG 2 further instructs its editor to prepare the pDAM text, with assistance from the Canadian national body, and forward it to SC 2 secretariat for an SC 2 ballot.</p>	M32: Completed; pDAM-11 text was prepared by Mr. Michael Everson, and was sent by the editor to SC 2 secretariat on November 28, 1996; See document N1472.
f	<p>RESOLUTION M31.7 (Cherokee script):</p> <p>WG 2 accepts the proposed code positions in the range x13A0 through x13FF, for the previously accepted (at meeting 30) 85 characters of the Cherokee script, in accordance with document N1362, and instructs its editor to prepare the pDAM text, with assistance from the US national body and the Unicode consortium, and forward it to SC 2 secretariat for an SC 2 ballot.</p>	M32: Completed; was also prepared by Mr. Michael Everson; it was sent by the editor on November 28, 1996 to SC 2 secretariat; See document N1476.
g	<p>RESOLUTION M31.8 (Pinyin):</p> <p>WG 2 accepts the following two characters:</p> <ul style="list-style-type: none"> a. x01F8 LATIN CAPITAL LETTER N WITH GRAVE b. x01F9 LATIN SMALL LETTER N WITH GRAVE <p>in accordance with document N1461, and instructs its editor to add them (with shapes similar to x0143 LATIN CAPITAL LETTER N WITH ACUTE and x0144 LATIN SMALL LETTER N WITH ACUTE, with the ACUTE accent replaced with a GRAVE accent) to the cumulative list of characters for future inclusion in ISO/IEC 10646-1.</p>	M32: Completed; document N1467 reflects the update including these characters.

Item	Assigned to / action (Reference Meeting 31 Resolutions document N1454 and Unconfirmed Meeting 31 minutes in document N1453 -this document you are reading)	Status
	<p>h RESOLUTION M31.9 (Internal Supplementation / Horizontal Supplementation):</p> <p>WG 2 accepts documents N1427, N1428, N1429 and N1434 on Internal Supplementation / Horizontal Supplementation from the IRG. WG 2 further instructs its editor to prepare the pDAM text, with assistance from IRG editor, and forward it to SC 2 secretariat for an SC 2 ballot.</p> <p>I RESOLUTION M31.13 (Collection Identifier):</p> <p>WG 2 instructs its editor to assign collection number 301 to identify the repertoire of the BMP up to and including Draft Amendment 7, in accordance with document N1388, for inclusion in a future amendment to the standard.</p>	<p>M32: In progress.</p> <p>M32: Completed; See document N1466.</p>
<p>AI-31-4</p>	<p>IRG - Rapporteur, Mr. Zhang Zhoucai</p> <p>a The current ITTF practice is to use Arial or Helvetica style for the numbers and non ideographic characters. IRG convener is to work with Mr. Bruce Paterson to follow the style used by ITTF for the standard publications, in time for transmission of the pDAM text by the editor - target Singapore meeting.</p> <p>b WG 2 encourages the IRG to refine the proposals for Ideographic Structure Characters, the Ideographic Variation Mark, the Ideographic Component Supplement and the Ideographic Radical Supplement based on the comments received at WG 2 meeting 31.</p> <p>c With reference to M31.9 (Internal Supplementation / Horizontal Supplementation), to prepare the camera ready copy for inclusion in the pDAM text, and forward to the editor Mr. Bruce Paterson to enable him to prepare the pDAM and forward it to SC 2 secretariat for an SC 2 ballot.</p>	<p>M32: In progress. See document N1486.</p> <p>M32: Completed; See document N1489 through N1494.</p> <p>M32: Completed; See document N1495.</p>
<p>AI-31-5</p>	<p>All member bodies and liaison organizations</p> <p>a To take note of resolution M31.15 (Future Meetings):</p> <p>WG 2 confirms the following future meeting schedule:</p> <ul style="list-style-type: none"> a) Meeting 32: 20 to 24 January 1997, in Singapore b) Meeting 33: 23 to 27 June 1997, in Cyprus (backup Greece) c) Meeting 34: January 1998, in North America (location to be decided) d) Future hosts: Ireland, Israel, Vietnam, Netherlands, China <p>b to take note of the attached message from the editor - on having to reassign APL QUAD symbol to another position than in resolution M31.5:</p> <p>Dear Uma 16th October 1996</p> <p>"I have just noticed a problem with WG 2 Resolution 31.5, which accepts APL QUAD into the symbols bucket for 10646. The code position x237B was approved for it on the day BEFORE WG 2 reviewed the symbols bucket paper N1416. So, surprise, surprise, that position is already allocated (at the Geneva meeting actually, and was already subject to conflict there - it must be a specially cosy spot). So I have put QUAD in the next available place - x2395. I thought you should know asap for the record."</p> <p>Regards - Bruce.</p> <p>c to take note of and use document N1396 as the standing reference document for the textual content of the latest 10646, and to inform the editor if there are any errors.</p> <p>d to review and feedback on documents N1143 and N1390 on the subject of additional Latin characters for Nigerian Yoruba.</p> <p>e are invited to write contributions on 'Guidelines on what sort of information can be included in Annex P - Additional information on characters'. The accepted text of such contributions would be included in the Principles and Procedures document.</p>	<p>M32: Noted.</p> <p>M32: Noted.</p> <p>M32: Noted.</p> <p>M32: No feedback; added to M32 agenda.</p> <p>M32: In progress.</p>

Item	Assigned to / action (Reference Meeting 31 Resolutions document N1454 and Unconfirmed Meeting 31 minutes in document N1453 -this document you are reading)	Status
f	to review document N1416 - cumulative list of symbols, and provide feedback as to how this collection could be further progressed.	M32: Noted; no feedback.
g	to review the contributions (several - see minutes) from IRG and provide feedback to IRG rapporteur, to assist the IRG with a meaningful view from outside the IRG.	M32: Unicode consortium's feedback was included in M31 minutes.
h	if interested in the French version of 10646, to review document N1448 and feedback to Mr. Alain LaBonté.	M32: Feedback were received from Israel, France, Ireland and UK. Completed.
l	with reference to resolution M31.1, to review the draft WD for TR 15285 that will be circulated by SC 2 for NB comments to enable WG 2 to further progress it at its January 1997 meeting.	M32: Completed; See documents N1477 and N1478.
j	to review documents N1437 and N1438 on the Mongolian script and inform Chinese national body if they wish to participate in the ad hoc group on Mongolian. Chinese national body is requested to inform all interested parties of the ad hoc meeting as much in advance as possible.	M32: No meeting was called. See documents N1475, N1497.
k	to take note of, and to inform the editor if there are any errors in the information in document N1385 - the cumulative list no. 3 of additional characters.	M32: Noted.
l	to review and feedback on the proposed revised proposal summary form in document N1460.	M32: Noted; no feedback.
m	to inform their WG 2 experts that if they are interested in accessing soft copies of WG 2 documents from WG 2's web site they should contact Mr. Keld Simonsen for getting a password to access the site.	M32: Noted.
n	are invited to contribute towards a new part of 10646, per resolution M31.14.	M32: Noted.
AI-31-6	Ad Hoc Group on Principles and Procedures (Mr. Sven Thygesen - lead)	
a	to take comments into account and revise document N1402.	M32: Completed.
AI-31-7	US national body (Mr. Michel Suignard) and The Unicode Consortium (Dr. Glenn Adams)	
a	to prepare the camera ready code table on the Ethiopic script, in accordance with document N1420, and resolution M31.4, and send to the editor.	M32: Completed; See document N1485.
b	to prepare the camera ready code table on the Cherokee script, in accordance with document N1362, and resolution M31.7, and send to the editor.	M32: Completed; See document N1472 from Mr. Michael Everson, Ireland.
AI-31-8	UK national body (Mr. Bruce Paterson) and The Unicode Consortium (Dr. Glenn Adams)	
a	to come to some agreement / proposal for some clarification text to resolve the ambiguity regarding Level 2 and Indic scripts. Using document N1406 as the base, to address the issues raised by UK and to encapsulate the issues in a simple way.	M32: Completed; See document N1470.
AI-31-9	Japanese national body (Mr. Takayuki Sato) and The Unicode Consortium (Dr. Glenn Adams)	
a	to provide the IRG Rapporteur the text of the note to be included in Annex S to address their concerns on the source code separation.	M32: Completed; See document N1486. John Jenkins is the editor.
AI-31-10	Dr. Glenn Adams and Mr. Keld Simonsen	
a	are invited to interact with the principal authors of RFCs in IETF on 10646. Some collection identifier such as the proposed 301 - once finalized in 10646 - could be registered with IANA registration authority also for use with Internet protocols.	M32: In progress.
AI-31-11	Danish national body - Mr. Keld Simonsen	
a	to prepare reports, with assistance of anyone else who is interested, indicating who is implementing UCS under the auspices of ITU services.	M32: Dropped. The project was dropped in Europe.

Item	Assigned to / action (Reference Meeting 31 Resolutions document N1454 and Unconfirmed Meeting 31 minutes in document N1453 -this document you are reading)	Status
AI-31-12	Swedish national body - Mr. Olle Järnefors a to consider the discussion on the Runic script proposal at this meeting and feedback to WG 2.	M32: In progress.
AI-31-13	Netherlands national body - Mr. Johan van Wingen a to submit a defect report on his finding of the mis-spelling Arabic letter Heh from the names in Annex B.	M32: Completed; Editor has taken corrective action; See document N1468.
AI-31-14	Romanian national body - Ms. Alexandrina Statescu a to provide more information, with input from other interested parties, including consideration for the various points raised on the proposed characters - s,S,t, and T with Comma below, and in the Copenhagen meeting, for further consideration at the Singapore meeting	M32: In progress.
AI-31-15	Japanese member body - Mr. Takayuki Sato a to assist the convener in preparing a cover letter to TC 134, with the message that WG 2 has agreed to accept the Braille as symbols - we take a preferred choice - for example, 256 symbols. Attach both 256 and 512 proposals - feedback by November 1 1996 or earlier.	M32: Dropped. No response from TC 134.
AI-31-16	Mr. Sven Thygesen a to prepare a document, with assistance of the convener, extracting a summary of current allocations, space to be used by all the accepted characters for inclusion, space expected to be used by characters that are still under consideration, and the remaining space in the BMP. This summary document is to accompany the question to national bodies on whether or not they agree with the IRG recommendation to encode the characters of IRG Vertical Extension A version 1.1, all in the BMP.	M32: Completed; See document N1464.
AI-31-17	Chinese member body - Mr. Mao Gang a to provide a refined proposal on the Yi script, based on document N1415, and other earlier contributions.	M32: Completed; See documents N1481 and N1482.
AI-31-18	Chinese and Mongolian member bodies - Mr. Mao Gang and Mr. Chilkasuren a to convene another ad hoc meeting to further progress the proposal in document N1438, and to give interested parties sufficient advance notice to enable to attend the meeting.	M32: No meeting was called. An ad hoc meeting is planned during M32.
AI-31-19	Canadian member body - Dr. V.S. Umamaheswaran/ Mr. Dirk Vermeulen a to prepare the camera ready code table on the Unified Canadian Aboriginal Syllabics script, in accordance with document N1441, and resolution M31.6, and send to the editor.	M32: Completed. Mr. Michael Everson provided the final draft. See document N1472.

5. Status of documents sent to JTC 1 and ITT

5.1 Internet Society - Category A Liaison

Mr. Mike Ksar: reported that JTC 1 plenary has approved A liaison relationship with the Internet society.

5.2 Re-Engineering of JTC 1

Input Document:

1506 Resolutions of 10th JTC 1, December 1996, plenary; Secretariat JTC 1; 1996-12-13

- a) Mr. Mike Ksar: The proposed JTC 1 reorganized structure was to merge several SCs into less number of SCs. SC 2 was to be merged with SC 29 and others under multi-media encoding as title. WG 2 is not directly affected by the higher level re-organizations. The

secretariat for SC 29 is Japan. In the past, SC 29 and SC 2 have been together, and have been separated due to the difference in the subject matters. JTC 1 at its last plenary in Paris has delegated the task to an ad-hoc group on re-engineering; it has not approved the re-organization, nor has it announced when the reorganization will be implemented. See document N1506. ITSC-J, Japan, is the next SC 2 secretariat and future SC 2 correspondences will be coming from Japan.

- b) Mr. Michel Suignard: SC 29 is really a large group - deals with lots of topics with all sorts of encoding, having nothing to do with Character Encoding.

6. Status of documents sent to SC 2

6.1 pDAM9 - Unique Identifiers - disposition

Input Documents:

1445 Ballot results - table of replies - pDAM 9; SC 2 Secretariat; 1996-08-12

1471 Report on Letter Ballot of pDAM9 - identifiers for characters - Draft Disposition of Comments from National Bodies; Bruce Paterson; 1996-11-12

Document N1471 contains the proposed disposition of comments. Document N1445 contained the WG 2 distribution of responses to pDAM9 ballot. SC 2 N2736 includes some responses that were not included in document N1445. Document N1445R was created and distributed at the meeting to include all the comments. There were four negative ballots - Japan Denmark, Ireland, Netherlands.

Discussion:

- a) Mr. Keld Simonsen: there was a liaison statement from SC 22 to SC 2.
- b) Mr. Bruce Paterson: it was not sent included in the ballot responses to the editor.
- c) Mr. Mike Ksar: Are the responses in document N1471 acceptable to Denmark, Ireland?
- d) Mr. Bruce Paterson: Netherlands has raised another concern. The identifiers have several forms - with letter U and T. The form with T refers to 1993 edition plus amendments till Amendment 4. Once we have an amendment AM 5 we have no technical basis for referencing something deleted from the standard. The proposed solution is to put the text associated with T in a NOTE.
- e) Dr. Asmus Freytag: The T is there in response to some national body need. The information can be placed in the note. The spill over will also be in the Backus-Naur form. As far as Unicode consortium is concerned, we will not have an objection to put this in a note. Some wording changes can be taken off line with the editor.
- f) Mr. Keld Simonsen: Had a conversation with Bruce and looked at the SC 22 liaison document. All their concerns have been addressed.
- g) Mr. Bruce Paterson: UK has made a comment that there are too many alternative forms for the identifiers. Preference was to disallow those with only sequence of hexadecimal digits. Ireland also had similar comment.
- h) Dr. Asmus Freytag: I would advise against changes at this point - because it took so long to arrive at the current proposal -- long discussion in Tokyo. It is beneficial to permit more variants. Unicode uses both forms.
- i) Mr. Bruce Paterson: From the discussion here -- UK comments and Ireland comment 3 are not accepted -- because of the current use of different forms that were suggested to be removed.

Disposition The T option on identifiers is to be removed from the normative text and placed in a note. WG 2 accepts the disposition of comments, with amendments per discussion during the meeting.

Relevant resolution:

M32.1 (pDAM9-Unique Identifiers):

Unanimous

With reference to documents N1445R and N1471 on Unique Identifiers, WG 2 accepts the disposition of comments in document N1471, amended as follows:

- a. to move all references to the forms beginning with the letter T into a note.
- b. to note that the comments from Denmark have been accommodated, and,
- c. to note that the comment from the UK, and a similar comment (no. 3) from Ireland, have not been accepted.

WG 2 further instructs the editor to prepare the text for DAM 9 for ISO/IEC 10646-1 on Unique Identifiers and forward it, together with the disposition of comments, to SC 2 secretariat for a JTC 1 ballot.

6.2 pDAM 10 - Ethiopic script

Input Document:

1485 PDAM 10 – Ethiopic; Adams/Paterson; 1996-12-01

The pDAM-10 document is in the hands of SC 2 secretariat and is expected to be sent for ballot during this week. If anyone has comments on the topic, they should channel them through their national bodies to be included in the ballot response.

6.3 pDAM 11 - Canadian Aboriginal Syllabics script

Input Document:

1472 pDAM 11 - Unified Canadian Aboriginal Syllabics; Bruce Paterson; 1996-11-20

The pDAM-11 document is in the hands of SC 2 secretariat and is expected to be sent for ballot during this week.

Discussion:

Dr. Glenn Adams: The proposal has position zero of the block unassigned. Would like to know the basis for these. Prefer to remove them -- possibly through national body comments for pDAM.

6.4 pDAM 12 - Cherokee script

Input Document:

1476 Draft pDAM 12 - Cherokee; Paterson; 1996-12-09

The pDAM-12 document is in the hands of SC 2 secretariat and is expected to be sent for ballot during this week.

6.5 Proposed disposition of comments - Character Glyph Model

Input Documents:

1477 Proposed disposition of comments on Character Glyph Model TR; Hart & Griffiee; 1997-01-10

1478 Updated Character Glyph Model Draft TR; Hart & Griffiee; 1997-01-10

Dr. Asmus Freytag volunteered to introduce the documents. Document N1477 is the list of comments and responses from the editors Messrs. Ed Hart and Alan Griffiee. Documents N1478 and N1478 (attachment) contain the revised text.

- Danish comments - Some of the terms requested by Denmark have been added.
- Norwegian comments were accepted to the extent the scope of the document permits.
- Comment from Mr. Ken Holman, Canada - there was no error.
- Comments from Mr. Agenbroad - most of the comments have been accommodated. The one on the mapping tables between the characters and glyphs - is accommodated to the extent of the scope of the TR.
- Mr. Olle Jarnefors' comments: Items 5, 8, 10, 11, 16, 17 - were rejected. All the others from 1 through 19 were accommodated to in some manner.
- Mr. Takayuki Sato's comment has been accepted and accommodated.

Discussion:

- a) Mr. Keld Simonsen: The disposition of comments in Québec - we believe had a statement that more text will be included. The current text does not include what was agreed to in Québec city. There were also other ad-hoc participants in Québec city. We believe that we decided to prepare a text to address their concerns also and we are surprised that the text has not been added.
- b) Mr. Sven Thygesen: The question was whether these were accepted in Québec city or not.
- c) Mr. Bruce Paterson: I am concerned that the scope of this document seems to be slowly expanding. The model was about individual characters and their associated glyphs. The comments are related to expanding the models etc.

- d) Dr. Asmus Freytag: Unicode consortium is concerned about speedier conclusion to the glyph aspect of the model. We would prefer not to hold this particular work back. The editors state that the input from Denmark has been recognized to be part of an expanded work - outside the scope of the current TR.
- e) Mr. Mike Ksar: Can Denmark accept the fact their comments have been partially accommodated - for parts not accommodated Denmark is invited to propose a new work item as part of this project or a new project. A new or another document of the TR can accommodate the Danish comments.

Disposition: WG 2 accepts the disposition of comments presented in document N1477, and the new text in document N1478, and will progress the pDTR.

Relevant resolution:

M32.2 (Character Glyph Model):

Denmark Abstained

WG 2 accepts the response to comments in document N1477, and the revised text of the Working Draft on ISO/IEC pDTR 15285 in document N1478. WG 2 further instructs the co-editors (Messrs. Hart and Griffie) to prepare the text for pDTR 15285 and forward it to SC 2 secretariat for an SC 2 ballot.

6.6 Results of SC 2 questionnaire on BMP allocation

Input Document:

1479 Results of SC 2 questionnaire on allocation of 6585 Han characters in BMP; Ksar; 1997-01-10

Mr. Mike Ksar: Eight of the fourteen national bodies are in favour of BMP allocation and six are against. This is not a conclusive enough indication for us to make a decision. We will continue discussion on this topic under the IRG discussion (see section 9.2.1 on page 29). Also, there are documents on the road map relevant to this topic -- see discussion under section 8.1 on page 16.

6.7 Program of work of WG 2

6.7.1 WG 2 projects

Input Document:

1394R WG2 Report to SC2 Plenary; Mike Ksar; 1996-05-22

- a) Mr. Takayuki Sato: As part of Re-Engineering work, Professor Kohji Shibano, acting chair of SC 2, would like to have a clear understanding of the projects of WG 2, with clear target dates. If the target dates are not met, the projects will be canceled. At the next JTC 1 plenary, each WG would be asked to list the projects, with specific target dates; only those projects that have been approved with specific objectives, milestones would be permitted to continue.
- b) Mr. Mike Ksar: Have we updated the milestones etc. of the WG 2 projects. Document N1394R contains the last report to SC 2. Mr. Keld Simonsen is requested to assist the convener in updating the list of WG 2 projects with target dates and relevant information.

Action Item: Messrs. Mike Ksar and Keld Simonsen - to update the list of projects of WG 2 (based on document N1394R).

6.7.2 New spread-sheet document

Input Document:

1509 Summary of WG 2 Work Items, including spreadsheet; Sven Thygesen; 1997-01-24

Mr. Sven Thygesen briefly identified the changes that are incorporated in the new spread sheet document N1509.

7. Non-repertoire issues

7.1 Editorial corrigenda - standing documents

Input Document:

1468 Editorial Corrigenda - 3rd Cumulative List - Issue 1; Bruce Paterson; 1996-10-17

Mr. Bruce Paterson: Document N1468 is standing document of editorial corrigenda. It is small now. Most of the previously accepted corrigenda have been included in document N1396 - revised text of 10646. Document N1468 contains those that are yet to be incorporated.

Action Item: National bodies and liaison organizations are invited to check document N1468 for any errors or omissions.

7.2 Editorial corrigenda - arising from French translation

Input Document:

1469 Editorial Corrigenda arising from French Translation; Bruce Paterson; 1996-10-24

Mr. Bruce Paterson: Document N1469 contains a number of proposed editorial corrigenda to accommodate some of the difficulties arising out of the effort on translation of 10646 into French. The UCS - Transformation Format should be really .. Transformed Format. The French Translation will reflect the latter terminology.

Discussion:

- a) Dr. Asmus Freytag: In 22 - Order of characters - the Unicode book has been using 'generally' instead of 'approximately'. I would like to ensure that there is some synchronization between the changes -- especially in the names of characters. Referencing in document N1468 - for example - Table 56 - Row 33 (character names) - corrigendum arising out of a defect Report. for x3332, x3343, x3344 and x3346.
- b) Mr. Bruce Paterson: 'Generally' has a wider connotation than 'approximately' in this instance.
- c) Mr. Mike Ksar: The above corrections were accepted in Washington, and later in Geneva we decided NOT to change any names and use Annex P instead.
- d) Mr. Takayuki Sato: Japan does not have problems with the Annex P annotation.
- e) Mr. Sven Thygesen: The Stage 4 of each proposal includes the code positions and the names of each accepted characters. Unicode consortium can synchronize on the WG 2 standing documents also.

Disposition: WG 2 accepts the proposed editorial corrigenda to be added to the cumulative list of Editorial Corrections. WG 2 will process corrections to Table 56 - Row 33 (character names) as an Annex P notation - to satisfy the Japanese request for correction of these names. Editor is instructed to process these as Annex P entries instead of correcting the names in Table 56, Row 33. A new resolution to over-ride an earlier WG 2 resolution will be presented to WG 2 for adoption.

Relevant resolutions:

M32.3 (Editorial Corrigenda-1):

Unanimous

WG 2 accepts the editorial corrigenda arising from the French translation of ISO/IEC 10646-1, in document N1469, and instructs the editor to add them to the cumulative list of editorial corrigenda in document N1468.

M32.4 (Editorial Corrigenda-2):

Unanimous

WG 2 instructs the editor to redraft the entries in the cumulative list of editorial corrigenda in document N1468 for Table 56, Row 33, as entries for Annex P, instead of showing corrections for the names in Table 56 - CJK Compatibility as requested by the Japanese national body. This resolution modifies resolution M24-DFR-1 from WG 2 meeting 24.

Action Item: The editor and Dr. Asmus Freytag to meet to understand the errata process for the Unicode standard, and see what can be done towards assisting in the synchronization between 10646 and the Unicode standard.

8. Repertoire issues

8.1 Roadmap

Input Documents:

1499 BMP and Supplementary Planes Allocation Roadmap; U.S.; 1996-12-27

1505 (Was 'Script Orders and Row Numbers within 10646') Withdrawn – not reassigned; John Clews; 1997-01-24

Document N1499

Mr. Michel Suignard introduced document N1499 - a US contribution. It describes the current allocations in the BMP, those in the pipeline for additions, and other proposals for allocation in the BMP. The paper proposes that having two additional planes Plane 1 for Non-Han and Plane 2 for Han Supplementary planes would be sufficient for the future part of 10646.

This is probably the first time, a good estimate was made on the space that would be taken up by different new scripts, by good expertise available in the US. This has gone towards arriving at a better estimate of the space available in the BMP and other planes.

Discussion:

- a) Dr. Asmus Freytag: We do have currently a large degree of freedom. I would like to be able to narrow down the choice. I would like to have a discussion on whether we have fundamental concerns on the principles in this paper. I would like to seek a solid consensus on the principles. We need to focus on the high level concept -- there are certain number of scripts that can still be accommodated in the BMP. The other two aspects are -- a single non-Han supplementary plane is adequate for non-Han that we may encounter, and a single Han supplementary plane has been proposed for Han characters. The idea is to use a cautious approach. We should encode only those Han characters that cannot be unified.
- b) Mr. Bruce Paterson: I read this document and I also compared this with document N1464. This new paper gives us a much more optimistic picture of the amount of space for the scripts in daily use. Could you point out how this optimistic picture was arrived at?
- c) Mr. Sven Thygesen: In document N1464 we did not have an indication of whether the allocations were in the BMP or outside for the different scripts that have been accepted.
- d) Dr. John Jenkins: The vacated space by Korean perhaps gave room for the Vertical Extension A. There are nearly 21000 Han characters in the BMP. Some 6600 characters may be added for Vertical Extension A in the BMP. There is an additional 65000 in Han supplementary plane. There are a large number of CCCI characters, which in most instances can be unified. We have about 90000 space - there is slight possibility that we may need more.
- e) Mr. Keld Simonsen: With additional information that we could have an extra supplementary Han plane if we need, it should be OK.
- f) Mr. Michel Suignard: The BMP allocations in page 6, shows that there is enough space for all the characters
- g) Mr. T.C. Kao: 64000 characters are needed from the CNS standards if duplicates are removed. In CCCI about 7000 characters can be unified.

- h) Mr. John Clews: Has the Korean vacated space been made available for encoding? YES. I am in favour of the three planes proposal. I would like to see some formatting enhancements to read the document better. This proposal is good - the Bibliographic community probably will not need any more.
- i) Mr. Arnold Winkler: The US had substantive input from Mr. Michael Everson of Ireland in preparing this document.
- j) Mr. Mao Yong Gang: The proposal to have a single supplementary Han plane is sufficient for now. About 90000 characters should be sufficient from what we know. Page 4 - Buginese (= Makassar) - is it related to Yi from China? NO.
- k) Mr. Takayuki Sato: The proposal allows additional supplementary planes in the future if needed. I would suggest we keep a standing document for supplementary planes, besides this document. Parts of this document could be verified.
- l) Mr. Mike Ksar: This road map is only a guideline document. It should not be assumed to be allocating all the scripts as described in the document. We still have to go through the process that we have in place. The guidelines in this document would be used as part of the process to be used by WG 2. I think it is sufficient to have two supplementary planes to accommodate what we can anticipate. It should be pointed out that there will be NO duplicates across the planes. The list of scripts are based on Linguists' input. We seem to be agreeing to the principles outlined in document N1499. WG 2 can certainly use this as a guideline document for our work. Specific clarifications can be obtained by discussing off line with the US delegates.

Disposition: WG 2 thanks the US national body and other experts for the road map contribution and accepts the principles proposed in this document as a guideline for its future work.

Document N1505:

Mr. John Clews introduced his contribution titled 'Script Orders and Row Numbers within 10646' in document N1505. WG 2 has a document N1370 which has been updated by document N1499. Document N1505 suggests a more useful groupings of scripts in the different areas. It would be useful for member bodies voting on amendments, a view of the groupings of scripts would be useful. Document N1499 is a roadmap, and document N1505 can be used as an alternative grouping of scripts for consideration.

Discussion:

- a) Dr. Asmus Freytag: If we start with document N1499, it would be useful to suggest changes modifications to the group working on document N1499.
- b) Mr. Mike Ksar: Document N1505 is for information purposes - to be considered by the group incorporating document N1499 into the principles and procedures document.

Action item: The ad hoc group on principle and procedures -- the procedures document to be updated to incorporate the principles in document N1499. (Note - document N1505 has been withdrawn by the author subsequent to the meeting).

Relevant resolution:

M32.5 (Road map):

Denmark Abstained

WG 2 thanks the US for its contribution in document N1499 - BMP and Supplementary Planes Allocation Roadmap, and accepts it as a guide for future allocations in ISO/IEC 10646.

8.2 Second part of 10646

Input Document:

1484 US Contribution for definition of new part of 10646; U.S.; 1997-01-10

Mr. Michel Suignard introduced document N1484. It proposes some introductory paragraphs, scope and other text, for the Second Part of 10646.

Discussion:

- a) Mr. Bruce Paterson: First of all this is a new part of 10646. We have to appoint an editor for this part -- it is not automatic. SC 2 has to approve an editor, WG 2 needs to recommend. The words that are on top of the 2nd page, regarding the duplication belong in the scope of the 2nd part. The word 'shall' should be replaced with 'are'. Otherwise, this is a good starting point to be given to the editor.
- b) Dr. John Jenkins: August 1997 should be August 1996. Korea is missing in the list of countries on page 1. Perhaps the language names be used instead of country names.
- c) Mr. Mao Yong Gang: What are Miscellaneous Syllabaries on page 2? Answer: The road map document N1499 has some information on them. These will typically be non-Han ideographs, syllabaries etc.
- d) Professor Kyongsok Kim: In SC 2 we use term Ideographs to refer to Han Ideographs. Perhaps use the term non-Han ideographs plane 1 to avoid confusion with Han.
- e) Mr. John Clews: Would it be useful to add UTF-16 etc. encoding to part 4.
- f) Mr. Keld Simonsen: Is this in line with the SC 2 resolution? This document is IN RESPONSE to the SC 2 resolution M6.4? Is the intention of this paper to go forward as a new subdivision of work?
- g) Dr. Glenn Adams: In Québec, the issue came up as to the size of the printing? The feeling at that time was One part per plane would be easier to handle. This document proposes several planes to be in this part. What is Japan's opinion?
- h) Mr. Takayuki Sato: This document may be modified to separate into two parts. As to the definition of the project, better definition of the scope was needed and this paper addresses this adequately. I think it may be sufficient to have a single part for both supplementary planes.

Disposition: Mr. Michel Suignard prepared a revised document addressing the above discussion. WG 2 accepted the revised document N1484R. It will be forwarded as information document to SC 2. We need to appoint an editor - who will be instructed to prepare the draft text of the second part of 10646.

Relevant resolution:

M32.6 (Part 2 of 10646):

Unanimous

WG 2 accepts document N1484R as the proposed scope for ISO/IEC 10646-2, and instructs its convener to forward the document to SC 2 secretariat, in response to resolution M6.4 of SC 2 Plenary meeting, August 1996 (document SC 2 N2749).

8.3 Repertoire additions - cumulative list no. 4

Input Document:

1467 Repertoire additions - Cumulative List No. 4; Bruce Paterson; 1996-10-17

Mr. Bruce Paterson: Document N1467 is almost the same as the previous cumulative list - updated from Québec city meeting. The document has an annex which shows the set of unallocated positions in the BMP. Each time new code positions are allocated to character(s) the unallocated positions will be updated. Collection numbers will also be shown.

8.4 Yi script

8.4.1 Yi syllabary

Input Documents:

1481 Yi Script Encoding; China; 1996-12-30
1482 Yi Radicals Encoding; China; 1997-01-05

Mr. Mao Yong Gang introduced document N1481 -- the overhead foils presented covered the various sections in document N1481.

(Note: Readers are encouraged to use document N1481 rather than relying only on the following notes taken by the recording secretary during the presentation by Mr. Mao Yong Gang).

Yi script has 10000 characters, has been standardized as 1165 syllables in 1979. Each Yi syllable has a different pronunciation. Each pronunciation was given a unique glyph in a non-decomposable form in the standard. GB 13134-91 standardized the 1165 syllables - all official documents are translated into Yi. Font standards have also been developed. More than 1000 kinds of publications are in use. Printout samples are attached to document N1481.

Yi has been implemented on Yi-DOS and more recently on Windows. Also on high end publishing systems - in China, Taiwan, Korea, Malaysia, and Japan. Based on distinguishing each other by shapes -- elementary units of presentation.

China's request is for these to be encoded in the BMP -- 5 rows. The proposed names are based on romanized sound values. There is no traditional alphabetical order, phonetic order is used; with each set the vowel order is endorsed. Of the 1165 Yi syllables -- 819 are basic, 345 are middle high toned syllables and 1 (Wu) for representing repeated syllable. Responses to Michael Everson's comments have been provided in the document N1481. China requests WG 2 to allocate code positions and progress this towards a pDAM.

Discussion:

- a) Mr. Takayuki Sato: Yi script does not include all the syllables. What would be the theoretical possibility - in combination.
- b) Mr. John Clews: In Hangul one could write all combinations if one needs to, whereas with Yi one cannot.
- c) Dr. Glenn Adams: about 1600 possible combinations. But only 1165 are legal. On the names of characters: 1147--1150 should have C replaced with IE; 1155--1157 -- replace Q with YR. These are editorial corrections. I would like to propose to replace 'LETTER' with 'SYLLABLE' in all the names. Excepting Cherokee - Ethiopic for example uses SYLLABLE. Annex K makes the category SYLLABLE optional. In the case of Canadian Syllabics we made a decision because of the long names of many characters. I would like to commend China to take input from various sources and accommodate the comments etc. They have done a good job.
- d) Mr. Mike Ksar: Why can't we remove LETTER or SYLLABLE if it appears in each character of the entire set?
- e) Mr. Bruce Paterson: Position of UK - is that we wish to use SYLLABLE throughout.
- f) Mr. Keld Simonsen: We would like to see SYLLABLE instead of LETTER throughout.
- g) Mr. Michel Suignard: US would like to see SYLLABLE throughout instead of LETTER.
- h) Professor Kyongsok Kim: Each syllable is not decomposed. The code table - it appears some of these can be decomposed. Is there any rule as to when to compose and when not to? This document does not have the rules related to the combination rules. When we combine two characters, would the result be such that we do not recognize the shape as decomposable. In case of Hangul we can recognize the components.
- i) Dr. John Jenkins: It is more like ideographs - we cannot identify pieces of symbols as consonants, vowels etc. looking at the shape. This is a set which was created recently from much larger set. Does China have intention of identifying the full set of ideographs for Yi - for example for computerizing the Yi literature?
- j) Mr. Mike Ksar: WG 2 can accept the proposal as complete. Into Stage 2. Do we want to go to Stage 3, allocate code positions per Road map. Is the 1165 number is the same as used for the estimate in the roadmap document N1499? YES.
- k) Professor Kyongsok Kim: Would be useful to identify which would be valid combinations etc. -- as background document. Should talk to Chinese expert to see if such a document could be prepared. When we ballot on the pDAM text it may be useful.
- l) Dr. Asmus Freytag: Technically speaking it may be a candidate for pDAM. It is not long enough in front of people to accept at this meeting. I would be more comfortable if we use this input to prepare the pDAM text. Stage 2 would be the right place for now. I would disagree with Professor Kim - in that this being NOT like Hangul, it will not be useful to produce a document such as what was asked regarding combinations. National bodies and liaison organizations can exercise due diligence and verify the proposals.
- m) Mr. John Clews: Document 'Language Automation Worldwide' contains some information - Professor Kyongsok Kim could refer to it.
- n) Mr. Bruce Paterson: If draft text for pDAM is to be prepared the code positions are to be given.

Disposition: WG 2 accepts the proposal in document N1481, and invites China to prepare a pDAM text; A000 - A48F - is proposed in document N1499 page 2. Names should be changed to 'Yi Syllable'. It is accepted at Stage 2 of WG 2.

Note: Also note that a new area - GENERAL SCRIPTS II area (A000 to ABFF) is suggested in document N1499 (page 2). The pDAM-text should reflect this new Area definition

Action Item: China is invited to make draft pDAM text at least two months prior to June 97 meeting

Relevant resolution:

M32.7 (Yi Syllabary):

Unanimous

WG 2 accepts the set of 1165 characters of the Yi syllabary, their names (with LETTER changed to SYLLABLE), and their shapes proposed in document N1481, allocates them provisionally to code positions in the range xA000 to xA48F, and invites the Chinese national body to prepare text for a pDAM for consideration at the next WG 2 meeting.

8.4.2 Yi radicals

Input Document:

1482 Yi Radicals Encoding; China; 1997-01-05

Mr. Mao Yong Gang introduced document N1482. Yi radicals were proposed by Mr. Michael Everson and China studied these. Document N1482 describes the radicals and their encoding. Chinese experts have verification on this number. Naming -- used the name of the closest syllable and add a suffix - b to the end.

Discussion:

Dr. John Jenkins: I think Yi Letter should be changed to Yi-Radical, and if you do this, you would not need the 'b' suffix. 'Yi Radical qot' would be better than 'Yi Letter qotb'. If we use Yi Syllable for the Syllabary, we can use Yi Radical for these.

Disposition: WG 2 accepts document N1482; China is invited to prepare draft pDAM text, with proposed name change to Radicals without b-suffix. Proposed code positions: A490 through A4BF. The proposal is accepted at Stage 2.

Action Item: China is invited to make draft pDAM text at least two months prior to June 97 meeting.

Relevant resolution:

M32.8 (Yi Radicals):

Unanimous

WG 2 accepts the 39 characters of the Yi radicals set, their names (with LETTR changed to RADICAL, and the suffix 'b' removed from each name, and change the character names to uppercase), and their shapes proposed in document N1482, allocates them provisionally to code positions in the range xA490 to xA4BF, and invites the Chinese national body to prepare text for a pDAM for consideration at the next WG 2 meeting.

8.5 Sinhalese proposal - Everson

Input Document:

1473 Proposal for encoding the Sinhalese script in 10646; Michel Everson; 1996-10-26

No discussion.

8.6 Sinhalese proposal - Sri Lanka

Input Document:

1480 Request to add Sinhalese to 10646 based on recent Sinhalese Standard (SLS 1134:1996; Sri Lanka Standards Institution; 1996-11-15

Mr. Mike Ksar: Document N1480 contains a copy of SLS 1134:1996, the Sri Lankan 8-bit code standard, sent to SC 2, with a request to include the repertoire in 10646. This document should be examined in detail. Sri Lankan national body representatives should be somehow be encouraged to participate in a discussion with other people interested in the Sinhala script.

Discussion:

Mr. John Clews: We could invite some one from Sri Lanka to attend the next WG 2 meeting. I do have some names that could be forwarded to SC 2 secretariat.

Dr. Asmus Freytag: The national standards may need to be respected more than what we may have as proposal from Linguistic experts alone. The Unicode consortium will pursue through normal channels validation of the script. There are some Tamil characters we have included in 10646 already. If we have competing proposals on the same subject, WG 2 may not be able to evaluate these in a reasonable way. As to ad hoc groups - we do have a poor record of preparing proposals in ad hoc groups at the WG 2 meetings. We need to have prior discussions.

Dr. Glenn Adams: There are already some control characters used to form conjuncts different from what we have in 10646.

Action Item: Dr. Glenn Adams is invited to prepare a response to document N1480; Mr. Mike Ksar to prepare a cover letter and send to Sri Lanka Standards Institution via SC 2 secretariat, with an invitation to participate at the next WG 2 meeting. Messrs. Ross and Everson have also contributions on the subject.

8.7 Supplementing Arabic for Uyghur, Kazakh and Kirghiz

Input Document:

1474 Proposal for supplementing Uighur, Kazakh and Kirghiz in the Arabic Script of 10646l China; 1996-10-18

No discussion.

8.8 Function of Identifiers on Mongolian

Input Documents:

1475 About the function of identifiers of Mongolian Proposal; China; 1996-11-10

1497 Use of Control Symbols in Mongolian Script Encoding; United Nations University; 1997-01-10

1510 Updated Mongolian encoding proposal (Update of N1438); China; 1997-11-06

Output Document:

1515 Report of ad hoc on Mongolian encoding proposal; United Nations University, China and Unicode Consortium; 1997-01-23

Document N1510

Mr. Mao Yong Gang introduced document N1510. Document N1510 is an update of document N1438, from August 1--5, 1996, meeting on Mongolian. The repertoire table has been updated and included. Descriptive text has been refined from earlier. The names of characters have been refined. The Mongolian reference table shows which characters are used in which language, whether unified or not, and presentation rules. China invites other interested parties to comment on document N1510, so that they can be incorporated in the next version. China has NOT received any feedback on the previous contributions on the subject that were circulated. There was no further meeting held on Mongolian since the August meeting. Document N1497 contains the feedback from the UN University.

Discussion:

- a) Mr. Richard Moore: There is a project on Multi-lingual document processing at the UN International University for IT in Macao. At the Beijing meeting in August, which was attended by representatives from UNU, several corrections were identified to document N1438. These have not been made in document N1510. UNU did not receive the August documents till about mid-November. I will highlight the necessary changes - due to omissions from document N1497 - in document N1510. The document N1497 is not clear - document could be organized to read more clearly. Some characters seem to be missing in the Mongolian reference table. There are some gaps in the table.
- There is general agreement on the Mongolian Basic Character Set and their names. The disagreement is on the control functions and supplementary information. The basic table contains one version of the glyphs used for the characters. The reference table indicates the different forms. The controls 172 --174 allow to pick the variant needed. One inputs the basic character, the software replaces the character depending on the context, and if the choice is to be over-ridden or one wants the isolated form of any one of the variants - the control characters are employed. These controls can appear in front, after or both - of the character whose variant is sought. There are some problems in this -- CTL, Char, CTL, Char -- sequence for example - there is an ambiguity on whether CTL surrounds the First Char, the second CTL applies to Char before or after. In some cases Mongolian SPACE and Mongolian HYPHEN act as controls. One cannot generate these if one wants them in a piece of text. Two problems: Control Symbols - preceding and after; some basic characters are used both as basic and control characters. Document N1497 - outlines these problems and suggests some alternative solutions. Eight control characters are needed to deal with the maximum number of variants. Comments are invited on the alternatives and which solution may be adopted.
- b) Mr. Mike Ksar: There is a request to include document N1437, document N1438 in the standard. Such reference material is not included in 10646.
- c) Dr. Asmus Freytag: The supplementary information is needed for evaluating this script and to be able to include in the Unicode standard. Are the control characters always present, or it is used only to disambiguate? Is there an assumption about the presence of an algorithm to do the shaping automatically? (YES - the control characters are used only to select specific shape overriding the algorithm.)
- d) Dr. Glenn Adams: Some form of information regarding the Mongolian script would be needed in the standard. I have objected to Mongolian SPACE in the character set - citing the example of Arabic case. The Mongolian SPACE could be removed and use the NBSP to indicate separation of characters within a word. This should be looked into. There is an implicit algorithm which is not documented. These controls were originally intended to deal with ambiguities.
- e) Dr. Umamaheswaran: Is it the observation that the three control characters plus the SPACE and HYPHEN are not adequate?
- f) Mr. John Clews: The supplementary tables are for information to help WG 2 assess the Mongolian script. The situation of disambiguation exists in software today - how is this properly dealt with in Mongolian. There is a great deal of explanation in documents N1437 and 1438.
- g) Mr. Michel Suignard: Would like to know where the block boundary for Mongolian is? Do we need all the 8 columns on the second page or only the first three columns?
- h) Mr. Mike Ksar: The basic repertoire for Mongolian looks OK with the exception of three control characters 172-174, and Mongolian SPACE. The rules related to use of the three control characters are in question. We have written text in the standard -- for example, a combining mark follows the base characters. I should suggest that we use a similar approach stating that the control character follows the base character. Why are there holes in the different columns in the code table?
- i) Mr. Mao Yong Gang: The original repertoire was bigger - we have reduced the set. Linguists on Mongolian are asking for refinements and we would like to provide some flexibility. Mr. Mike Ksar's suggestion would eliminate some of the ambiguity - I agree we could specify that. On the issue of number of control characters - the coding system itself should support all possible combinations. However, not all combinations are valid. One could use

techniques such as &xx. - to represent the standalone forms of the dual use of SPACE and HYPHEN.

- j) Mr. Mike Ksar: Messrs. Glenn Adams, Mao Yong Gang, Richard Moore (and others) - to form an ad hoc group to address the questions and concerns that have been raised, and arrive at an agreed upon solution.
- k) Mr. Bruce Paterson: It would be useful to give a broad guidance to the ad hoc. Are we trying to optimize on any particular point -- for example, minimizing the number of characters in a string etc. Do we care about code space, about number of bytes in transmission / interchange, the ease of use to generate the strings -- etc. should be entertained. Arabic assumes that there is an implicit algorithm to select the shape, along with the need to select a specific shape. In case of Arabic - we do have all compatibility zone presentation forms.
- l) Mr. Mike Ksar: The various presentation forms are NOT to be encoded - we have an agreement from the previous discussion on Mongolian.
- m) Dr. Glenn Adams: In case we have encoded a script, and it includes several punctuation characters etc. we have left space for more of these -- particularly for scripts that are still evolving. Implementability and consistency - are the two concerns. Ambiguity has to be eliminated. We need a consistent way of being able to select specific presentation form. The Rules of the Mongolian Todo Xibe Manchu Presentation to 'single present'-- what does the 'single present mean? I do not understand the purpose of this. Why is there a discontinuity between 119 and 128? 128 onwards is used to represent ancient text -- aligali.

Document N1515

Mr. Roger Moore prepared and presented the ad hoc group report. The ad hoc group agreed to remove the Mongolian Space. NBSP serves the same purpose. Removed the three control characters at 172, 173 and 174. Added 10 new ones as replacement -- instead of the 8 that was suggested in earlier discussion. These 10 controls can be made available to other scripts as well - and so, could be added in another block such as the general punctuation marks. The character set table from document N1510 is being updated to incorporate the above ad hoc group agreements. Document N1510 already captured the information from the previous documents.

Discussion:

- a) Mr. Mike Ksar: I suggest to refer to the ISO Standard 10646 instead of Unicode standard on page 2 of document N1515. The Source of document N1515 should be Ad Hoc Group on Mongolian -- not UNU/IIST, China and Unicode Consortium.
- b) Mr. Michel Suignard: I would suggest to move the characters up by one to remove the hole at position 000, vacated by the Mongolian Space.
- c) Dr. Glenn Adams: We are proposing new things in the ad hoc. The other participants should also take a look at the changes proposed. We cannot take a final position at this meeting.
- d) Mr. Mao Yong Gang: Document N1515 proposes 10 control symbols. Document N1497 proposes only 8.
- e) Mr. Moore - the original count of 8 was wrong. We found 10.
- f) Dr. Asmus Freytag: The most natural thing would be document N1510 Revised - to be used as input document for comment by other Mongolian experts. A new document N1515R which includes additional information such as tables etc. and a list of open issues will be provided to the delegates at this meeting. The source of this document will be the Ad Hoc Committee.

(The ad hoc on Mongolian met and revised document N1515 to include changes -- Unicode standard to 10646 standard; Source changed to Ad Hoc Group on Mongolian; Filling position 000 -- result is in N1505R distributed to the meeting delegates).

Action Item: Document N1515R will be distributed to WG 2 for comments by those interested in Mongolian script.

Relevant resolution:

M32.9 (Mongolian script):

Unanimous

WG 2 commends the Mongolian ad hoc group on the excellent progress that has been made on the Mongolian script since the last meeting. WG 2 accepts document N1515 on the Mongolian script, and invites national bodies and liaison organizations to review and comment on it prior to the next WG 2 meeting.

8.9 Deseret Script

Input Document:

1498 Proposal for Encoding Deseret Alphabet; Unicode Consortium; 1997-01-20

Dr. John Jenkins introduced the Deseret script in document N1498. This is a specific proposal for outside the BMP. The US requirement to WG 2 is to include in 10646. They are included in the roadmap documents as potential new scripts. We have some feedback from Mr. Michael Everson. First are in terms of Names - he suggests Deseret Capital Letter etc. and Lower Letter should be mixed. This would be acceptable, though Deseret is the name of a place. The names should not be in mixed case. Chee should perhaps be Chi. Do not agree with this - as Chi will not be pronounced as intended.

Discussion:

- a) Mr. John Clews: Deseret is not a language name. The long name should include alphabet.
- b) Dr. Umamaheswaran: One could use the full script name for the block name, and use the short name in the letters.
- c) Mr. Mao Yong Gang: The Upper and Lower letters look like Font Variants of the same character.
- d) Dr. Asmus Freytag: Ordering of characters - No reason for ordering in a mixed upper and lower case in the code position allocation - there is not technical advantage either way. Even though these characters look like Font Variants, they have to be distinguished in the encoding. Unicode consortium supports this proposal - we need to break the ice. We need to encode something into the Supplementary plane -- this would be the First Script which is requested to be specifically outside the BMP. Even though the user community is small - it is in modern use.
- e) Mr. Sven Thygesen: If the amount of users are very small we may decide not to encode it, and align to a private encoding. I have no problem in putting it outside the BMP.
- f) Mr. Bruce Paterson: This is the first proposal outside the BMP - may be the document that goes for CD ballot should include this script in the CD included. I would like to see a collection for characters to include in supplementary planes.
- g) Mr. Mike Ksar: If we have to proceed with this proposal, we need to get the Part 2 of 10646 drafted. We may have to place this proposal on hold in stage 1, till Part 2 is defined. WG 2 accepts the proposal in principle.

Action Item: Dr. John Jenkins is invited to prepare a working document -- as a candidate for inclusion as the first script to be included in Part 2.

8.10 Kang Xi radicals, TCA

Input Document:

1182 Proposed to add 210 Kang Xi Radicals, TCA; TCA; 1995-03-23

Mr. T.C. Kao, TCA, presented document N1182. The request is to add additional 210 radicals to enable two way conversion between 10646 and CNS 11643. 214 radicals from CNS 11643 are already included in 10646, the others are not. Also digits 10, 11, 12 (Hangzhou numerals) are NOT in 10646. The radicals are used as Radical Index and Radical ideograph with two different meanings of use.

Disposition:

- a) Mr. Mao Yong Gang: IRG has discussed these during supplementation. The TCA requirements are NOT included in IRG deliberations and WG 2 should consider these.
- b) Dr. Glenn Adams: Even if we include these in Compatibility Zone, we cannot still have round trip with CNS, due to large number of ideographs. With CNS 1986 version we may be able to round trip. I have always supported the inclusion of these. They are no worse than

- existing similar looking characters. Compatibility, Input methods, indexing and composition etc. all seem to lead to treat these as new characters -- than simply compatibility characters.
- c) Dr. Asmus Freytag: Are 210 is enough to do a two way conversion? Tone marks information is available in the annex of the Unicode document. We can have duplication of characters for different purposes - A ring - is coded twice. K - Kelvin versus, K letter etc.
 - d) Mr. T.C. Kao: 210 of the 213 radicals are duplicated in CNS in Ideograph area and in KXR area. 214 are in the CJK Ideographs area in 10646. We need 210 additional space in 10646 to permit round-tripping.
 - e) Mr. John Clews: Just like the APL characters looking like the Latin characters are present with different uses. Compatibility would be likely use.
 - f) Mr. Takayuki Sato: Why do we need it in the Compatibility zone? They are required only for compatibility. In case of CNS, if CNS would have been coded from Scratch, you would not have duplicated them -- is that true? If it is true, then they belong in the compatibility zone.
 - g) Mr. Bruce Paterson: Why were these ideographs coded twice in CNS? Some historical reason may be there. Would you encode these as duplicates today? Another question is how would you distinguish them on a screen?
 - h) Dr. John Jenkins: There is a certain agreement that having radicals as a separate entity makes some sense. Round trip compatibility with CNS is a important. In terms of composition method, if these are not only compatibility characters, you would lose the benefit of composition use of these radicals. The uniqueness of canonical decomposition would be violated if both radicals are allowed to be used. From IRG perspective, these should be coded as compatibility characters.
 - i) Dr. Umamaheswaran: Radical Index characters - call them differently and ask for them to be separate coding. Why not treat them as new requirement than just being compatibility? Encode 214 Kang-Xi Radical Indices characters - to avoid the problems.
 - j) Mr. T.C. Kao: In CNS they have two code points - they have different meanings. The shapes are similar - one is narrower than the other. The original request was for a two-way conversion.
 - k) Dr. Asmus Freytag: Where would these be with respect to document N1499 - road map? Meaningful names could be assigned to the 214 radicals -- Dr. John Jenkins will send a set of names to Mr. Mao Yong Gang.
 - l) Dr. John Jenkins: I would suggest using code positions - x2F00 through x2FFF (at the end of the Symbols block). When it is time to prepare the pDAM text, TCA will be requested to assist in the preparation of the pDAM in a Camera Ready form.
 - m) Mr. Mike Ksar: The reason for including these in the BMP - use as Input Methods, use as Indexing Radicals, potential use in composition and compatibility with CNS - not necessarily in the Compatibility Zone. If TCA does not have objections to include outside the compatibility zone we can find a spot. We can accept the inclusion of 214 Kang Xi Radicals as stage 2. TCA is to revise the proposal for a set of 214 Kang-Xi Radicals including the input received from this document.

Disposition: WG 2 accepts this in principle. TCA to prepare revised proposal fro 214 Radicals, with Revised Names in code positions x2F00 ... x2FFF;

Relevant resolution:

M32.10 (Kang Xi radicals):

Unanimous

WG 2 accepts the request for the set of 214 Kang Xi radical characters in document N1182. WG 2 allocates them provisionally to code positions In the range 2F00 to 2FDF. WG 2 further invites the IRG to prepare the text for a pDAM assigning character names, their shapes in accordance with document N1182, and the block name 'KANG XI RADICALS', for consideration at the next WG 2 meeting.

Disposition: The Hangzhou numbers 10, 11 and 12 -- 3038, 3039 and 303A - are the suggested positions for including these in the compatibility zone.

Relevant resolution:

M32.11 (Hangzhou numerals):

Unanimous

WG 2 accepts the request for 3 Hangzhou numerals in document N1182. WG 2 provisionally allocates code positions and names in the CJK Symbols and Punctuation block, as follows:

3038 - HANGZHOU NUMERAL TEN,
3039 - HANGZHOU NUMERAL TWENTY
303A - HANGZHOU NUMERAL THIRTY

WG 2 further invites the IRG to prepare the text for inclusion as a separate item in the pDAM for resolution M32.10, for consideration at the next WG 2 meeting.

8.11 Romanian - 4 additional characters

Input Document:

1507 Comment on Romanian issues concerning characters S & T with Cedilla/Comma; Michel Suignard, U.S.; 1996-12-06

Mr. Michel Suignard introduced the document N1507. This document describes the problem of the Romanian characters - s, t, S and T with Comma below which have been unified with Cedilla below. In fact these characters are being used in the country - by mapping these characters to the appropriate fonts for these characters. Romania was asked if these Turkish and Romanian characters were used simultaneously in the same text. There is a major break of many existing implementations -- of using Latin-2 as the 8 bit code.

Discussion:

- a) Mr. Keld Simonsen: We did change Latin-1 -- the names of characters. It would be possible to change Latin-2 similarly to describe these characters and change the associated mappings to 10646. The combination T with Comma Below and T with Cedilla below will be two different characters.
- b) Mr. Bruce Paterson: Comma Below and Cedilla are recognized as separate combining characters -- positions 26 (Comma below) and in position 27 (Cedilla). Is it the custom of this committee -- to refuse a character on the basis of mapping problems to an existing 8-bit code. Can we refuse these characters in WG 2. Why can't these characters be Unified?
- c) Mr. Michel Suignard: Mapping is a key point - and we cannot ignore the link to Legacy information.
- d) Dr. Asmus Freytag: In the Eastern European accented characters we have different typographical usage of the notion of accents. We always had T-hachek, D hachek etc. These are often rendered as a high comma. The history of Cedilla is that it is the little connecting link between the comma and the letter S - making it a cedilla. The difference between the Cedilla and the Comma below is basically typographic variation. It is quite appropriate to treat these as typographical variants - and reject this proposal. These are typographers' choice of Comma Below / Cedilla Below. The standard has all sorts of characters for different reasons. There are differing opinions and concerns and we cannot resolve this at this time. It took a little bit in Romania to understand the distinction between the Font versus characters. We do not have conclusive evidence that Coding these characters as separate entities is the only way to proceed.
- e) Mr. Alain LaBonté: Any two languages can be present on the same page - whether or not Romania has stated this as a requirement or not. For compatibility reasons there is no reason they cannot be mapped into the same character in the 8-bit code. I have seen C with a comma below in old documents. Mr. Stefan Fuchs has mentioned that he learned S with Comma etc. from his childhood. It has been certainly in use for a long time. it is not a recent one.
- f) Mr. John Clews: From the Bibliographic community point of view, we need to show both forms in the same document - we can get both languages - Turkish and Romanian.
- g) Dr. Glenn Adams: We are not apriori rejecting the Romanian request - we are awaiting their response to our question. The national body can decide what their national requirements are independent of the Industry. It seems that the Romanian standards body is willing to introduce a new spelling standard and are trying to use the coding process to bring these new characters into common use. We certainly need such evidence from Romania before we can act on this request.

- h) Mr. Takayuki Sato: If it is only typographic reasons then we should not have had these two combining characters in the standard in the first place.
- i) Dr. Umamaheswaran: These have been unified - when Latin-2 was being developed. The request from Romania is to de-Unify these.
- j) Mr. Mike Ksar: We have discussed these in Copenhagen and we suggested that we add a notation in the Annex P. Romania did not accept. We had asked Romania whether or not the Comma below and Cedilla below form appear in the same text. Whether legacy applications exist using 10646 implementations that would break? Romanians have not responded to these characters. We did receive contributions from Romania - but they did not respond to these questions. The T Comma is shown as T Cedilla in the standard though it would have been T Comma. The issue is only whether S is to be added with Comma below or not.

Disposition: WG 2 will await response to the questions raised in the earlier meetings from the Romanian member body.

8.12 Runic names

Input Documents:

1417 Runic Proposal Update; Sweden; 1996-07-17

National bodies and liaison organizations were invited to comment on latest document on Runic.

Dr. Asmus Freytag: Unicode consortium essentially agrees with the WG 2 position that no additional names be included in the Annex P regarding the Runic names. (Dr. Asmus Freytag will include this in the written Liaison report from Unicode Consortium)

8.13 Braille

Input Documents:

1409R Modified Braille Proposal; Unicode Consortium, Glenn Adams; 1996-06-14

Messrs. Mike Ksar and Takayuki Sato had contacted TC 304 could not get any response back. WG 2 would go ahead with the 256 version proposed in document N1409R.

ACTION ITEM: US national body is invited to prepare a draft pDAM based on document N1409R - the 256 version - x2800 to x28FF (as suggested code positions in the BMP).

Relevant resolution:

M32.12 (Braille symbols):

Unanimous

WG 2 accepts the 256 Braille symbols proposed in document N1409R, and provisionally allocates them to code positions in the range 2800 to 28FF. WG 2 further invites the US national body to prepare the text for a pDAM, for consideration at the next WG 2 meeting.

8.14 Nigerian Yoruba

Input Document:

1390 Further Request to add Special Letters for Nigerian Yoruba; Hugh McG Ross; 1996-04-05

Mr. Bruce Paterson: Document N1390 was tabled in Copenhagen, discussed in Québec meeting. Additional evidence regarding use of 14 characters (proposed originally document N1143) was requested of Mr. Ross. The school of Oriental and East Asian Studies was provided in document N1390 - this was contested by Netherlands - possibly that these are from school books. The first exhibit was from a Play. The second is from School Book - and could be challenged. The provision has been made for these characters in display fonts on the cover as well as the content.

Discussion:

- a) Dr. Glenn Adams: The Unicode consortium's position is -- in the absence of any official input document from Nigeria, which may request for these characters or any other combinations, and evidence of their use in the industry, we would propose using combining marks and

combination sequences, and we should not include these at this point in time. It may not take too much effort to get this verified. We have similar situations with other smaller countries - like Macedonia etc. where similar efforts have been mounted. Nigeria has a large number of languages in use. They may not have a pan-Nigerian alphabet to cover all the languages. My concern is that if the input is based on piecemeal basis we may have a problem. These characters are required, and these composition techniques will adequately cover their requirements.

- b) Dr. Asmus Freytag: Existing mechanisms of composition - if it can be shown to be inadequate by existing implementations etc. then we can move ahead. At this point in time, we are not in favour of proceeding with this proposal.
- c) Mr. Bruce Paterson: it is unrealistic to expect an official input from Nigerian -- I am not sure whether they have standards experts or not. There is sufficient knowledge in the UK to prove this point. It may take a lot of resources to just prove this point.
- d) Mr. Mike Ksar: We should not wait any longer to accept or reject this proposal. We are not discounting the UK expertise on the subject. We could write an appropriate letter to the Nigerian authorities requesting their support and confirmation of these requirements. If UK national body is interested, even if Nigeria is not officially interested in this then we have an obligation to consider this.
- e) Dr. Umamaheswaran: Is there no interest from other national bodies also on the subject -- other than UK and the Unicode consortium?
- f) Mr. John Clews: There is a massive publishing industry in Nigeria and they use these characters. There may be potential interest from other national bodies, various requirements do exist and other groups should be interested.

Action Item: Bruce to take back to UK, investigate possibility of BSI to get an official position from Nigerian authorities - in support of the Yoruba proposal from Mr. Hugh McGregor Ross.

9. IRG status and reports

Input Documents:

1479 Results of SC 2 questionnaire on allocation of 6585 Han characters in BMP; Ksar; 1997-01-10
1486 IRG # 8 Resolutions – Singapore ; IRG; 1997-01-16
1487 IRG position concerning Japanese comments on extension A; IRG; 1997-01-15
1488 Review Report for IRG N427 – 332 vertical extension characters – 55 have no justification from China/Singapore and 166 have no justification from Singapore; IRG; 1997-01-15
1489 Supplement to Ideographic Components and Composition Schemes; IRG; 1997-01-16
1490 Response to WG 2 question on Ideographic Structure Characters; IRG; 1997-01-16
1491 Proposal Summary Form for Ideographic Variant Character; IRG; 1997-01-19
1492 Proposal Summary Form for Ideographic Radical Supplement; IRG; 1997-01-02
1493 Proposal Summary Form - Ideographic Component Supplement; IRG; 1997-01-20
1494 Proposal Summary Form – Ideographic Structure Characters; IRG; 1997-01-20
1495 CJK Unified Ideographs – Internal/Horizontal Supplementation. – 2.0; IRG; 1996-12-11
1496 IRG Work Report; IRG; 1997-01-19

Mr. Zhang Zhoucai, the IRG rapporteur, presented the documents. Document N1496 contains the summary of the IRG items.

9.1 Horizontal supplementation

Input Document:

1486 IRG # 8 Resolutions – Singapore ; IRG; 1997-01-16

Document N1486 contains the resolutions of the Singapore IRG meeting. High quality printing is completed using True Type fonts. Fonts were supplied by the different IRG member bodies. Mr. John Jenkins is the new Annex S editor. High quality printing of Version 3.0, loose-leaf, camera ready copy will be sent to the convener.

Relevant resolution:

See resolution M32.13 under section 9.7 on page 3229.

9.2 CJK Vertical extension A

Input Documents:

- 1486 IRG # 8 Resolutions – Singapore ; IRG; 1997-01-16
1487 IRG position concerning Japanese comments on extension A; IRG; 1997-01-15
1488 Review Report for IRG N427 – 332 vertical extension characters – 55 have no justification from China/Singapore and 166 have no justification from Singapore; IRG; 1997-01-15

IRG has reaffirmed their strong need for inclusion of Vertical Extension A in the BMP. Japanese comments on splitting the Vertical Extension A -- some into BMP and others outside was discussed. Document N1487 contains IRG's response and position. IRG unanimously resolved not to split the set.

Discussion:

- a) Mr. Takayuki Sato: The information is supplement to document N1479. For purpose of further JIS development, whenever we collect new requirements nearly 50 percent have stable sources others not. Japan expected based on the past experience about 3000 characters. After that the editor Mr. Koike examined the Vertical Extension A, majority of the characters had solid references. In document N1488 there are 332 characters not having solid references for the source. Singapore has the majority of these characters and Singapore is requested to verify the sources.

9.2.1 Vertical extension A - allocation

Input Document:

- 1479 Results of SC 2 questionnaire on allocation of 6585 Han characters in BMP; Ksar; 1997-01-10

Mr. Mike Ksar: We talked briefly on the Vertical Extension A allocation. We have heard from Japan on their comments - which was not included in document N1497. We now also have the roadmap document as additional information as a guideline. Would like to ask those national bodies who have expressed view against IRG's request to code the Vertical Extension A in the BMP.

Discussion:

- a) Dr. John Jenkins: Looking at document N1479 some of the comments - like that of Turkey - we cannot address them. Ireland's position is not known.
b) Mr. Keld Simonsen: Denmark has a better idea now with the roadmap document in terms of BMP allocation.
c) Dr. Glenn Adams: Can we add explanatory document to the pDAM to assist in the better judgment by the member bodies.
d) Mr. Bruce Paterson: A short version of the roadmap document could be attached as information document to go along with the pDAM ballot. The points to be made are -- there is enough space in the BMP, and WG 2 has a plan in place to define supplementary planes.
e) Mr. John Clews: What is the cost to CJK countries if these are not encoded in the BMP? (Mr. Clews was requested to take this off line with the IRG members).
f) Mr. Michel Suignard: The countries who respond negatively should be required to show proof that there is pressure on the BMP from space point of view.
g) Mr. Alain LaBonté: A request to IRG to get the radical count etc. for dealing with Sorting the extension A.
h) Mr. Bruce Paterson: IRG works on work items of SC 2. We cannot officially instruct the IRG for other subject matters from WG 2.

Disposition: Mr. Mike Ksar -- If we cannot resolve this item at this meeting, we could accept the IRG request and produce a pDAM and permit those countries who still object to raise their concerns during the ballot. We will place them in the BMP - on the caveat that no additional CJK Ideographs will be added to the BMP. (COPY from the Québec Meeting Resolution - the condition). The proposed code positions for placement of CJK Vertical Extension A characters in the BMP are: x3400 through x4DBF.

Relevant resolution:

M32.14 (CJK Unified Ideograph Extension A Version 1.1):

Denmark - Negative

WG 2 provisionally allocates the set of 6585 characters of CJK Unified Ideograph Extension A Version 1.1 in documents N1423 and N1424 to code positions in the range 3400 to 4DBF, and invites the IRG editor to prepare the text for a pDAM, for consideration at the next WG 2 meeting.

9.3 Composition schemes

Input Documents:

1486	IRG # 8 Resolutions – Singapore ; IRG; 1997-01-16
1489	Supplement to Ideographic Components and Composition Schemes; IRG; 1997-01-16
1490	Response to WG 2 question on Ideographic Structure Characters; IRG; 1997-01-16
1491	Proposal Summary Form for Ideographic Variant Character; IRG; 1997-01-19
1492	Proposal Summary Form for Ideographic Radical Supplement; IRG; 1997-01-02
1493	Proposal Summary Form - Ideographic Component Supplement; IRG; 1997-01-20
1494	Proposal Summary Form – Ideographic Structure Characters; IRG; 1997-01-20

Document N1489 - has the description of the composition schemes. It describes a canonical composition sequence. There were several questions from Québec city minutes. Document N1490 answers each of the question in document N1453. The pre-fix notation is used to describe the composition sequence. Structured Ideograph Sequence (SIS) is the new name for Combined Ideograph Sequence. Ideographic Variation Sequence (IVS) is also defined. The Canonical Sequence is defined by using Left to right Representation and the Decomposition in the opposite direction.

Discussion:

- a) Questions: Is the Canonical Decomposition stable ? NO. Is that an issue? NO.
- b) Dr. John Jenkins: Main purpose of composition is to create ad hoc characters. The variant mark in front states - the following is the closest thing that we can use to represent another variant. Two or more sequences could produce identical effects - one of them would be declared to be the canonical.

Relevant resolution:

See resolution M32.13 under section 9.7 on page 3229.

9.4 Ideographic radical supplement

Input Document:

1492	Proposal Summary Form for Ideographic Radical Supplement; IRG; 1997-01-02
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IRG had expressed via a resolution that they did not have any objection to the Kang Xi radical proposal by TCA into the Compatibility zone. After analyzing four different dictionaries, document N1492 identifies Ideographic Radicals. It also includes the Kang Xi radicals requested by TCA. CNS has the Kang Xi radicals in the Standard Part and duplicated in the ideographic part. In CJK, there are 290 new radicals - from GB, JIS, KSC - based on dictionaries from Japan, Korea and China. Of these 290, 31 radicals are missing. Document N1492 it proposes to add these.

Discussion:

- a) Dr. John Jenkins: IRG has a problem of potential confusion if these are encoded twice. There is a total of 321 radicals from all the dictionaries. There are 214 Kang Xi Radicals; of these 76 Radicals have been encoded and 31 are not encoded. The 76 are encoded unified in the CJK Unified area. The missing 31 could go either at the end of the CJK area or after the Kang Xi radicals. They will be needed to deal with composition. Once the characters appear - similar looking - but with different semantics there is potential for confusion. In the process of printing the Unicode book, for example, I could not print all the radical charts. The missing 31 are required not only for composition, but also for other uses. One should understand that there could be more radicals in the future and we may have to put them elsewhere at that time. We know they exist, but they have not been brought forward for encoding either to IRG to WG 2.

- b) Mr. Bruce Paterson: Should we have four separate columns for these CJK Unified Radicals or single glyph with a long name for each?
- c) Mr. Zang Zhoucai: Putting radicals outside the restricted zone will lead to problems. Most of these are pre-composed and putting them outside the CJK zone - there will be a problem. What to do with ordering --- WG2 leaves it to IRG.
- d) Mr. Mao Yong Gang: The 214 Kang Xi radicals are also coded in the Ideographic zone. This will cause problems.
- e) Mr. John Clews: We can have some text to identify these as radicals versus ideographs.
- f) Mr. Mike Ksar: What we decided to put in the standard re: Kang Xi radicals was to accept the 214 characters into another area. With the above explanations, we should proceed with the previous position on the 214 Kang Xi radicals.
- g) Mr. Takayuki Sato: Annex S can have some information or note on the fact that there can be other shapes for these also.
- h) Dr. Umamaheswaran: We need a single shape and romanized long name for each of these 31 characters.
- i) Dr. John Jenkins: I will supply the long names.

Relevant resolution:

M32.15 (Ideographic Radical Supplement):

Unanimous

WG 2 accepts the 31 Ideographic Radicals proposed in document N1492, and provisionally allocates them to code positions in the range 2FE0 to 2FFF. WG 2 further invites the IRG to assign a character name and a single graphic symbol to each. WG 2 further invites the IRG to prepare the text for inclusion as a separate item in the pDAM for resolution M32.10, for consideration at the next WG 2 meeting.

9.5 Ideographic variant mark

Input Document:

1489 Supplement to Ideographic Components and Composition Schemes; IRG; 1997-01-16
 1491 Proposal Summary Form for Ideographic Variant Character; IRG; 1997-01-19

Mr. Zhang Zhoucai: Document N1491 is a proposal for a single character called Variation Mark. Document N1489 documents the use of the Variation Mark.

Discussion:

- a) Mr. Mike Ksar: Do we need to include it right now, or we await till all the questions on Composition techniques have been answered.
- b) Dr. Glenn Adams: We should wait.
- c) Mr. Takayuki Sato: This mark can be used in other contexts outside the CJK area also. It should be entertained now.
- d) Professor Kyongsok Kim: I still have questions on the use of this mark. Does the use of this character indicates a SPECIFIC character? NO. The equal sign should be replaced with similar to in the coded example column.
- e) Dr. John Jenkins: No we should not wait - this mark can be used elsewhere also.
- f) This mark says - it looks like the following character - but cannot draw. It is a control character. It is a FLAG.
- g) Dr. Glenn Adams: I withdraw the objection if this character will be applicable to others.
- h) Dr. Asmus Freytag: The use of this tag implies that not all the information has been preserved.
- i) Mr. Mike Ksar: It is quite appropriate to place it at the tail end -- xFFFB - to be added in the Collection of Other characters for further processing in the future. What follows the Ideographic Variation Mark - can be any character. Accordingly we call it a GENERAL VARIATION MARK.

Relevant resolution:

M32.16 (General Variation Mark):

Unanimous

WG 2 accepts the request for the Ideographic Variation Mark and associated graphic symbol in document N1491, and assigns it as follows:

FFFB GENERAL VARIATION MARK

and instructs the editor to add it to the cumulative list of characters in document N1467 for future inclusion in ISO/IEC 10646-1.

9.6 Ideographic structure characters

Input Document:

1490 Response to WG 2 question on Ideographic Structure Characters; IRG; 1997-01-16

1494 Proposal Summary Form – Ideographic Structure Characters; IRG; 1997-01-20

Mr. Zhang Zhoucai: Document N1494 contains a request for 12 Ideographic Structure Characters. Document N1490 has the answers to all the questions that have been raised at previous meetings.

Discussion:

- a) Dr. Glenn Adams: I still have reservations about not unifying the seven OTI characters. Should the composition techniques be able to produce all possible combinations? It does not follow the Level 3 model very well. The conjoining Hangul does not follow these either.
- b) Mr. Takayuki Sato: I have a lot of questions on document N1490. The proposal says Level 3 is required, requiring a combining character along with non-combining mark. There seems to be some error in thinking - one way is to call these radicals 'combining radicals'. There are also several other questions.
- c) Mr. Bruce Paterson: These characters are more like Control Functions in the 6429 style. Annex D in the standard already has some 'Alternate Format Characters'. The semantic of these characters is important more than the table of code positions, Glyphs and names for these. Concentrate on text that is written in the style of 6429.
- d) Mr. Zang Zhoucai: All the fonts are made available on the IRG site - in bit map form.

Disposition: We are not ready to move on this yet. Feedback should be sent to Mr. Zhang Zhoucai (IRG) by end of April 1997. Documents N1489, N1491, N1493 and N1494 - to be read together.

Action Item: National bodies and liaison organizations are to review the various documents and feedback by end of April 97 to the IRG rapporteur.

9.7 IRG schedules

Input Document:

1486 IRG # 8 Resolutions – Singapore ; IRG; 1997-01-16

Professor Shibano asked Mr. Zang Zhoucai about the IRG schedule. Document N1486 items 11, 12 and 13 - has the schedules. IRG 9 meeting is scheduled for 5--9 May 1997, hosted in Nanjing by China. IRG 10 meeting is scheduled for Vietnam in December 1997. The work items and target dates are shown in Item 13 in document N1486.

IRG has set up a web site in Hong Kong University - all IRG documents are at the site- in Word 2.x using Bit Map fonts.

Relevant resolution:

M32.13 (IRG related):

Unanimous

- a) WG 2 commends the excellent work done by IRG on the Internal and Horizontal Supplementation, the Vertical Extension and other CJK related items.
- b) WG 2 accepts the IRG nomination of Mr. John Jenkins as co-editor for Annex S on Unification and Arrangement of CJK Ideographs.
- c) WG 2 accepts the IRG work program under item 13 of document N1486.
- d) WG 2 approves the scheduled IRG meeting number 9 in Nanjing, China, 5--9 May 1997 and IRG meeting number 10 in Vietnam, December 1997.

10. Defect reports status

10.1 Response to defect report N1406 on Indic scripts

Input Documents:

- 1406 Defect Report - Indic Script problems; Hugh Ross & Bruce Paterson; 1996-05-28
1462 Response to defect report in N1406 on Indic; Unicode Consortium; 1996-08-15

Document N1462 contains response from the Unicode consortium to the proposed solutions to the defects reported in document N1406. False Compounds were identified in document N1406 - certain characters that appear to be composed of others. One cannot put a restriction on the entire standard on the basis of these. The use of Link Characters was another item identified. The comments are made on conjuncts - dead and live consonants.

10.2 Defect report - Indic scripts - revised

Input Document:

- 1470 Defect Report - Indic Script problems (revised); Bruce Paterson and Hugh Ross; 1996-10-27

Document N1470 is in response to document N1462 from UK. The defect was restricted specifically to Level 2, where only specific combining characters were permitted or disallowed.

Discussion:

- a) Mr. John Clews: Looks like the Unicode consortium response is adequate.
- b) Mr. Bruce Paterson: There is inadequacy in Level 2 vis a vis Indic. The proposed corrections are to fix these. Alternative words to "unique spellings is welcome".
- c) Dr. Asmus Freytag: In general the Unicode consortium is neutral to Levels in the standard. We see the point raised by fixing Level 2, though I am not sure of the value of fixing level 2.

Disposition: In principle, WG 2 accepts the proposed editorial changes in document N1470, with further clarification on wordings between the editor and Dr. Glenn Adams.

Relevant resolution:

M32.17 (Indic Scripts):

Unanimous

WG 2 accepts the defect report and the proposed resolution in document N1470 and instructs the editor to add it to the cumulative list of editorial corrigenda in document N1468.

11. Liaison reports

11.1 Unicode Consortium

Input Document:

- 1514 Liaison report from the Unicode Consortium; Unicode Consortium; 1997-01-22

Dr. Asmus Freytag presented document N1514. It contains the responses to several action items arising out of the Québec WG 2 meeting. Information regarding use of Annex P in Annex B of document N1402 should be separated out and expanded to cover not only dealing with defect reports, but also specification of additional character information. Some rewording / text in document N1402, to warn of overuse of Annex P is suggested. The Unicode standard could be used for placing additional information of characters and script processing. Unicode V2.0 has been published, synchronized with 10646 code table content up to Amendment 7. Next International Unicode Conference will be held in Mainz, Germany, March 10--12.

Discussion:

- a) Mr. Mike Ksar: WG 2 welcomes the offer of the Consortium to offer to include the information on characters in the Unicode standard.
- b) Mr. Zang Zhoucai: Where can we register for the conference? Contact the conference organizers directly for registration information.

11.2 X Consortium - BMP collection numbers

Input Documents:

- 1466 BMP Collection Numbers; Bruce Paterson; 1996-10-27
1512 US Contribution for the definition of 10646 Collections; U.S.; 1997-01-12

Document N1466:

Mr. Bruce Paterson introduced the document. Explained the definition for Collection number 301. The wordings are such that as long as existing collections do not change, the definition of 301 does not change.

Discussion:

- a) Mr. Michel Suignard: This does not address the collections individually. We do already have changes to existing collections coming up.
- b) Mr. Sven Thygesen: We could perhaps issue the collection ids only at a point of different editions of the standard. If we do it with each amendment or collection we may be able to do it.
- c) Mr. Mike Ksar: Can we remove 300 by doing what you propose?.
- d) Dr. Asmus Freytag: The logically stable way seems to be impossible. May be we should back away from attempting to solve this item in 10646. The references seem to be going round in circles. We may be better off -- collections are not addressing the things needed by others. May be the users should devise their own. Part of the problem is that we have no way inside the standard of referencing that collections have changed. We should accept that we do not do it. The suggestion from Mr. Sven Thygesen seems to be issue new collection numbers only at the next edition. We seem to be getting into a corner with this. Other means than unique collection ids are also available.
- e) Mr. Keld Simonsen: CEN has been also looking at this problem. If we have to add a few characters and come up with a new collection it is still do-able - it is a little bit more work.
- f) Mr. John Clews: We may be referencing collections of collections etc.
- g) Mr. Mike Ksar: Let us review why we are here -- Annex A is the Registration vehicle for the collection identifiers. The original request was to be able to differentiate between pre-Korean amendment and post-Korean amendment -- from the X Consortium. The definition of 301 versus 300 was the one time request.
- h) Dr. Umamaheswaran: The discussion was specifically on 300 and 301 at the last meeting. The discussion on the precision of the collection identifiers is still open. The issue of what is Collection Ids - reference includes holes which may be filled in the future. The collection ids thereby are less precise than if the holes were excluded. We do have blocks, and collections which are somewhat less granular - can include partial blocks.
- i) Mr. Mike Ksar: The original intent while working with Mr. Masami Hasegawa (the first editor) was the less precise definition -- which allowed the holes to be filled in -- and still retain the holes in the code positions.
- j) Dr. Asmus Freytag: There are a number of un-addressed issues -- there are concerns on this topic. How to address 300 versus 301?

An ad hoc group was formed to address the different issues raised - Messrs. Bruce Paterson, Asmus Freytag, Michel Suignard, Mike Ksar, and Umamaheswaran participated. Mr. Michel Suignard drafted a new document N1512 and presented it to the meeting.

Document N1512:

Mr. Michel Suignard presented the document. We have two places where we deal with collections - one is 'blocks' and the other is 'collections'. There is some confusion on whether 'collections' include the unspecified code positions in the range or not. The precision of the associated 'collection identifier' is questioned -- should we have a new number for collection identifier if we assign a character to a previously empty position in the collection? For example, Cyrillic - if we add more characters should we have a new collection identifier. Collections in Annex A have been used to identify ranges -- for example, Latin is used to say that it is in the RANGE -- irrespective of what it contains. This paper is proposing to clarify these definitions so that the 'collection identifier' to be used in both contexts -- precise and specific. The paper proposes Annex A will contain -- a block section and a collection section.

Discussion:

- a) Mr. Mike Ksar: The document proposes a clearer definition of Block, Collection and Specific collection. The Specific Collection is NEW - to permit precision. I would like Mr. Bruce Paterson to comment on the identifier for X Consortium (N1456), based on document N1512.
- b) Mr. Bruce Paterson: I would welcome this contribution from the US. I would like to treat this as a defect report -- it addresses the question -- If a collection has holes in it, and if the code positions get assigned in the future thereby changing the repertoire in the collection, should we have a new collection id or not? The current wordings in the standard does not answer this question. The original concept of a collection is in 4.11 in section 1 of document N1512. The term 'specified collection' could be changed to 'fixed or full collection' etc. I am also glad to see the block names and collection numbers merged into the common annex. It makes the life of the editor easier in processing the different amendments. I suggest WG 2 gives the editor some freedom to take document N1512 as input document as a defect report, and propose changes in text to the standard in response.

We can satisfy the X Consortium much better if we have this clear framework proposed in document N1512. I need to propose a new collection definition from what is in document N1466. For example, 301 will always mean a specific repertoire and will not change over time as other additions are made.

- c) Mr. Mike Ksar: In addition, when document N1466 is revised, to include in it a new collection id, for example 299 or 302, to refer to the fixed contents of Edition 1. The reason for the pre and post AM-7 would be because of the reallocation of code positions.
- d) Dr. Asmus Freytag: The Unicode consortium is in favour of the approach. With the advent of the Fixed Collection, we should be careful not to go overboard by issuing more identifiers.
- e) Dr. Umamaheswaran: The collection id 300 should have a cautionary note - that it refers to the CURRENT version of the standard, to avoid any ambiguity arising out of AM7.

Relevant resolution:

M32.18 (Collection Identifier):

Unanimous

WG 2 accepts the document N1512 as a defect report. WG 2 instructs its editor:

- a. to prepare all necessary editorial corrigenda to the text of 10646-1 in accordance with the principles in document N1512
- b. to revise the definition of collection identifier 301 (BMP up to amendment 7) in document N1466 as a 'fixed collection' in accordance with the above principles
- c. to draft the definition of a new 'fixed' collection identifier 299 (BMP prior to any amendments) to identify the repertoire of ISO/IEC 10646-1 edition 1

and submit the text for consideration at the next WG 2 meeting.

11.3 TC 46

Input Document:

1511 Liaison Report from TC 46/SC 2 John Clews 1997-01-23

Mr. John Clews introduced document N1511. Mr. John Clews is the convener of TC 46/SC 2. Mr. Melagrakis, ELLOT, Greece, provides the secretariat. The document lists the current activities of TC 46/SC 2. It describes the relationship of 10646 to the work of Transliteration. In DAM-5 we did not have a reference to the transliteration standard TR 11941. Web site information is also included. A list of other SCs of TC 46 is included. TC 46 is not prepared to put in the resources to maintain existing coding standards on transliteration. ISO/TMB has transferred the responsibility of encoding to SC 2.

Discussion:

- a) Mr. Mike Ksar: A reference to TR 11941 on transliteration in DAM-5 on Korean, can be made only after a formal verification has been made that the names in 10646 are indeed using the transliteration standards. What does to use IDs ...as character identifiers mean? As to the transfer of TC 46 coding standards, there is no instruction from JTC 1 to SC 2 to take on any additional work item on behalf of TC 46.

- b) Mr. Takayuki Sato: If we want to verify whether the transliteration TR 11941 and 10646 are using the same names for Korean, we can request Korea (Professor Kyongsok Kim) to do that.
- c) Mr. Michel Suignard: The third paragraph of transliteration section -- does not make sense and should be removed.
- d) Mr. Bruce Paterson: Could reference pDAM9 instead. Also correct the date of the Oslo meeting.

Action Item: Mr. John Clews was invited to provide a revised Liaison Report document N1511R.

12. Other business

12.1 Web Site Review

Input Document:

1513 Status on SC 2/WG 2 web site; Simonsen, Thygesen and Ksar; 1997-01-22

Mr. Sven Thygesen introduced document N1513. The SC 2/WG 2 web site is described. Sample pages of what one sees on web are included. Planned future additions to the web are also identified. At present, one can download the form for filling, but not send the filled form to the web site after filling.

Mr. Keld Simonsen: The convener and myself are planning to provide an updated document register. If the contributions are available in electronic form -- send to the convener and not to the web administrator (Keld Simonsen). We will make a number of documents available as requested by the convener. We have space available. Access to the home pages are free at this time. We may have to place some access restrictions on future pages. The title of the work items document N1452 - should be corrected. The work on CGM should be added to it. We do have a list of WG 2 experts -- members are national bodies, liaison organizations. Other experts could be added.

Discussion:

- a) Mr. Mike Ksar: I would like to update the links to other documents. Partial document registers will still be maintained. Depending on the available disk space, we may not be able to place every WG 2 document on the ftp site and provide links for viewing or for downloading. I would recommend not to provide the web references to their web sites -- once the paper copy is sent to the convener, the control of the document will be with WG 2.
- b) Dr. Umamaheswaran: Request that the proposal summary form be available also in plain text version.
- c) Mr. Mao Yong Gang: Would like to download it in different formats and be able to fill it. Would like to note that the IRG web site also will be set up.
- d) Dr. John Jenkins: Would like to have different form for example .txt form. Also would like to have links to the instructions as to how to fill it.
- e) Dr. Asmus Freytag: If there is space available, the different formats such as postscript etc. should be placed on the ftp site. Hot links could be provided to the instructions to fill the form from the 'Proposal Summary Form' page. The links should be provided in the plain text form as well.

Relevant resolution:

M32.22 (Appreciation to Denmark):

WG 2 thanks the national body of Denmark for their excellent support to WG 2 in providing and maintaining Web site and FTP site facilities for WG 2 and IRG.

By Acclamation

12.2 Principles and procedures - an update

Input Document:

1502 Update of N 1402 – Principles & Procedures of WG 2; Sven Thygesen; 1997-01-24

Mr. Sven Thygesen introduced the document. Highlighted the changes from the previous version of the document. Annex D has been added. It is the road map contribution from the US with minor editorial change. Annex P has been renamed in references. The stages have been renamed from A, B, etc. to 1, 2, 3 etc.

Discussion:

- a) Mr. Mike Ksar: The US national body is requested to keep the ad hoc informed of any updates to the road map document. There was a request for another note in the proposal summary form -- to ask the question in the technical part -- "Whether this proposal summary form submittal has been submitted before, and if submitted was rejected for some reason or it is an updated version of an earlier one -- 'Please Explain' (for example new evidence is included)". All national bodies have been requested to attach the proposal summary form to each proposal brought forward to WG 2.
- b) Mr. Zang Zhoucai: Is there any change in the proposal summary form in this document?
NO.
- c) Dr. Glenn Adams: In Annex D, are the term Han and Non-Han preferable? A revised 1484R has been prepared - it should be used.
- d) Mr. Bruce Paterson: Is there a problem that we have encountered that necessitated this question? It is anticipatory.
- e) Mr. Sven Thygesen: This Annex D could be updated from time to time. The proposal to add the new question - will be entertained at the next edition of this document.
- f) Dr. Asmus Freytag: We may want to put an upper limit on the number of questions in the proposal summary form.
- g) Dr. John Jenkins: The form is on the whole is quite is useful.
- h) Mr. Keld Simonsen: In the road map paper in Annex D, there is a reference to Unicode Standard.
- i) Mr. Mike Ksar: The names of the standard references should be ISO/IEC 10646; "/Unicode/" changed to (The Unicode Standard Version 2.0). The content of this Annex D is a 'snap shot'. It is buried in the bullet 1 -- it should be highlighted.

Action Item: Mr. Sven Thygesen to revise document N1502 and send the updated document to convener. The updated document will be document N1502R.

12.3 Future meetings

Meeting 33 was originally scheduled for 23 to 27 June 1997, in Cyprus (backup Greece). Mr. Melagrakis has informed Mr. Mike Ksar that there is verbal confirmation of hosting the next meeting (June 23) from Cyprus. If it does not come through in writing, Greece will host the meeting. Mr. Mike Ksar has a conflict with the meeting date - would like to get it changed to June 30 to July 9 (including WG 3 and SC 2 meetings). There is a possibility to move it to Greece due to unfavourable political situation. If Greece does not come through US (Seattle) would be the backup. For hosting the meetings the hosting national body must know as soon as possible -- for the processes to kick in. The convener will know in next couple of weeks.

The meeting schedules are captured in resolution M32.19 given below.
Future hosts: Ireland, Israel, Vietnam, Netherlands, China

Relevant resolution:

M32.19 (Future Meetings):

Unanimous

WG 2 confirms the following future meeting schedule:

- Meeting 33: 30 June to 4 July 1997, in Cyprus (could change to Greece, backup USA West Coast)
- Meeting 34: 16--20 March 1998 (US West Coast, backup UK)
- Meeting 35: 21--25 September 1998 (UK, backup Vietnam)
- Meeting 36: March 1999 (China)

12.4 Miscellaneous

12.4.1 Electrotechnical symbols

Referenced documents:

985	Electrotechnical Symbols for First Addendum; Hugh McG Ross UK; 1994-03-28
1146	Extra Electrotechnical Symbols - proposal summary form for N 985; Hugh McG Ross, UK individual contribution; 1995-02-01
1416	New Symbols for 10646 - cumulative list (SYMBOLS Bucket); Bruce Paterson; 1996-06-30

- a) Mr. Mike Ksar: These symbols requested by IEC TC 3 committee are already included in the Cumulative List of Approved Symbols in document N1416. The convener received an e-mail message from the IEC TC 3 committee which is responsible for registration of Electrotechnical symbols stating that we have not taken action on their submission to us in WG 2 document N1146. WG 2 had taken action on it and have added 8 symbols into document N1416. The collection has not been published yet. Resolution M30.9 covers it (from Copenhagen meeting).
- b) Mr. Bruce Paterson: The request from the TC was to put these symbols in ISO Register. We have checked and found that except for 8 characters all were included in the standard already or unified with other similar looking symbols. Only 8 new ones are in the collection to be published.

Action Item: The convener is to communicate to IEC TC 3 that WG 2 has taken action on their request, including our plan for publishing these in the future.

12.4.2 BANGJEOM and GUGYEOL characters

Referenced documents:

935	Adding two Bangjeom chars (Old Hangeul tone marks) to UCS-2; Kyongsok Kim Korea; 1993-10-29
936	A draft proposal on adding Gugyeol characters to UCS-2; Kyongsok Kim Korea; 1993-10-29

Mr. Mike Ksar: The convener was asked if he had copies of proposals from Korea for Hangeul tone marks and some additional characters for Gugyeol. We have not taken action on these contributions.

Action Item: Korean national body is encouraged to submit a proposal summary form to cover these requests with possible updates to these documents and submit to WG 2 for consideration at meeting 33.

12.4.3 Publishing of accepted collections of characters

Mr. Mike Ksar: I would like to give instruction / action to the editor to prepare a single or multiple pDAM towards publishing all the accepted characters for future publication and which are currently in the different collections for future publication. This is in response to requesters such as IEC TC 3 who are awaiting WG 2 publishing their requested characters in 10646.

Action Item: The editor is to prepare text for pDAM including all accepted characters to date, for consideration at the next meeting.

- a) Mr. Mike Ksar: We will include consideration for the next edition of 10646 at the next meeting.
- b) Mr. Bruce Paterson: At Tokyo we agreed that it is not cost effective if the changes are less than 10 percent. This is independent of the review cycle. All the amendments up to a specific point in time can be included in the next edition.
- c) Dr. Asmus Freytag: What would be the specific collection of characters / amendments etc. that would be ready for inclusion in the next edition by January 1, 1998? We do already have a large number of characters that have been accepted through the amendments. These should be included in the next edition.

Action Item: The convener is to get information from ITTF as to which amendments would have been approved by the next 10646 revision date. Also, to include an agenda item on the topic of next edition of 10646 for meeting 33.

13. Agenda items carried over from action item list of meeting 31

Input Document:

1453 WG 2 Minutes - Québec Meeting 31; Ksar, Uma; 1996-12-06

All have been included in the agenda. No new items.

14. Closing

14.1 Approval of resolutions

Output Document:

1504 Resolutions of Meeting # 32 – Singapore; WG 2; 1997-01-24

Draft resolutions were discussed on Friday AM. They were adopted after some modifications. The adopted resolutions can be found in document N1504. They are also listed as 'relevant resolution(s)' in these minutes under different agenda items for easy reference. Nineteen (19) business related resolutions and three (3) resolutions of appreciation were adopted.

14.1.1 Appreciation

Mr. Takayuki K. Sato is retiring from his current company - Hewlett-Packard, Japan.

The following resolutions of appreciation (in addition to M32.22 under item 12.1 on page 36) were adopted by acclamation:

M32.20 (Appreciation to Mr. Sato):

By Acclamation

WG 2 thanks Mr. Takayuki K. Sato for his expert guidance and valuable contributions to the work of WG 2 over the past several years, and wishes him a happy retirement.

M32.21 (Appreciation to the host):

By Acclamation

WG 2 thanks its host the Institute of Systems Science, National University of Singapore, and their staff, especially Mr. Wilson Lee, for hosting the meeting, providing secretarial and administrative support and for their outstanding hospitality.

14.2 Adjournment

The meeting was adjourned at 11:05h on Friday 24th Jan 1997.

Mr. Bruce Paterson announced that a record of **8294** characters were allocated at this meeting.

15. Cumulative list of action items

Note: The following list of action items have been separately distributed earlier as Draft Action Items list. WG 2 experts, national bodies and liaison organizations are encouraged to verify the action items against the final list given below -- recording secretary, Dr. V.S. UMAhaheswaran.

15.1 Outstanding action items from previous WG 2 meetings -- M25 to M28

Outstanding action items from meeting 25 Antalya, Turkey, meeting 26, San Francisco, CA, USA, meeting 27, Geneva, Switzerland, and meeting 28, Helsinki, Finland, have been either completed or dropped.

15.2 Outstanding action items from WG 2 meeting 29, Tokyo, Japan

Item	Assigned to / action (Reference Meeting 29 Resolutions document N1304 and Unconfirmed Meeting 29 minutes in document N1303 -and corrections to these minutes in section 3 of document N1353).	Status
AI-29-10	China a To take comments in document N1246 and comments from this meeting (M29) as feedback to the appropriate experts on Uyghur, Kazakh and Kirghiz. M30, M31 In progress.	M32: In progress.

15.3 Outstanding action items from WG 2 meeting 30, Copenhagen, Denmark

Item	Assigned to / action (Reference Meeting 30 Resolutions document N1354 and Unconfirmed Meeting 30 minutes in document N1353 and corrections to these minutes in section 3 of document N1453.	Status
AI-30-9	Ireland (Mr. Michael Everson) b To prepare Proposal Summary Forms and proposals for Sinhala, Burmese and Khmer scripts, based on contribution N1321 and N1376 from Mr. Hugh Ross. M31: In progress; Mr. Everson has these on his web page - he is requested to submit them in hardcopy form to the convener.	M32: See document N1473; Sinhala; Burmese and Khmer are in progress.
AI-30-12	Ad Hoc Group on Principles and Procedures (Mr. Sven Thygesen - lead) a To work with Mr. Hugh Ross and document the guidelines / criteria that were used in the creation of the first edition of the standard, for deciding when a pre-composed character was considered for inclusion directly versus when it would be left as Level 3 composition encoding. M31: Outstanding.	M32: In progress. Mr. Hugh Ross is preparing a contribution.
AI-30-16	Latvia, Ireland and Finland a to provide additional supporting documents to address the various concerns expressed on proposal for Livonian characters in document N1322 at this meeting to permit WG 2 to better evaluate the proposal. M31: Outstanding.	M32: Outstanding.
AI-30-18	Greece a To prepare a revised proposal on Byzantine Musical Symbols addressing the concerns expressed during the discussion at meeting 30, for consideration at meeting 31. M31: In progress.	M32: In progress.

15.4 Outstanding action items from WG 2 meeting 31, Québec City, Canada

Item	Assigned to / action (Reference Meeting 31 Resolutions document N1454 and Unconfirmed Meeting 31 minutes in document N1453 and corrections to these minutes in section 3 of document N1503 (under preparation)	Status
AI-31-2	Convener - Mr. Mike Ksar c to communicate to the Asian Classics Input Project (ACIP) that DAM6 is for ballot, and that ACIP should communicate through the appropriate NB to get their feedback in.	M32: Outstanding.
AI-31-3	Editor - Mr. Bruce Paterson To prepare the appropriate pDAM texts and entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following WG 2 resolutions: h RESOLUTION M31.9 (Internal Supplementation / Horizontal Supplementation): WG 2 accepts documents N1427, N1428, N1429 and N1434 on Internal Supplementation / Horizontal Supplementation from the IRG. WG 2 further instructs its editor to prepare the pDAM text, with assistance from IRG editor, and forward it to SC 2 secretariat for an SC 2 ballot.	M32: See below for each sub item. M32: In progress.

Item	Assigned to / action (Reference Meeting 31 Resolutions document N1454 and Unconfirmed Meeting 31 minutes in document N1453 and corrections to these minutes in section 3 of document N1503 (under preparation))	Status
AI-31-4	IRG - Rapporteur, Mr. Zhang Zhoucai a The current ITTF practice is to use Arial or Helvetica style for the numbers and non ideographic characters. IRG convener is to work with Mr. Bruce Paterson to follow the style used by ITTF for the standard publications, in time for transmission of the pDAM text by the editor - target Singapore meeting.	M32: In progress. See document N1486.
AI-31-5	All member bodies and liaison organizations e are invited to write contributions on 'Guidelines on what sort of information can be included in Annex P - Additional information on characters'. The accepted text of such contributions would be included in the Principles and Procedures document.	M32: In progress.
AI-31-10	Dr. Glenn Adams and Mr. Keld Simonsen a are invited to interact with the principal authors of RFCs in IETF on 10646. Some collection identifier such as the proposed 301 - once finalized in 10646 - could be registered with IANA registration authority also for use with Internet protocols.	M32: In progress.
AI-31-12	Swedish national body - Mr. Olle Järnefors a to consider the discussion on the Runic script proposal at this meeting and feedback to WG 2.	M32: In progress.
AI-31-14	Romanian national body - Ms. Alexandrina Statescu a to provide more information, with input from other interested parties, including consideration for the various points raised on the proposed characters - s,S,t, and T with Comma below, and in the Copenhagen meeting, for further consideration at the Singapore meeting	M32: In progress.

15.5 New action items from meeting 32, Singapore

Item	Assigned to / action (Reference Meeting 32 Resolutions document N1504 and Unconfirmed Meeting 32 minutes in document N1503 -this document you are reading)
AI-32-1	Meeting Secretary - Dr. V.S. UMaaheswaran a To finalize the document N1503 containing the unconfirmed meeting minutes and send it to the convener as soon as possible. b To finalize the document N1504 containing the adopted meeting resolutions and send it to the convener as soon as possible.
AI-32-2	Convener - Mr. Mike Ksar a to update the list of projects of WG 2 (based on N1394R), with assistance from Mr. Keld Simonsen. b to communicate to IEC TC 3 that WG 2 has taken action on their request for technical symbols, including our plan for publishing these in the future. The symbols are currently in the cumulative symbols collection in document N1416. c to send to the SC 2 secretariat for forwarding to the Sri Lanka Standards Institution, a cover letter inviting the Sri Lankan member body to participate at the next WG 2 meeting along with WG 2's response on their contribution on Sinhala in document N1480, with assistance from Mr. Dr. Glenn Adams in preparing the response. d to get information from ITTF as to which amendments would have been approved by the next 10646 revision date, as input into the discussion on planning of the next edition of 10646 at the next WG 2 meeting. e to include an agenda item on the topic of next edition of 10646 for the next WG 2 meeting. f per resolution M32.6 on Part 2 of 10646, to forward document N1484R on the proposed scope of ISO/IEC 10646-2 to the SC 2 secretariat, in response to resolution M6.4 of SC 2 Plenary meeting, August 1996 (document SC 2 N2749).
AI-32-3	Project Editor, Mr. Bruce Paterson a to prepare text for a pDAM on clearing the collections of accepted characters for consideration at the next meeting.

Item	Assigned to / action (Reference Meeting 32 Resolutions document N1504 and Unconfirmed Meeting 32 minutes in document N1503 -this document you are reading)
	b Dr. John Jenkins, is invited to prepare the draft text on the Deseret script (in document N1498) in a form suitable for inclusion in the future ISO/IEC 10646-Part 2.
AI-32-7 Unicode consortium	
	a Dr. Glenn Adams is invited to prepare a response (giving due consideration for contributions from Messrs. Ross and Everson on the Sinhalese script) to document N1480 on the Sinhalese script from the Sri Lankan member body and send it to the convener.
	b Dr. Asmus Freytag and the Editor Mr. Bruce Paterson to get together to understand the errata process for the Unicode standard, towards assisting in the synchronization between the 10646 corrigenda and the corresponding errata for the Unicode standard.
AI-32-8 Danish member body (Keld Simonsen)	
	a Coordinating with the convener, Mr. Mike Ksar, to update the list of projects of WG 2 (based on N1394R).
AI-32-9 UK member body (Mr. Bruce Paterson)	
	a to investigate possibility of BSI getting an official position from Nigerian authorities - in support of the Yoruba proposal from Mr. Hugh McGregor Ross.
AI-32-10 Ad hoc group on principles and procedures (lead - Mr. Sven Thygesen, assist of a US member body representative)	
	a To update the Principles and Procedures document and forward it to the convener, incorporating the principles in the roadmap document N1499, taking into consideration comments in document N1505 (from Mr. John Clews
AI-32-11 Korean member body (Professor Kyongsok Kim)	
	a is invited to submit a proposal summary form to cover requests for Bangeom and Gugyeol characters (original requests in documents N935 and N936) with a possible updates to these documents and submit to WG 2 for consideration at meeting 33.
AI-32-12 IRG (Mr. Zhang Zhoucai, Rapporteur)	
	a with assistance of the Taiwanese Computer Association to prepare pDAM text on Kang Xi radicals for consideration at the next WG 2 meeting, per resolution M32.10 below:: WG 2 accepts the request for the set of 214 Kang Xi radical characters in document N1182. WG 2 allocates them provisionally to code positions in the range 2F00 to 2FDF. WG 2 further invites the IRG to prepare the text for a pDAM assigning character names, their shapes in accordance with document N1182, and the block name 'KANG XI RADICALS', ...
	b with assistance of the Taiwanese Computer Association to prepare pDAM text on Hangzhou numerals for inclusion as a separate item in the pDAM for resolution M32.10 (see action item a above), for consideration at the next WG 2 meeting, per resolution M32.11 below:: WG 2 accepts the request for 3 Hangzhou numerals in document N1182. WG 2 provisionally allocates code positions and names in the CJK Symbols and Punctuation block, as follows: 3038 - HANGZHOU NUMERAL TEN, 3039 - HANGZHOU NUMERAL TWENTY 303A - HANGZHOU NUMERAL THIRTY
	c to prepare text on Ideographic Radical Supplement for inclusion as a separate item in the pDAM per resolution M32.10 (see action item a above), for consideration at the next WG 2 meeting, per resolution M32.15 below: WG 2 accepts the 31 Ideographic Radicals proposed in document N1492, and provisionally allocates them to code positions in the range 2FE0 to 2FFF. WG 2 further invites the IRG to assign a character name and a single graphic symbol to each. ...
	d the IRG editor is to prepare pDAM text on CJK Unified Ideograph Extension A Version 1.1, for consideration at the next WG 2 meeting, per resolution M32.14 below: WG 2 provisionally allocates the set of 6585 characters of CJK Unified Ideograph Extension A Version 1.1 in documents N1423 and N1424 to code positions in the range 3400 to 4DBF, ...
AI-32-13 All member bodies and liaison organizations	
	a with reference to pDAMs sent for SC 2 ballot -- pDAM 10 on Ethiopic script, pDAM 11 on Canadian Aboriginal Syllabics script and pDAM 12 on Cherokee script -- to review the pDAM documents and include all their comments in the ballot response.
	b to review the cumulative editorial corrections in document N1468, along with the draft marked up text of 10646-1 in document N1396, for any errors, omissions etc. and inform the editor, Mr. Bruce Paterson.

Item	<p>Assigned to / action (Reference Meeting 32 Resolutions document N1504 and Unconfirmed Meeting 32 minutes in document N1503 -this document you are reading)</p> <ul style="list-style-type: none"> c are invited to review and feedback to Mr. Zhang Zhoucai, the IRG Rapporteur, on the proposal for 12 Ideographic Structure characters by the end of April 1997 (in time for the next IRG meeting). Documents N1489, N1490, N1491, N1493 and N1494 - to be read together. (Document N1494 contains a request for 12 Ideographic Structure Characters; Document N1490 contains the answers to all the questions that have been raised at previous meetings.) d per resolution M32.9 on the Mongolian script, are invited to review and comment on document N1515, prior to the next WG 2 meeting. e To take note of the following future meetings of IRG and WG 2: <ul style="list-style-type: none"> a) IRG meeting number 9 in Nanjing, China, 5--9 May 1997 b) IRG meeting number 10 in Vietnam, December 1997. c) Meeting WG 2-33: 30 June to 4 July 1997, in Cyprus (could change to Greece, backup USA West Coast) d) Meeting WG 2-34: 16--20 March 1998 (US West Coast, backup UK) e) Meeting WG 2-35: 21--25 September 1998 (UK, backup Vietnam) f) Meeting WG 2-36: March 1999 (China)
AI-32-14	<p>Mr. John Clews, Convener of TC 46/SC 2</p> <ul style="list-style-type: none"> a is invited to update the TC 46/SC 2 to WG 2 liaison report document N1511 to address the comments during the meeting and provide a revised document N1511R to the convener Mr. Mike Ksar.

Note: Please send any questions, comments, corrections etc. on these minutes to the meeting secretary Dr. V.S. Umamaheswaran (dorai@vnet.ibm.com) and the convener Mr. Mike Ksar (mike_ksar@hp.com).

==== END OF MEETING MINUTES ===