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

DOC TYPE:	Meeting Minutes
TITLE:	Unconfirmed Minutes of WG 2 meeting 39, Vouliagmeni, Athens, Greece 2000-09-19--22
SOURCE:	V.S. Umamaheswaran, Recording Secretary, and Mike Ksar, Convener
PROJECT:	JTC 1.02.18 – ISO/IEC 10646
STATUS:	SC 2/WG 2 participants are requested to review the attached unconfirmed minutes, act on appropriate noted action items, and to send any comments or corrections to the convener as soon as possible but no later than 2001-02-28.
ACTION ID:	ACT
DUE DATE:	2001-02-28
DISTRIBUTION:	SC 2/WG 2 members and Liaison organizations
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ISO
International Organization for Standardization
Organisation Internationale de Normalisation

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

ISO/IEC JTC 1/SC 2/WG 2 *N2253*
Date: 2001-01-21

Title:	Unconfirmed Minutes of WG 2 meeting 39,
	Divani Apollon Palace Hotel, Vouliagmeni, Athens, Greece; 2000-09-19--22
Source:	V.S. Umamaheswaran, Meeting Secretary, Mike Ksar, Convener
Action:	WG 2 members and Liaison organizations
Distribution:	ISO/IEC JTC 1/SC 2/WG 2 members and Liaison organizations

1   Opening and roll call

Input document:
N2255   3rd Call and updated Agenda for meet 39; Ksar; 2000-08-31

The convener opened the meeting at 14:19h on 2000-09-19 and welcomed the delegates to the meeting. We will try to complete our work by Friday the 22nd - the latest by Monday the 25th morning. Our host Mr. Evangelos Melagrakis, ELOT, will give us some information about the meeting logistics.

Mr. Evangelos Melagrakis welcomed the delegates to Athens. It is our sincere wish that you will have a fruitful meeting and you will enjoy your stay here.

The meetings will start at 09:00h every day. Two coffee breaks will be at 11:00h and at 15:30h, and the lunch breaks will be at 13:00h. The convener will have the flexibility to adjust these times. There are lunch facilities at the hotel and several other restaurants nearby. We have a dinner planned for Thursday evening.

An excursion to the Santorini island is planned for Saturday and Sunday – flying out early morning Saturday and returning late Sunday. The island is over an undersea volcano - this volcano's eruption is claimed to be responsible for the destruction of the Minoan civilization. The sunrise and sunset from the volcano on the island are not to be missed. Local transportation -- like buses or taxis etc. will take you to different places of interest. Thíra is the ancient name of Santorini; it is also the name of the volcano. Firá is the name of the main town on the island. The bus and flight times were given out. Additional information is available from ELOT staff.

1.1   Roll Call

Input document:
N2151   Updated WG2 Distribution List, post meeting 37; Ksar

Attendees were requested to review the names-list (from N2151), enter their names, and attach their business cards to the list: The following thirty-seven (**38**) delegates representing fourteen (**14**) national bodies and four (**4**) liaison organizations attended the meeting.

Name	Representing	Affiliation
Alain Labonté	Canada	Direction du soutien au déploiement de l'inforoute gouvernmentale, Gouvernement du Québec
V. S. (Uma) Umamaheswaran	Canada, Recording Secretary	IBM Canada
Chen Zhuang	China	Chinese Electronics Standardization Institute
He Lifeng	China	Minority Nationalities Language and Literature Work Executive Committee of Yunnan Province
Cai Hengchang	China	Minority Nationalities Language and Literature Work Executive Committee of Yunnan Province
Xi Weining	China	Minority Nationalities Language and Literature Work Executive Committee of Yunnan Province
Zhao Qinglian	China	Minority Nationalities Language and Literature Work Executive Committee of Yunnan Province
Zhang Zhoucai	China, IRG Rapporteur	CCID
Hong Yong	DPR of Korea	Committee for Standardization
Mun Yong Ho	DPR of Korea	Committee for Standardization
Pak Dong Gi	DPR of Korea	Committee for Standardization
Erkki Kolehmainen	Finland, CEN TC304	Tieke
Marc Küster	Germany	Universität Tübingen
Gregorios Stathis	Greece	Independent
Evangelos Melagrakis	Greece, Convener WG3	ELOT
Michael Everson	Ireland	Everson Gunn Teoranta
Koiti YAMAZAKI	Japan	CTI Co. Ltd.
Shoichi SENDA	Japan	NTT Corporation
Shun ISHIZAKI	Japan	Keio University
Takayuki SATO	Japan	Independent
Tatsuo KOBAYASHI	Japan	Scholex Co., Ltd.
Kohji SHIBANO	Japan, SC2 Chair	Tokyo University of Foreign Studies
Toshiko Kimura	Japan, SC2 Secretariat	ITSC-J
Shih-Shyeng Tseng	Liaison - TCA	Computing Center, Academia Sinica
Asmus Freytag	Liaison - The Unicode Consortium	ASMUS, Inc.
Johan van Wingen	Netherlands	Independent
Keld Simonsen	Norway, IETF	Rationel Almen Planlægning
Elżbieta Broma-Wrzesień	Poland	Telekomunikacja Polska S.A.
Kyongsok Kim	Republic of Korea	Busan National University
Monica Ståhl Forsberg	Sweden	Information Technology Standardization
Kent Karlsson	Sweden	Industri-Matematik International
Karl Ivar Larsson	Sweden	Independent Consultant
Ken Whistler	USA	Sybase, Inc.
Arnold Winkler	USA	Unisys Corporation
Hideki Hiura	USA	Sun Microsystems Inc.
Michael Y. Ksar	USA, Convener	Uniscape
Michel Suignard	USA; Editor Part 2	Microsoft
Edwin Hart	USA; Editor TR 15285	SHARE; Applied Physics Laboratory, Johns Hopkins University

(The Chinese delegation arrived Thursday night.) The recording secretary was Dr. Umamaheswaran. Drafting committee volunteers were asked to contact the convener.

2   Approval of the agenda

Input document:
N2255   3rd Call and updated Agenda for meet 39; Ksar; 2000-08-31

Mr. Mike Ksar: The most important thing for this meeting is to finish the work related to FCD 10646-2, and initiate the amendments to ISO/IEC 10646-1: 2000 related to the work of Part 2. The rest of the agenda items will be addressed as time permits, and some of these can be carried forward to the next meeting if needed.

Mr. Keld Simonsen: Two items -- Appointment of secretary and drafting committee

Mr. Mike Ksar: Dr. Umamaheswaran will be the recording secretary and any volunteers to the drafting committee can contact the convener. Also, new documents have been brought forth and will be added to the different agenda items.

Under agenda item 7:

Mr. Michael Everson: Add two items - Philippines scripts and Komi Cyrillic Script

Mr. Takayuki Sato: Add JIS 213 symbols

Mr. Marc Küster: document N2266 - on medieval diacritics

Mr. Kent Karlsson: Soft Hyphen -- has been added

Mr. Shih-Shyeng Tseng: Super CJK - 10 review has pointed some errors in the BMP; IRG has modified Extension B -- associated changes

Mr. Keld Simonsen: APL Character set – document N2260.

Dr. Ken Whistler: Amendment 1 draft – documents N2263, 2264 and 2265 to be added.

Under agenda item 8:

Dr. Asmus Freytag: Math Symbols glyphs - mainly related to Part 2 but could also be to Part 1.

Mr. Michael Everson: Irish ballot responses to 10646-2 - I see the US comments listed, but not Ireland's. (It will be attached to the ballot response document from SC2.)

Dr. Asmus Freytag: On the editorial corrigendum for Khmer, I can provide you the version we should be using. It requires a decision on how we should proceed -- see document N2274.

Mr. Mike Ksar: The ballot on Part 2 closes today. The Part 2 ballot responses are expected from SC2 secretariat sometime tomorrow.

The agenda was approved with the above changes - a revised agenda (document N2255R) was distributed. Other changes during the progress of the meeting are all captured and are reflected in these minutes -- some of the agenda items have been reorganized for purposes of reporting the minutes. The following table of contents of these meeting minutes reflects the agenda items.

3 Approval of minutes of meeting 38

Input document:
N2203 **Draft meeting minutes - Beijing meeting 38; Uma/Ksar; 2000-07-21**

One significant error was reported:

Dr. Ken Whistler: The count for Math Symbols in resolution M38.9 should have been 591 instead of 951. The resolution did capture the discussion during the meeting correctly – however, the number was erroneously 951.

Dr. Umamaheswaran: We should take a resolution to correct the correspond resolution M38.9.

Minutes of meeting 38 were approved with the above modification.

Mr. Mike Ksar: I would like to express our appreciation for the secretary's help in preparing the minutes.

Relevant resolution

M39.19 (Mathematical Symbols):	**Unanimous**

WG2 notes the following correction to resolution M38.9 -- the count for Math Symbols should have been five hundred ninety one (591) instead of 951.

4 Review action items from previous meeting

Input document:
N2203   Draft meeting minutes - Beijing meeting 38; Uma/Ksar; 2000-07-21

Dr. Umamaheswaran reviewed the various action items from section 16 of document N2203 from meeting 38. The following is the resulting status of the various action items.

4.1 Action items from previous WG 2 meetings (numbers 25 to 32)

All the action items from meeting 25 in Antalya, Turkey, meeting 26 in San Francisco, CA, USA, meeting 27 in Geneva, Switzerland, meeting 28 in Helsinki, Finland, meeting 29 in Tokyo, Japan, meeting 30 in Copenhagen, Denmark, meeting 31 in Québec City, Canada, meeting 32 in Singapore, meeting 33 in Heraklion, Crete, Greece, meeting 34 in Redmond, WA, USA, and meeting 35 in London, UK, have been either completed or dropped.

4.2 Outstanding action items from meeting 36, Fukuoka, Japan

Item	Assigned to / action (Reference Meeting 36 Resolutions in document N2004 and Unconfirmed Meeting 36 minutes in document N2003 - with the corrections noted in section 3 of document N2103).	Status
AI-36-3	**Editor of ISO/IEC 10646-1 Mr. Bruce Paterson and contributing editor Mr. Michael Everson**	
	To prepare the appropriate AM, DAM or PDAM texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:	
r	M36.19 (New character bucket M36): With reference to document N1941, WG 2 accepts the proposed Triangular Overlay character, with the new name COMBINING ENCLOSING UPWARD POINTING TRIANGLE, with its proposed shape, and allocates it the code position 20E4 in the BMP. WG 2 instructs its project editor to create a new list of characters accepted for processing beyond the 2nd edition of ISO/IEC 10646-1. M37 and M38 - in progress.	**Completed; see document N2226.**
AI-36-6	**Ad hoc group on principles and procedures (lead - Dr. V.S. Umamaheswaran)**	
a	M36.20 (Criteria for encoding symbols): WG 2 accepts the Criteria for Encoding Symbols proposed in document N1982 in principle and instructs the ad hoc group on Principles and Procedures to incorporate the material from this document into the WG 2 standing document on Principles and Procedures, document N2002. M37 and M38 - in progress.	**In progress**
b	To take note of including IDEOGRAPHIC VARIATION INDICATOR at 303E and remove GENERAL VARIATION MARK from FFFB in the roadmap related work. M37 and M38 - in progress.	**Completed; see roadmap document N2213.**
c	To incorporate agreed upon parts of roadmap documents N1949 BMP and N1955 Plane 1 into the principles and procedures document. M37 and M38 - in progress.	**Completed; see roadmap document N2214.**

4.3 Outstanding action items from meeting 37, Copenhagen, Denmark

Item	Assigned to / action (Reference Meeting 37 Resolutions in document N2104 and Unconfirmed Meeting 37 minutes in document N2103 – with the corrections noted in section 3 above.)	Status
AI-37-6	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	

Item	Assigned to / action (Reference Meeting 37 Resolutions in document N2104 and Unconfirmed Meeting 37 minutes in document N2103 – with the corrections noted in section 3 above.)	Status
a	With assistance from the Unicode representative, to include a warning in the Principles and Procedures document to proposers of future precomposed characters into the standard on the effect of normalization UTR on the integrity of the characters. M38 - in progress.	**In progress**
AI-37-11	**Japanese national body (Mr. Takayuki Sato)**	
b	To communicate document N2055 - Comment on Proposal for Nepalese Script, Hugh McG. Ross, 1999-07-29, as feedback to Nepal. M38 - in progress.	**In progress**
AI-37-13	**Germany (Mr. Marc Küster)**	
a	With reference to Encoding Egyptian Hieroglyphs, is invited to contact the German experts, encourage them to participate and report to them on the WG2 discussion, and to supply the contact names etc. to Messrs. Michael Everson and Rick McGowan. M38 - in progress.	**In progress**

4.4 New action items from meeting 38, Beijing, China

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
AI-38-1	**Meeting Secretary - Dr. V.S. UMAmaheswaran**	
a	To finalize the document N2204 containing the adopted meeting resolutions and send it to the convener as soon as possible.	**Completed; see document N2204.**
b	To finalize the document N2203 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	**Completed; see document N2203.**
AI-38-2	**Convener - Mr. Mike Ksar**	
a	To draw attention of SC2 to resolution M38.19 (Liaison from SC2 to the Unicode Consortium): Recognizing there is no current liaison representative from SC2 to the Unicode Consortium, WG2 nominates its convener Mr. Mike Ksar to this role. WG2 requests SC2 to process this liaison and the nomination.	**Completed.**
b	To act on Resolution M38.18 (Feedback to JTC 1 SG on Strategic Planning): With reference to the Collaborative Tools mentioned in resolution 8 on Project Management Tool, in document N2178, WG2 instructs its convener to communicate through SC2 to JTC1, about SC2's special requirements of being able to prepare and display documents containing shapes of graphic characters that are not yet in any standard or not yet supported by easily available tools.	**Completed.**
c	To communicate to Armenia on resolution M38.17 (Feedback to Armenia): With reference to document N2190 on Armenian, WG2 instructs its convener to prepare a response to their recent feedback based on the discussion at meeting M38 confirming the following principles: Existing characters in the standard cannot be reassigned other code positions. Existing character names in the standard cannot be changed. Informative clarifying text regarding usage of names of scripts can be considered. No duplicate characters are added if they can be unified with existing characters. Used in the development of ISO/IEC 10646, and inviting them to participate at the next WG2 meeting in Greece, in September 2000. (Messrs. Michael Everson and Michel Suignard are to assist in preparing the above response.)	**Completed.**
d	To act on Resolution M38.16 (Feedback to IEC - 3B on mapping of technical symbols): With reference to documents N2171 - IEC 3B/2xx/CDV, and N2174 on correspondence (mapping) between ISO/IEC 10646-1 and IEC 61286-2, WG2 instructs its convener to prepare and forward to the responsible IEC committee, a suitable response with assistance from Dr. Ken Whistler.	**Completed.**
e	To carry forward agenda items from M37 - these are listed as action item(s) on national bodies giving them another opportunity to review and feedback on the relevant documents (see the last group of action items for M38).	**Completed; see document N2255.**

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
AI-38-3	Editor of ISO/IEC 10646-1 Mr. Bruce Paterson and contributing editor Mr. Michael Everson	
	To prepare the appropriate AM, DAM or PDAM texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:	
a	Resolution M38.5 (Editorial Corrigenda to ISO/IEC 10646-1: 2000): WG2 adopts the editorial corrections, which have already been incorporated in the final text sent to ITTF, as described under section B in document N2158. In addition, WG2 accepts the following proposed editorial corrigenda: Section A in document N2158, with additional input from the meeting, and the corrections of glyphs for the Khmer table as shown in document N2210. WG2 further instructs its project editor to forward these Editorial Corrigenda to SC2 for further processing. WG2 requests SC2 to communicate its desire to ITTF that these corrigenda be included if possible in the planned CD-ROM publication of ISO/IEC 10646-1: 2000 (E) and (F).	**Completed; see documents N2232, N2238 -- Khmer in progress.**
b	Resolution M38.7 (Additions to the BMP - Miscellaneous): WG2 accepts to encode the following in the BMP of ISO/IEC 10646: 17DD - KHMER SIGN LAAK, with the glyph as shown in document N2164. 8 Cyrillic Sámi characters, with the shapes as shown on page 4 of document N2173: 048A - CYRILLIC CAPITAL LETTER SHORT I WITH TAIL 048B - CYRILLIC SMALL LETTER SHORT I WITH TAIL 04C5 - CYRILLIC CAPITAL LETTER EL WITH TAIL 04C6 - CYRILLIC SMALL LETTER EL WITH TAIL 04C9 - CYRILLIC CAPITAL LETTER EN WITH TAIL 04CA - CYRILLIC SMALL LETTER EN WITH TAIL 04CD - CYRILLIC CAPITAL LETTER EM WITH TAIL, and, 04CE - CYRILLIC SMALL LETTER EM WITH TAIL. 20B1 - PESO SIGN, with the shape as shown on page 1 of document N2161 (a P with two horizontal bars) 237D - SQUARE FOOT, and, 234A - PROPERTY LINE with shapes similar to what appear in document N2184. 20B0 - GERMAN PENNY SYMBOL with shape as shown in document N2188. WG2 further instructs its project editor to add these characters to the list of characters accepted for processing beyond the 2nd edition of ISO/IEC 10646-1 (based on resolution M36.19 - New character bucket M36).	**Completed; see document N2226.**
c	Resolution M38.11 (CJK compatibility ideographs from JIS X 0213): WG2 accepts the proposal for 61 compatibility ideographs from Japan for future encoding in the BMP, at positions FA30 to FA6B, with the shapes and names as shown in document N2197. Japan is to provide additional information on these compatibility ideographs suitable for inclusion in the standard per discussion at meeting 38 (see also document N2142). WG2 further instructs its project editor to add these characters to the list of characters accepted for processing beyond the 2nd edition of ISO/IEC 10646-1 (based on resolution M36.19 - New character bucket M36).	**Completed; see document N2226.**
d	Resolution M38.13 (Collection identifiers for Multilingual European Subsets (MES)): WG2 accepts the request and instructs its editor to assign four collection identifiers for each of the Multilingual European Subsets - MES-1 (fixed collection), MES-2 (fixed collection), MES-3A (non-fixed collection) and MES-3B (fixed collection), as requested in document N2211, for inclusion in a future amendment to ISO/IEC 10646-1: 2000.	**Completed; see document N2228.**
e	Resolution M38.8 (Yi radicals): WG2 provisionally accepts the five Yi radicals, their code positions, names and shapes, as shown in document N2207, subject to verification and feedback on these characters from the Chinese Yi experts.	**Completed; see document N2226.**

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
f	Resolution M38.6 (Restriction of encoding space): WG2 accepts the proposal in document N2175 towards removing the provision for Private Use Groups and Planes beyond Plane 16 in ISO/IEC 10646, to ensure internal consistency in the standard between UCS-4, UTF-8 and UTF-16 encoding formats, and instructs its project editor prepare suitable text for processing as a future Technical Corrigendum or an Amendment to ISO/IEC 10646-1: 2000.	**Completed; see document N2228.**
g	Resolution M38.14 (Future amendment to ISO/IEC 10646-1: 2000): WG2 instructs its editor to prepare the text for sub-division of work and a working draft for an amendment for consideration and approval at meeting 39 in September 2000, incorporating all the accepted changes to date.	**Completed; see document N2228.**
AI-38-4	**Editor of ISO/IEC 10646-2: Mr. Michel Suignard**	
	to take note of the following and incorporate the needed text in the next draft of ISO/IEC 10646-2:	
a	Resolution M38.2 (CJK compatibility ideographs from TCA/CNS 11643): WG2 accepts the proposal for 527 compatibility ideographs from the Taipei Computer Association for encoding in Plane 2, at positions F800 to FA16, with the shapes and source identifications as shown in document N2159R. WG2 further instructs its project editor to include these characters, along with suitable additional information on these compatibility ideographs per discussion at meeting M38, in the final text for ISO/IEC FCD 10646-2 being prepared per resolution M38.4 below.	**Completed; see document SC2 N3442.**
b	Resolution M38.4 (ISO/IEC CD 10646-2): WG 2 accepts the disposition of comments for the ballot on ISO/IEC CD 10646-2 in document N2217, which reflects the results of discussion at this meeting M28, and instructs its project editor to prepare the final text of ISO/IEC FCD 10646-2, including additional compatibility ideographs accepted for inclusion in Plane 2 at this meeting (per resolution M38.2 above), with assistance from the contributing editors, and to forward these documents to SC 2 secretariat for further processing in May 2000, with unchanged target dates.	**Completed; see document SC2 N3442.**
c	To allow Japan to reverse its negative ballot on ISO/IEC CD 10646-2 from Japan, to send the FCD text to Japan for a preview, before sending it for SC2 processing.	**Completed; see document SC2 N3442.**
d	To assist the convener in preparing an appropriate response to Armenia per resolution (see action item AI-38-2- c on the convener),	**Completed.**
AI-38-5	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
a	To add text to the principles and procedures document concerning formats of documents to be submitted to the convener, along the following: "Preferences are for Word .DOC format, or printable .PDF formats, with unprotected TEXT portions and possibly copyrighted Font portions. Whereas, files could be ZIP-ped for compressing them, It should be noted that .EXE files may not be accepted in many organizations as part of their Security Policy and self-extracting .EXE files should be avoided."	**In progress.**
b	Per Resolution M38.15 (Roadmap documents), to provide links to the updated documents N2213, N2214, N2215 and N2216 on the SC2 web site, once they are posted there, from Annex A of the principles and procedures document.	**In progress.**
c	To capture the WG2 resolve, in Resolution M38.12 (Additional Arabic presentation forms for Uighur and other languages), …. WG2 resolves not to add any more Arabic presentation forms to the standard and ….	**In progress.**
d	To take document N2176R - Implications of Normalization on Character Encoding; Unicode Consortium – Mark Davis; 2000-03-07, and incorporate it into Principles and Procedures document.	**In progress.**
AI-38-6	**Irish national body (Mr. Michael Everson)**	

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
a	To update the roadmap documents per Resolution M38.15 (Roadmap documents): WG2 adopts documents N2113, N2114, N2115, and N2116, as revised based on the discussion at meeting M38 as its standing documents. WG2 invites Mr. Everson to revise these documents reflecting the agreed upon changes, and forward these for distribution by WG2 and by SC2. The WG2 Principles and Procedures document N2002 is to be revised to reflect these revised roadmaps.	**Completed; see SC2 documents N3426, N3427, N3428 and N3429.**
b	To assist the convener in preparing an appropriate response to Armenia per resolution (see action item AI-38-2- c on the convener),	**Completed.**
AI-38-7	**National body of DPR of Korea**	
a	To take note of Resolution M38.1 (Feedback to DPR of Korea): With reference to the document N2193 (and other related ones), WG2 invites the Democratic People's Republic of Korea to provide sufficient input for review and further additions to the existing Korean character repertoire in ISO/IEC 10646. Specifically, WG2 invites DPR of Korea to submit proposals for their additional characters -- 8 Jamos, 79 symbols and any Hanja characters not already encoded in the CJK unified or compatibility ideographs sets in ISO/IEC 10646-1: 2000 or in ISO/IEC CD 10646-2, for further consideration by WG2, keeping in mind the following principles: Existing characters in the standard cannot be reassigned other code positions. Existing character names in the standard cannot be changed. Informative clarifying text regarding usage of names of scripts can be considered. No duplicate characters are added if they can be unified with existing characters. All new character proposals should be submitted following the guidelines in the WG2 Principles and Procedures document (SC2 /WG2 N2002) and the conventions for naming of characters in the standard. DPR of Korea is further encouraged to participate in the IRG regarding their Hanja character requirements for possible inclusion as an extension to CJK.	**Noted; see documents N2243, N2244, N2245, N2246 and N2247.**
AI-38-8	**The US national body (Dr. Ken Whistler)**	
a	To take note of Resolution M38.9 (Math Symbols): WG2 provisionally accepts the 591 Mathematical Symbols for encoding in the BMP, as proposed in document N2191R. The US national body is invited to prepare a revised proposal reflecting feedback received from the experts group on the subject before the next meeting M39 in September 2000. WG2 intends to include this proposal in the working draft of the next Amendment to ISO/IEC 10646-1: 2000 at the next meeting.	**Completed; see document 2263.**
b	To act on Resolution M38.16 (Feedback to IEC - 3B on mapping of technical symbols): With reference to documents N2171 - IEC 3B/2xx/CDV, and N2174 on correspondence (mapping) between ISO/IEC 10646-1 and IEC 61286-2, WG2 instructs its convener to prepare and forward to the responsible IEC committee, a suitable response with assistance from Dr. Ken Whistler.	**Completed.**
c	To get feedback from the UTC, and to take note of Resolution M38.10 (Symbols from JIS X 0213): WG2 provisionally accepts the proposed symbols described under items 1 through 12 in document N2195 for future encoding in the BMP. Their names, shapes and code positions are to be synchronized with the processing of Mathematical Symbols proposal (see resolution M38.9 above), based on feedback to the experts' group on this topic.	**Completed; see document N2263.**
AI-38-9	**Japanese national body (Mr. Takayuki Sato)**	
a	Per Resolution M38.11 (CJK compatibility ideographs from JIS X 0213), to provide additional information on the 61 compatibility ideographs suitable for inclusion in the standard per discussion at meeting 38 (see also document N2142).	**Completed; see documents N2221R, N2222R, and N2223R,**
b	To get feedback from the Philippines on Philippines script (documents N1933 and N2194).	**In progress.**
c	To convey to Philippines the decision by WG2 not to encode NG as a separate character.	**Completed.**

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
d	To convey to Japan that the glyph change proposal in document N2166 for 301C WAVE DASH is not accepted. The glyph in the standard should be treated as a glyph variant in JIS 208 standard.	**Completed.**
e	To get feedback from Japanese experts on several questions raised on document N2195 - Rationale for non-Kanji; JSC, Japan; 2000-03-15, during meeting M38, and input to the ad hoc group for email discussion -- see resolution M38.10 (Symbols from JIS X 0213) -- WG2 provisionally accepts the proposed symbols described under items 1 through 12 in document N2195 for future encoding in the BMP. Their names, shapes and code positions are to be synchronized with the processing of Mathematical Symbols proposal (see resolution M38.9 above), based on feedback to the experts' group on this topic.	**Completed; see documents N2256, N2257 and N2258.**
AI-38-10	**Chinese national body (Mr. Chen Zhuang)**	
a	To take note of Resolution M38.12 (Additional Arabic presentation forms for Uighur and other languages): WG2 has examined the request from China in document N2048 for additional Arabic presentation forms for supporting Uighur and other languages. WG2 resolves not to add any more Arabic presentation forms to the standard and suggests that China use the appropriate characters from the Arabic block and employ appropriate input methods, rendering and font technologies to meet the user requirements.	**Noted.**
AI-38-11	**German national body (Mr. Marc Küster)**	
a	With reference to the German ballot comment on ISO/IEC CD 10646-2, concerning Annex F (see document N2181), the German national body is invited to provide the list of Sources the Editor to be able to accommodate their comment. Other national bodies who have relevant information are encouraged to submit references to the editor.	**Dropped.**
AI-38-12	**Myanmar national body**	
a	(Myanmar script experts in particular) to review document N2033 - Proposal for Extension of Myanmar Coded Set, John Okell and Hugh McG Ross, UK, 1999-06-03, with particular attention to the proposed DOUBLE COMBINING MARKS in the document. M38: action item M17-5 d, reassigned to Myanmar national body.	**In progress.**
AI-38-13	**Singapore national body (Mr. Huang Yu Xiong)**	
a	With reference to Singapore's comment accompanying their negative ballot on ISO/IEC 10646-2 (in document N2181), Singapore is invited to submit the missing Hang-Zi characters as input to IRG for consideration for inclusion in CJK Ideograph Extension C.	**Completed.**
AI-38-14	**Cambodian national body (Mr. Mony Sokha Sath)**	
a	To work with other Cambodian experts (including Messrs. Ken Whistler, Michael Everson, Maurice Bauhan), to come to an agreement on the kind of annotation / explanatory text needed regarding Khmer characters referenced in document N2164) based on discussion at meeting M38.	**In progress.**
AI-38-15	**All national bodies and liaison organizations**	
a	To take note of Resolution M38.20 (Future meetings): WG 2 confirms the following future meeting schedule: - Meeting 39: 15 to 21 September 2000, Greece (along with SC2 plenary and SC2/WG3 meetings) (Note: change of dates from resolution M37.18). - Meeting 40: March 2001 - US West Coast - Meeting 41: September 2001 - Asia (Location to be confirmed) - Meeting 42: March 2002 - Ireland - WG 2 accepts and confirms the following IRG future meeting schedule: - IRG 15: 19--23 June 2000 in Taiwan (Host: Taipei Computer Association) - IRG 16: 4 -- 8 December 2000 in Korea (Note: changed meeting dates from resolution M37.18)	**Noted.**

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
b	With reference to document N2180 - "Resolution 26 of the JTC 1 Seoul Plenary Meeting (JTC 1 5983) and Draft Agenda for the ISO/IEC JTC 1 SWG on Development of a Business Plan for Standards Availability (JTC 1 N 6041); JTC1; 2000-03-07", national body delegates are encouraged to work through their JTC1 national body representatives towards wide availability of SC2 standards on the web.	**Noted.**
c	With references to documents N2148 - Proposal: ISO/IEC TR 15285 extension – Character Glyph Model; Takayuki K. Sato Shuichi Tashiro; 2000-01-05; N2198 - Proposal to amend TR 15285 – Char Glyph Model; Japan; 2000-03-15; N2199 - Requirements for coded elements – proposed annex to TR 15285 – Char Glyph Model; Japan; 2000-03-13, and, N2206 - Proposal to develop new Anex for TR 15285 – Char Glyph Model; Kobayashi, Kataoka, Kuwari; 2000-03-13, to review and feedback to Mr. Takayuki Sato, towards assisting users of ISO/IEC TR15285 to better understand how to bridge the worlds of glyphs and characters especially in the end-user interfacing. **(Item carried forward to next meeting)**.	**In progress.**
d	With reference to the German ballot comment on ISO/IEC CD 10646-2, concerning Annex F (see document N2181), the German national body is invited to provide the list of Sources the Editor to be able to accommodate their comment. Other national bodies who have relevant information are encouraged to submit references to the editor.	**Dropped.**
e	To review and feedback on the following documents related to - Proposed Lithuanian repertoire additions - N2075R - Proposal to add Lithuanian Accented Letters to 10646-1; Lithuanian Standards Board; 1999-08-15; N2176R - Implications of Normalization on Character Encoding; Unicode Consortium – Mark Davis; 2000-03-07; N2189 - Identification of Decomposed Characters in 10646-1; Finland, Germany, Iceland – Erkki Kolehmainen, Marc Küster, Þorgeir Sigurdsson; 2000-03-14, and N2176R - Implications of Normalization on Character Encoding; Unicode Consortium – Mark Davis; 2000-03-07. **(Item carried forward to next meeting).**	**Noted; see document N2230.**
f	To review and feedback on Proposal for encoding additional Math symbols in BMP (document N2191R - Proposal for encoding additional mathematical symbols in BMP; US national body; 2000-03-14) -- contact Dr. Ken Whistler, US, for the latest version of this document after glyph fixes etc.	**Noted.**
g	To review and feedback on document N2195 - Rationale for non-Kanji; JSC, Japan; 2000-03-15; work with ad hoc (Messrs. Hideki Hiura, Michael Everson, Ken Whistler, Japanese experts) via email, and feedback to Japan. See resolution M38.10 (Symbols from JIS X 0213) -- WG2 provisionally accepts the proposed symbols described under items 1 through 12 in document N2195 for future encoding in the BMP. Their names, shapes and code positions are to be synchronized with the processing of Mathematical Symbols proposal (see resolution M38.9 above), based on feedback to the experts' group on this topic.	**Noted.**

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
h	To review and feedback on the following **items carried forward to next meeting**. a) Proposal to encode Meroitic in plane 1 (documents - N1638 - Proposal to encode Meroitic in Plane 1 of ISO/IEC 10646-2; Everson; 1997-09-18; N2098 - Report on the proposal for a Meroitic sign; DIN, Germany; 1999-09-13; N2134 - Response to comments on encoding Meroitic (N2098); Everson; 1999-10-04) b) Old Mongol Scripts (Document N2163 - Soyombo and Pagba (old Mongol scripts); Sato; 2000-01-06) c) Document N2187 - Overview of characters approved by Unicode; Unicode Consortium – Asmus Freytag; 2000-03-13, with the intent of accepting towards synchronization between 10646 and Unicode standards. d) Philippines script (documents N1933 - Revised proposal for encoding the Philippine scripts; Everson; 1998-11-10; N2194 - Philippino characters; Sato; 2000-03-22). e) Early Aramaic (and other scripts) (Document N2042 - Unicode Technical Report #3: Early Aramaic, Balti, Kirat (Limbu), Manipuri (Meitei), and Tai Lue scripts; Rick McGowan and Michael Everson; 1999-07-20) f) Apostrophe and quotation mark (Document N2043 - On the apostrophe and quotation mark, with a note on Egyptian transliteration characters; Everson; 1997-07-24) g) Encoding of New Tai Lue (Document N2044 - On encoding New Tai Lue as proposed by China; Everson; 1997-08-13) h) Latin combining characters to support Middle High German (Document N2160 - Proposal to add Latin combining characters to support Middle High German; DIN – Marc Küster; 2000-02-16)	Noted; Following are the various agenda items addressing these: a) item 8.3; b) Dropped; c) and d): item 7.14; e) and g} item 8.4; f) item 7.10; and, h) item 7.17.

5   JTC1 and ITTF matters

5.1   *Availability of 10646-1: 2000 from ITTF*

Mr. Mike Ksar: The standard is not yet available from ITTF. I was promised that it would be available first week of July, and then the first week of September. There are discussions within ISO and IEC councils to put the documents on the web. This is a revenue generating mechanism for ISO and for national bodies, and the matter is outside the scope of WG2.

Discussion:
a) Mr. Ed Hart: TR 15285 - the Character Glyph Model - is now on the web.
b) Mr. Keld Simonsen: My understanding is that JTC1 decision to put the document on the web has been made.
c) Mr. Mike Ksar: What they resolved to put on the web was the 1993 edition, and I told them not to. ITTF has been negotiating since 1993 and awaiting ISO council decision.
d) Professor Kohji Shibano: JTC1 is meeting in Norway -- at that time I will bring up this matter again.
e) Mr. Keld Simonsen: Possibly we need an SC2 resolution requesting the 2000 edition be put on the web. It seems it is not ITTF's responsibility.
f) Mr. Michael Everson: The Irish national body has requested an electronic copy be made available.
g) Mr. Mike Ksar: WG2 cannot take any further action on this matter.

6   SC2 matters

6.1   *SC2 Program of Work*

Mr. Mike Ksar: SC2 program of work is on the web as of yesterday. We will be using that document to prepare the WG2 report this week.

6.2   SC2 input to JTC1

Input documents:
SC2 N3454   Resolutions from the Meeting of the JTC 1 Special Group on Strategic Planning, 19-21 June 2000 in Zurich, Switzerland [JTC 1 N 6205]; JTC 1 Secretariat; 2000-07-03
SC2 N3455   Request for Input on Participation in JTC 1 Development Activities [JTC 1 N 6207]; JTC 1 Secretariat; 2000-07-03
SC2 N3457   Request for Input on Funding the JTC 1 Program [JTC 1 N 6209]; JTC 1 Secretariat; 2000-07-03

These documents are for information to WG2. Delegates are requested to bring up any concerns at the SC2 plenary.

6.3   Submittals to ITTF

Input documents:
SC 2 N 3442 FCD 10646-2: Secondary Multilingual Plane for scripts and symbols, Supplementary Plane for CJK Ideographs, Special Purpose Plane; 2000-05-19
N2276   Ballot results on FCD 10646-2; SC2 Secretariat; 2000-09-20

FDIS 10646-2 ballot closed on 2000-09-19. Table of replies and comments were made available by SC2 secretariat on 2000-09-20 - see document N2276. Disposition of comments were prepared during the meeting - see agenda item 8.1 on page 41.

6.4   Ballot results

Input document:
N2262   Ballot results of WG2 subdivision of work (N2225); SC2 Secretariat; 2000-09-06

The NP for amendment to ISO/IEC 10646-1: 2000 has passed. The related items will be discussed under other items in the agenda. See agenda item 7.4 on page 20.

6.5   References to 10646, Unicode and Unicode Tech Reports

Input document:
N2177   Unicode Technical Reports references; Unicode Consortium – Asmus Freytag; 2000-03-08

The Unicode Technical Reports can be referenced in other work. Document N2177 gives the web site references etc. Negotiations are going on between IETF and the Unicode Consortium on how such references can be made better.

6.6   Draft WG2 Report to SC2 plenary

Input documents:
N2248   WG2 draft report to SC2 plenary; Ksar; 2000-09-22
N2267   WG2 Program of Work from SC2; SC2 Secretariat; 2000-09-18

Documents N2248 and N2267 contain the WG2 draft report to the SC2 plenary.

Mr. Mike Ksar: The WG2 report will be based on document N2267 and the resolutions document N2254 from this meeting. If there are any questions let us discuss them.

There were no questions.

7   10646-1: 2000

7.1   Feedback on Armenian from Armenia

Input document:
N2190   Cover letter on Armenian plus 3 attachments - AMST 34.001-99, AMST 34.002-99, Armenian in 10646-1; Armenia – Levon Aslanyan; 2000-03-14

Mr. Mike Ksar: A fax was received via the Armenian embassy in Athens, from the Department of Standardization, Metrology and Certification of Armenia (SARM) (containing a message translated from Armenian into English). The Armenian representative is being informed that the meeting will most likely

conclude by 15:00h on Friday, the 19th, and if their representative could attend the meeting. (The following paragraphs are copied from the fax message.)

> "Any TC coming to a decision should take into consideration of national interests in order not to create additional difficulties to organizations exporting their products. ISO 10646 specify a solution of standardization of Armenian language, which is not a guaranteed solution of all problems concerning information technologies. The need for additional coding and re-coding arose, which results in loss of resources.
>
> It specially is worth emphasizing that from the moment of accession of Armenia to ISO not only Armenia declares about its intention in serious participation in drafting and application of standards on linguistic informational technological spheres, especially concerning the Armenian language, but also ISO is obliged, with regard to Armenian Law on Language, implement the latter in its possible provisions.
>
> Harmonization of developed drafts with the Armenian Laws without participation of an Armenian legislative body is a separate question.
>
> Armenia hopes that ISO will do this itself with participation of its technical committees. Before that all the current drafts will be suspended. The technical committee will immediately notify about suspension to correctly orientate the current drafts and not to create further difficulties. It is (proposed to) organize and conduct a bilateral workshop, preferable in Armenia, for final clearance of these problems.
>
> … "

If Armenia is asking us to suspend our drafts for 10646 we will have a problem. They have been invited to come to the meeting to discuss the presentation. They had prepared a draft showing what they want from 10646 draft.

Discussion:
   a) Mr. Michael Everson: We need to prepare a response -- after reading their document. Their demand for harmonization can be easily met, using mapping / transformations and using 14651 for sorting.
   b) Dr. Asmus Freytag: Given the ambiguity of the document, we welcome them putting their documents on hold -- if that is in the document -- and if they are willing to work with us then we should welcome them.
   c) Mr. Marc Küster: An invitation to Armenia to participate in WG2 and contribute should be included.
   d) Mr. Evangelos Melagrakis: I do not see which entity this fax document is referring to. Does this refer to SC2, WG2, or any other technical committees outside of SC2? It is not clear whether the letter's content is addressed to SC2. Based on a conversation I had with Mr. Aslanyan, they want us to put the WG2 standards on HOLD till a discussion with them. I tried to explain to them that this couldn't be done. Best way to get what they want etc. is to participate at our meeting. Of course, there is no way we can change the standard itself -- they can use mappings etc. to be able to interchange with their national standards. I think Armenia has prepared their national standard without having a clear understanding of the encoding principles.

Relevant resolution

RESOLUTION M39.1 (Feedback to Armenia):	Unanimous

With reference to the fax message received from SARM, the Armenian national body, via the Armenian embassy in Athens, WG2 instructs its convener to respond as follows:
   a. reaffirming the previous resolution M38.17
   b. informing SARM that ISO/IEC 10646-1 is a published standard, not a DRAFT, and cannot be suspended, and,
   c. inviting SARM to participate in SC2 and its working groups towards better harmonization of Armenian standards with SC2-developed standards and to actively participate in the technical program of work of SC2/WG2.

Action item: Convener to respond to Armenia along with an invitation to them to participate in SC2 and its working groups.

7.2 DPR of Korea feedback

An ad hoc group of delegates who are interested on the contributions from DPR of Korea will discuss and report to the meeting. The ad hoc group consists of Messrs. Michael Everson, Asmus Freytag, Karl Ivar Larsson, Kent Karlsson, Marc Küster, Kyongsok Kim, and DPRK delegates. Anything related to CJK unification will be taken to IRG. This ad hoc group can discuss DPRK input, and separate the issues into those that should be taken to the IRG and those to be dealt within WG2.

7.2.1 Character names and ordering

Input documents:
N2231   DPRK letter on character names and ordering in 10646-1: 2000; Cho Chun Hui, Secretary-General, The Standardization Committee of DPR of Korea; 2000-07-05
N2245   Proposal to change existing name of Korean characters in 10646-1; DPR Korea; 2000-08-10
N2246   Evidence for arrangement of Korean characters; DPR Korea; 2000-08-10
N2249   Draft 14651 CTT tailoring delta for DPRK; Kent Karlsson, Sweden; 2000-08-31

Document N2231 is a letter received from DPRK committee for standardization to the convener. The same letter was also sent to SC2. It is the cover letter addressing the items in documents N2245, N2246, and N2249, requesting changes in 10646-1: 2000.

Mr. Hong Yong: DPRK would like to express our thanks to the convener and SC2 for allowing us to come to the meeting. If one studies the resolution M38.1, it does not address our requests. Instead of taking up the time of all of this WG, I would like to propose establishing a small ad hoc group to address all the proposals that we have made. The small ad hoc group can discuss and recommend solutions.

Discussion:

   a) Professor Kim: DPRK is proposing a sub working group, not just for this meeting, but also for the longer term.

   b) Mr. Mike Ksar: We normally do not create separate sub-groups to work on specific scripts. We normally create ad hoc groups during our meetings. As we explained to DPRK delegates in Beijing, WG2, or SC2 or JTC1, cannot do anything about changing the names of characters or their locations in the standard. These are two fundamental principles that we follow in order not to impact existing users / implementers of the standard. We have spent considerable time to explain these principles to you. These are our standing positions in this committee. An ad hoc committee even if created should not discuss these two items.

   c) Dr. Asmus Freytag: I agree with the convener on the rules that we follow in this committee. But I also hear in the DPRK proposal, some ideas on how to bring new participants up to speed. The ad hoc group certainly can have side discussions on issues that could be discussed without violating our rules.

   d) Mr. Mike Ksar: Documents N2445, 2446 and 2449 have proposals, which break the rules I mentioned.

   e) Mr. Michael Everson: There are seven documents. Of these we cannot entertain the proposals violating the rules. However, document N2249 points a way on how to deal with the ordering needs for DPRK. Korea has made four proposals here -- we would like you to understand that we will not discuss the documents in item 7.2.1. We can go on with the other three.

   f) DPRK: Are you suggesting we will not discuss documents N2445 and N2446?

   g) Mr. Mike Ksar: The matters in these documents have been discussed and rejected before, because they violate our principles. Document N2449 shows you a method on how you can meet your for ordering needs using other standards, but the subject matter of ordering is outside the scope of ISO/IEC 10646. We cannot discuss these documents any more.

   h) Professor Kim: I would like to take some time to explain the procedure used by WG2 to the DPRK experts.

   i) Mr. Marc Küster: I would like to support Professor Kim's suggestion to explain to the DPRK members the WG2 procedures in the interest of a smoother discussion at this meeting.

   j) DPRK: Quoted the ISO Directives - JTC1 procedures -- regarding creation of "Other Working Groups" - section 2.5.2.

   k) Professor Kohji Shibano: SC can establish "Other WGs". It is up to the WG, in this case WG2, to decide if there is a need to create another sub-WG or not. If WG is not satisfied of the necessity or for the need for a new group, then there is no need to establish another working group. If WG2 thinks it is not responsible for the matters requested by DPRK, then they can recommend another ad hoc group.

7.2.2 Proposal for the addition of 14 Korean characters

Input document:
N2243 **Proposal for the addition of 14 Korean Alphabets to 10646-1; DPR Korea; 2000-08-10**
Output document:
N2282 **Ad hoc report on Korean; 2000-09-21**

An ad hoc group (Messrs. Mun Yong Ho, Pak Tong Ki, Hong Yong, Kyongsok Kim, Kent Karlsson, and Marc Küster) met and discussed documents under items 7.2.2, and 7.2.3. The report is in document N2282. Mr. Marc Küster reported on behalf of the ad hoc:

- As to the ordering, DPRK agreed to use ISO/IEC 14651 and the Unicode sorting algorithm as the way to go forward.
- Korean Jamo -- additional information to be provided by DPRK.
- DPRK will refine their 'additional symbols' proposal -- removing already encoded characters etc.
- The ad hoc group did not discuss the proposal to add an additional column for DPRK Hanja in Part 1.

Mr. Mike Ksar: I would like to thank the ad hoc group. I am glad to see that there are some resolutions regarding the DPRK input, and that the report focuses on what WG2 can do to address DPRK requirements. You can continue to work -- with Professor Kyongsok Kim coordinating the discussions on the topic. The ad hoc could correspond via email, or meet in person etc. I will encourage DPRK to work with other experts on Korean.

Relevant resolution

M39.2 (Proposals from DPR of Korea):	China Abstains

a. With reference to documents N2231, N2245, and N2246, WG2 reaffirms its resolution M38.1 on the WG2 principles.
b. WG2 officially creates an ad hoc group on the Korean script and invites DPR of Korea, Republic of Korea and other interested national bodies and experts to participate in it.
c. With reference to documents N2243 and N2244, WG2 invites DPR of Korea to separate and refine their proposals according to the ad hoc recommendations in document N2282.
d. With reference to document N2247, WG2 regrets it cannot add an additional column to the CJK tables in 10646-1: 2000, due to production and formatting complexities.
e. WG2 invites DPR of Korea to participate in the IRG, and contribute towards developing a set of Data Tables containing the CJK Character Sources for the CJK ideographs in 10646-1 (similar to the corresponding data tables in FCD 10646-2). The target date for the DPR of Korea data tables is 2000-11-15.

7.2.3 Proposal for the addition of 82 symbols

Input document:
N2244 **Proposal for the addition of 82 Symbols to 10646-1; DPR Korea; 2000-08-10**

(See Korean ad hoc group discussion and relevant resolution M39.2 under item 7.2.2 above.)

7.2.4 Proposal to add the Hanja column to 10646-1

Input document:
N2247 **Proposal to add the Hanja column of DPR Korea to 10646-1; DPRK Korea; 2000-08-10**

Discussion:
a) Mr. Mike Ksar: Adding an additional column for a sixth column for DPRK Hanja poses production difficulties. In Part 2 we are having only a single column. When we publish Part 1, it is possible that we will change to using the format of Part 1. As a result, we cannot accommodate the DPRK request at this time. We do not have the tools to squeeze in an extra column.
b) Mr. Michel Suignard: Part 1 can also be more useful by adding the source information in the same format as Part 2. We could keep the current five columns and just add the source information. The glyph information will be lost if we go to removing the five column -- however, the source information can be used, much like what we are doing in Part 2 Annex C. I would encourage contribution from DPRK for adding the DPRK information as an amendment to Part 1.
c) Dr. Umamaheswaran: To include the information from DPR of Korea, we need to initiate the file formatting work for the BMP -- to prepare the data tables for sources, for all the CJK characters (and compatibility ideographs) in the BMP from the Super CJK data base including the DPRK requirements.

Relevant resolution

M39.26 (DPRK - Ideographs in the BMP):	**Unanimous**

The IRG is instructed to investigate creation of mapping tables of CJK ideographs and compatibility ideographs included in the BMP to their sources, including consideration for adding DPRK sources, similar to the data tables provided for CJK sources in 10646-2.

7.3   Editorial Corrigenda for 10646-1:2000

Input documents:
N2232   **Editorial Corrigenda – 10646-1: 2000 2nd edition; Paterson; 2000-07-18**
N2238   **Additional editorial glyph corrections 10646-1: 2000; Unicode; 2000-08-15**
N2272   **On the requirements for alphanumeric fonts for mathematical use; Asmus Freytag; 2000-09-19**
Output document:
N2290   **Charts for editorial corrigenda; Freytag; 2000-09-22**

(See also agenda item 7.4 Khmer additional corrigendum on page 20.)

Document N2232 is FYI.
Dr. Asmus Freytag explained additional corrections identified in document N2238:
- Ethiopic - glyph correction due to wrong Font Choice – at 125C
- Set Minus – at 2216
- Riel Sign – at 17DB
- Arabic characters - fixing the previous misunderstanding – at 066B, 066C
- Lazy S to reverse Tilde - discovered in the math symbols exercise – at 224C
- Black squares - adjust size and position – at 25AA, 25AB.
- (Items 1,2, 6, 7, 8 and 9 in document N2238).

Discussion:
  a) Mr. Mike Ksar: Document N2232 should be enhanced to items from document N2238 - supplemented with material from document N2274.
  b) Dr. Asmus Freytag: When we amend the fonts for Mathematical Symbols for Part 2, there is a corresponding change needed for Mathematical characters in Part 1 also -- see document N2772.

On the processing of Editorial Corrigendum

Mr. Mike Ksar: The editorial corrigenda can be made a part of a technical corrigendum. ITTF does not seem to be publishing the editorial corrigenda in time for us to apply / review the PDAM against.
Discussion:
  a) Mr. Takayuki Sato: The editorial corrigendum must be published before any Amendment to Part 1 is published.
  b) Professor Kohji Shibano: If we process as Editorial Corrigendum, ITTF does not make it a part of the published documents. If you make it as part of an amendment, it gets published.
  c) Dr. Ken Whistler: That much more material has to be included in the amendment text.
  d) Dr. Umamaheswaran: Editorial corrigendum should not be opened up for ballots. This should be sent to ITTF directly -- process wise.
  e) Dr. Asmus Freytag: If the editorial corrigendum part of an amendment is balloted down, then we have to go separate the editorial parts and send it out again. Most of the editorials are in the Glyph Tables.
  f) Mr. Michel Suignard: We should write the PDAMs against the base plus editorial changes.
  g) Dr. Asmus Freytag: The amendments could be written in the form of "substitute this chart with another chart" etc. rather than writing "insert this after that" etc. This way at least the editorial corrigenda can be accurately reflected when we publish the amendments.
  h) Dr. Ken Whistler: The PDAM text is to be synchronized with Unicode 3.2 and its schedule is not fixed.
  i) Mr. Mike Ksar: The editor will send the editorial corrigenda to ITTF for publishing as soon as possible. The PDAM text will be written against the standard 2nd edition with the editorial corrigendum. Another proposal we have is the one to make one amendment an architectural one and another one for repertoire additions.
  j) Dr. Ken Whistler: It would be unwise to do that, since there is a cross-linking with block name etc.
  k) Mr. Michael Everson: In the past we had balloted entire scripts etc.

l)   Mr. Mike Ksar: ITTF has come back and told us that it is not desirable to have too many amendments. We also want the editorial corrigenda to be processed by ITTF.
m)   Ms. Toshiko Kimura: We can propose a "minor revision" to be published by ITTF. We can take it up at the SC2 plenary.

Disposition: Accept and invite an update to the corrigendum text.
Action item: Dr. Asmus Freytag is invited to prepare the revised Editorial Corrigendum charts - see document N2290.
Relevant resolution

M39.5 (Editorial Corrigenda):	Unanimous

WG2 accepts the following proposed changes:
   a.   revised character shapes for code positions 066B, 066C, 125C, 2216, 224C, 25AA, 25AB (from document N2238) in the BMP
   b.   the updated Table 47 for Khmer in document N2274, with correction to the glyph for RIEL SIGN at 17DB per document N2238, and,
   c.   the proposed changes to the glyphs of Letter-like Symbols in the BMP as suggested in document N2272
   d.   FEFF (ZWNBSP) – add the missing glyph.
Further WG2 requests the Unicode Consortium to prepare the updated Tables reflecting the above corrections in a form suitable for replacing the corresponding Tables in 10646-1: 2000. Further, WG2 instructs its editor to update document N2232 - cumulative list of editorial corrigenda, and forward the corrigenda to ITTF with a request to publish the set as a Minor Revision to the standard.

7.4   Khmer additional corrigendum

Input documents:
N2210   Editorial correction on Khmer – post 10646-1:2000; Ireland and Unicode; 2000-03-22
N2232   Editorial Corrigenda – 10646-1: 2000 2nd edition; Paterson; 2000-07-18
N2238   Additional editorial glyph corrections 10646-1: 2000; Unicode; 2000-08-15
N2274   Khmer charts for editorial corrigenda; Asmus Freytag; 2000-09-19

Document N2274 replaces document N2210. Between the post Copenhagen version of 10646-1: 2000 and the production version of the 2nd edition, the wrong fonts were used and the glyph errors crept in. This includes all the corrections accepted in Beijing as well as a correction to the RIEL SIGN, which was discovered later. It replaces the previous corrigendum document that was presented in Beijing. We have to ensure that document N2274 gets reflected in the final editorial corrigendum being sent to ITTF.

Document N2232 reflects the post publication corrigendum -- see item 7.3 above.

Document N2238 identifies additional corrections to shapes. The editor is supposed to have been sent the previous editorial corrigendum to ITTF. The .pdf version should have reached ITTF. The online version of 10646 should contain the corrected table.
   a)   Dr. Asmus Freytag: It is difficult to work in this committee without a copy of the published version of the document.
   b)   Mr. Mike Ksar: I own the problem -- we have asked ITTF to get the publication done -- it has not happened so far.
Disposition: Prepare an editorial corrigendum to fix the Glyph for RIEL SIGN. Add to the list of editorial corrigendum for post-publication version of the standard.

(See relevant resolution M39.5, under item 7.3 above.)

7.5   Unique Sequence Identifier – collections with combining sequences

Input documents:
N2230   Proposal for Unique Sequence Identifiers (USI-s) and repertoire specifications including these USI-s; US national body (Author: V.S. Umamaheswaran); 2000-07-21

Dr. Umamaheswaran introduced the document N2230. Explained the background and the proposal.
Discussion:
   a)   Mr. Michael Everson: Is the intent to document the methodology in 10646 or is it to open up 10646 to become an open registry for all collections?

b) Dr. Umamaheswaran: The intent is not to open up 10646 to registration any more than the current status of collections being identified in the standard today. It facilitates the identification of combining sequences in collections that could be entered in the standard.

c) Mr. Michael Everson: That seems to be unobjectionable. My concern is that 10646 can become a dumping ground for defining the alphabets of different languages etc. I am concerned whether the balloting process of using 10646 to identify collections is going to prevent us from identifying languages etc.

d) Mr. Erkki Kolehmainen: I am puzzled by the question by Mr. Michael Everson. There is an extremely strong demand for registering sequences. Indeed, we currently allow collections in the standard. The proposal will permit sequences in collections. We already allow in principle collections to be added -- though we are not swamped by requests. We have used the mechanism for example to enter the MESs. To date they were all script-based. I would like to bring to your attention the Resolution 4 from the CEN TC304 Liaison Report to SC2 (see document N2227) -- CEN TC304 has endorsed this proposal. We would like to see if we could also name the entity represented by the sequences in the standard.

e) Mr. Marc Küster: Mr. Erkki Kolehmainen has expressed all I wanted to say. It has been stated several times that addition of sequences in collections is not going to create a rush for more collections. If we are swamped we can consider other means. There are strong opinions that there should be other ways also to insert pre-composed characters into the standard -- some national bodies have expressed it. The naming of entities is another consideration.

f) Dr. Umamaheswaran: Pointed out that the issue of the naming of entities etc. is outside the scope of the standard.

g) Mr. Michael Everson: I do not share the optimism of several others that we will not be swamped by requests for entering alphabet-specific collections. The Annex can potentially become a dumping ground -- and it is a heavy-duty procedure for entering such items.

h) Dr. Asmus Freytag: I think we should hold off the discussions on whether or not collections containing these USIs should be entertained or not. We should focus on the USIs themselves.

i) Mr. Erkki Kolehmainen: I will not dream of any normative names for the entities. Do we have to orchestrate the request for collections containing such USIs before we accept the USIs?

j) Dr. Asmus Freytag: It is a simple engineering principle that we should wait for the first request. We can deal with collections containing such USIs when such a request comes to this committee.

k) Mr. Erkki Kolehmainen: I would want to be able to use the USIs -- in identifying the different scripts of the world.

l) Dr. Umamaheswaran: Please keep the three items of discussion separately: the USIs, its possible use to identify sequences in collections, and entity names.

m) Mr. Takayuki Sato: Conformance - related? If conformance says that a device supports a given collection does the device display or print the sequences correctly?

n) Dr. Umamaheswaran: The glyphs associated with such sequences, much like the entity names, is outside the scope of the standard.

o) Mr. Marc Küster: How much more concrete should we get? Lithuanian repertoire, for example, cannot be described without a means such as the USI.

p) Mr. Erkki Kolehmainen: We discussed the original request from Lithuania and gave them the impression that we could not entertain their encoding request of composed characters directly in the standard. We are giving them the means to identify their own repertoire in their own standards. We have to provide a response to Lithuania.

q) Dr. Ken Whistler: I think that the basic problem we are coming up with us is a disagreement on the appropriate place where the mechanism should be used. The concern is not on the mechanism itself. Once we go down the road of adding particular language collections in the standard, there may not be an end to it. The appropriate response would be to give others the mechanism -- for example to the Lithuanian NB - that they can identify the collection for their own standard. USA could use the same mechanism to describe the Navajo alphabet. It is appropriate for adding such collections in the standards of their own national body or other documents. We are providing a mechanism for them to be able to describe their repertoires.

r) Mr. Michael Everson: There are three items Dr. Umamaheswaran alluded to. I note that we do cater to the Lithuanian request for being able to describe their repertoire in "A" standard, but not necessarily in 10646.

s) Mr. Erkki Kolehmainen: Lithuania has already identified their collection -- not encoded in UCS - however, I want to be able to identify such collections in the standard.

t) Dr. Asmus Freytag: Dr. Umamaheswaran said something that can get us out of the discussion. One of them is the notation -- we seem to have a consensus on it. Second part is that taking a sequence and giving itself a name (an entity name). The second point applies to the Lithuanian situation. The third part is what to do with collections -- it plays into two sub parts. There are two kinds of collections today -- you can string together any string of collections or characters and make your own collection. Some are predefined collections -- like the MES-1 etc. It is not clear whether we have a mandate to create collections that do contain USIs -- and it is not clear whether we want to entertain one of these. We do have open collections -- all possible combinations within such open collections are possible. The second and third issues cannot be fully discussed and arrived at a consensus. The notation could be accepted. We could give guidelines on the use of the notation. As to Lithuanian request, I am not clear on what they require on what sort of combinations they need etc.

u) Mr. Erkki Kolehmainen: Using the collections and using the sequences in the collections is not what Lithuania requested. The method of identifying the individual sequences is what they need, not the identification of the collection corresponding to their repertoire itself. We can go and re-look at the original Lithuanian request not to re-discuss the various issues.

v) Mr. Marc Küster: Lithuania has already defined their repertoire. I do not see any principal differences between the collections we have today versus the collections that may have the proposed sequence identifier.

w) Dr. Asmus Freytag: We have to look deeper in the standard -- and take a look at how the collections are used. One can enumerate one by one a list of characters separately. We do not make collections so far specifically for other standards. We understand one of the needs of Lithuania - a mechanism to identify individual entities -- is useful to provide them with.

x) Mr. Mike Ksar: We should revisit the Lithuanian request in document N2175 and see if we can respond to their requirements using this mechanism.

y) Mr. Erkki Kolehmainen: We still will not meet their requirements completely.

z) Mr. Kent Karlsson: (Comments received off line regarding the notation) Use of Left and Right Angle Brackets should be changed to LESS THAN and GREATER THAN signs (from the first 128 code positions of UCS). Question the need for the term "Unique" -- why not simply UCS SEQUENCE IDENTIFIER? Also, there must be at least two character identifiers in a USI.

Action Item: To enhance the guideline for submitting collection proposals, to include the USIs.

Disposition: Accept USI proposal in document N2230, and include it in the next amendment to 10646-1. Name could be UCS Sequence Identifier or simply Sequence Identifier. Modify to include at leas two characters in the sequence, the delimiters are LESS THAN and GREATER THAN signs.

Relevant resolution

RESOLUTION M39.7 (UCS Sequence Identifier):	Norway Negative

WG2 accepts the notation for sequence identifier proposed in document N2230 for inclusion in the next amendment of 10646-1: 2000, with the following changes:
  a) The identifier is called "UCS Sequence Identifier (USI)" instead of Unique Sequence Identifier.
  b) The delimiters are LESS THAN and GREATER THAN signs instead of the angle brackets.
  c) There must be at least two UIDs in a sequence.

7.6 *Proposal to extend U+ notation*

Input document:
N2234   Proposal to extend U+ notation; UTC - Mark Davis; 2000-08-10

Dr. Asmus Freytag introduced document N2234. We need to reference characters outside the BMP. We have also agreed to limit the coding space up to plane 16. The proposal is for a variable length notation for such references. The Unicode technical committee has adopted such a notation. To maintain synchronization with the Unicode standard, WG2 should also adopt the notation. The needed changes to clause 6.5 of 10646-1: 2000 are proposed in document N2234.

Discussion:
  a) Mr. Michael Everson: We do not need to discuss the paper, and should adopt the proposal.
  b) Mr. Kent Karlsson: Should this notation be in Part 2 and not in Part 1.
  c) Mr. Michel Suignard: All items that affect the architecture are included in Part 1.

d) Mr. Mike Ksar: We will place this in Part 1 amendment in parallel with Part 2 progression.
e) Mr. Kent Karlsson: We have an existing notation with 8-digit notation. Should leading zeroes be allowed?
f) Dr. Asmus Freytag: Leading zeroes are not used in Unicode. The document should be amended to state that the wording should be "Leading zeroes are prohibited for values greater than FFFF".
g) Mr. Kent Karlsson: For the six- digit form, for plane 16, there will be two leading digits. This should be somehow expressed in the amendment.

Disposition: Adopt the notation in document N2234, with clarification on leading zeroes.

Relevant resolution

RESOLUTION M39.8 (U+notation):	**Unanimous**

WG2 accepts the change to the U+notation for Short Identifier proposed in document N2234 with the additional restriction that "Leading zeroes are suppressed for values greater than U-0000FFFF ".

7.7 Proposal for addition of ZERO WIDTH WORDJOINER

Input document:
N2235   Proposal for addition of ZERO WIDTH JOINER; UTC – Mark Davis; 2000-08-10

Dr. Asmus Freytag: The UTC has identified a defect in our activities in 1991 and 1992, in the introduction of the byte order mark. The acceptance of this character was possible at that time only if the semantic of Zero Width No Break Space was attached with it. Members of UTC have found difficulties with the unified semantic of this character U+FEFF. The proposal is to separate the functionality by introducing a new character ZERO WIDTH WORD JOINER with identical semantic as the ZWNBSP that is currently associated with U+FEFF.

Discussion:
a) Mr. Michael Everson: We are not giving a character a new name, nor are we moving a character. We are introducing a new character by disunifying it from an existing one. Is there any impact on legacy data?
b) Dr. Umamaheswaran: There will be no impact on the legacy data -- since this character is used only in the UCS context. The primary use of this character in implementation has been as a Byte Order Mark and its use as a ZWNBSP is probably far less.
c) The ad hoc on Amendment 1 draft (see item 7.20 on page 35) recommended position 2060, name change to WORD JOINER, and the glyph change to WJ in a Box.

Disposition: Accept the proposal with changes.

Relevant resolution

RESOLUTION M39.9 (Word Joiner):	**Unanimous**

WG2 accepts the proposed zero-width word joiner character in document N2235 for encoding at position 2060 in the BMP, with the name WORD JOINER, and with a glyph composed of a WJ inside a dashed square.

7.8 Proposal for addition of COMBINING GRAPHEME JOINER

Input document:
N2236   Proposal for addition of COMBINING GRAPHEME JOINER; UTC – Mark Davis; 2000-08-10

Dr. Ken Whistler: The UTC was faced with continued request for adding digraphs in the standard. Also, a distinction needs to be made in Maltese 'ie'. The 'ie' character has to be treated as a digraph in some instances and not as a digraph in other instances. There have also been other cases such as Slovak, where there is a requirement for such distinctions. There was also a discussion on what to do with Circled Numbers -- from JIS X213. The UTC was searching for an encoding solution that will provide the ability to unambiguously encode existing characters and be able to provide the distinctions of Circled Numbers, Digraphs etc. The result was to provide a small encoding solution to deal with dual treatments such as Maltese 'ie' – whether it is a digraph or not. The solution was a character to Glue two characters together to be treated as a unit. A discussion on the counterpart of Non-Joiner showed that we do not need one. We need only the Joiner. The UTC has adopted this and requests WG2 to adopt this.

Discussion:
a) Mr. Johan van Wingen: The name of the character includes GRAPHEME. In the Character Glyph Model TR we do not use the term GRAPHEME for linguistic reasons (?). I suggest we find an alternative term. I have an idea that this remedy is worse than the disease. Our experience with

'ij' shows that we should avoid these. The side effect of having joiner characters is that the positions are important -- in many instances only 24 characters are allowed (for example) per line. The joiners prove to be problematic. In the Netherlands we have prohibited treatment of 'ij' as a single character.

b) Dr. Ken Whistler: In the case of use of any joiners, there are three ways of character counting -- depending on the application. If you are counting code points -- the joiners will be counted separately -- for memory allocation. If we are counting graphemes, the joiners will not be included in the count, but the components will be counted. If we are counting end user characters -- for example letters of Slovak and CH -- the complete digraph will be counted as a single unit.

c) Mr. Marc Küster: In principle a character similar to what is proposed would be useful for correct sorting. A layer above can be used for tagging, or to do the counting properly, identifying AE as a unit for ordering purposes etc. this could be used. There are complexities in counting. Clarification will be needed on the use of this character in the context of many European languages.

d) Mr. Michael Everson: I do not believe this character is mature enough for encoding. Useful examples, edge cases etc. are additionally needed. I have seen the example of Maltese 'ie'-- I have seen loan words but not native ones. The joiners affect two characters versus combining characters -- the behaviour is different. There are questions about what to do with Legacy data -- ch in Slovak or Welsh -- which do not currently use the joiners. There are other solutions in place and the impact on them needs to be discussed. I had proposed in a similar context -- a LIGATOR character -- in a previous WG2 contribution, which was about thirty pages long with ample examples. It was found that by redefining how a ZWJ can be used, the LIGATOR character was not needed. I need some more examples -- c (mark) h becomes a single ch. I can also use that string to get at that glyph. What would be the impact of this new joiner on such sequences? I request the UTC to provide more substantial document than what we have seen today addressing the various issues.

e) Mr. Johan van Wingen: I support Mr. Michael Everson -- I would like to see a document elaborating on the various side issues and interactions. I do have a contribution on the subject and can make it available.

f) Dr. Ken Whistler: I am sure the UTC would welcome all questions and concerns on this topic, including Mr. Johan van Wingen's input. The intent of use of this character is by exception. There is no intent to use it with existing legacy data. There is no intention that this new joiner character will be suddenly required for existing digraphs, trigraphs etc. The exception will be when someone wants to distinguish the sequence from having its customary treatment. The interaction with the ligation issue etc. is that there is no interaction. It has no intended impact on the display of these characters.

g) Mr. Kent Karlsson: Why is this character not made a combining character versus a joiner? Why can't we use the ZWWJ?

h) Dr. Ken Whistler: The reason - if it was made combining, the set of properties that this character will have to be complex. It will be easier to introduce this as a joiner for the purposes of treating the Sequence as a Unit -- Char Glue Char. The UTC considered the various options and it turns out to be more complex to treat it as a combining character.

i) Mr. Kent Karlsson: Why ZWWJ is not a combining character?

j) Dr. Ken Whistler: ZWWJ was intended to be just a disambiguation carrying the same properties of existing U+FEFF.

k) Dr. Asmus Freytag: Some of the arguments on the combining versus joiner etc. also arise from considerations for Line Breaking properties. The line breaking descriptions treat the combining characters in a transparent way. If we treat the Grapheme Joiners as combining it works without changes to the Line Breaking algorithm, similar to the VIRAMA behaviour.

l) Mr. Mike Ksar: I propose an ad hoc group -- Messrs. Michael Everson, Kent Karlsson, Johan van Wingen, Asmus Freytag, Ken Whistler, Marc Küster, and Takayuki Sato -- to discuss the issues associated with this proposal and come up with some recommendations. I request the contribution from Mr. Johan van Wingen to be given to me.

Disposition: The recommendation from the ad hoc group was NOT to accept this character at this time, and await further clarification on the different concerns raised.

Action Item: Proposers are invited to create an updated document.

7.9 *Proposal to add 8 recycling symbols*

Input documents:
N1661   Proposal to encode two ecological symbols in ISO/IEC 10646; Everson; 1997-12
N2240   Proposal to add 8 recycling characters to ISO/IEC 10646; Everson, Freytag; 2000-08-27

Dr. Asmus Freytag: WG2 has looked at recycling symbols (document N1661) already a few meetings ago. At that time we were stuck with the question of whether these should be treated as single entities or as combining overlays. The research done by Mr. Michael Everson shows that these should be separate characters -- there may be some glyph variations that do not need to be separately encoded. Document N2240 proposes eight separate recycling symbols. The question to this committee is on the naming of these symbols -- based on glyphs or based on the intended meaning in the recycling world.

Discussion:
   a) Mr. Alain Labonté: It will be unwise not to use the combining characters for these. Why not more combinations in the future? We had similar problem with the Keyboard symbols -- we had a fixed set -- and went to combining method. There is more evidence here that there could be more than seven.
   b) Dr. Ken Whistler: On the "should there be more - issue" -- if Alain says 8 or 9 -- the combining approach is OK. As soon as we say 10 or more -- we have a problem of using combining characters. There is a problem dealing with combinations of more than 1 digit -- like in the case of circled, or triangle numbers.
   c) Mr. Michael Everson: The approach of combining does not work in general for these kinds of symbols. We can deal with inserting text within symbols in typography but not in character encoding. The users of these symbols are mostly groups like municipal administrations dealing with Recycling to the public. There are examples in the document about these. If these are encoded as combining characters, the users may end up in extending it for other purposes. The proposed ones have a specific meaning in recycling industry and should not be extended. On the naming of these characters alternate names have been suggested.
   d) Mr. Alain Labonté: I have no big problem with non-combining things. However, I have a big problem with the non-uniform treatment of the symbols in different instances. If it is for some molecule, why not use the real name of the molecule?
   e) Mr. Kent Karlsson: These are symbols which have been originated somewhere -- we should contact the source where these symbols came from, and get their input on the symbol names.
   f) Mr. Karl Ivar Larsson: Are these symbols coming from some European standards, or EU regulations etc.? Has that been checked?
   g) Dr. Asmus Freytag: With the chemicals it is important to note that these are a class of related plastics, and not just one molecule. If the name should be names of plastics, we still have a number of choices -- one of many possible chemical names can be used. We have not checked if there is any European standard or regulation. I would welcome input from those who are closer to the EU regulation scene. It is nice to have authoritative source information. These symbols are fairly widely used. One could go back and check with the users to get at the sources. However, we have found a consistent use of a limited set of these symbols. In the context of the web, it is more important to treat the various symbols with the full semantics behind them -- the web has changed the circumstances demanding more attention to the semantic behind symbols on the web. That is the sum total of the arguments in going forward with these symbols.
   h) Mr. Marc Küster: There is an EC Directive on packaging and packaging waste where recycling symbols are used. In Germany there are great number of symbols (a side issue) of the same kind. There is blurring between the zone of logos versus symbols. Logos are also used in great many products -- owned by some private organizations. These symbols seem to be on the borderline with Logos. We should consult the ISO committees responsible for symbols. The relevant EC directive should also be consulted. Each of these symbols should be checked for Logo versus Symbol.
   i) Mr. Karl Ivar Larsson: Are we talking about Logos or characters? I would like to take it back to Sweden with people responsible for environment matters and get their feedback.
   j) Mr. Alain Labonté: There are IEC 417 and ISO 7000 are the two standards dealing with symbols.
   k) Mr. Mike Ksar: Are there any Japanese standards related to these symbols?
   l) Mr. Michael Everson: Dr. Asmus Freytag has been in contact with ISO 7000 community. We had presented this in 1997 initially -- the national bodies did have enough time. It is not interesting to

me whether or not there are EC directives. The North American official documents are sufficient. However, I find them everywhere in the consumer world. Whether or not they are OFFICIAL is less important. It is true that the Green Dots (der Grün Punkt) is a Logo -- it was proposed earlier in Fukuoka and was rejected because it was a Logo. The proposed characters are not Logos.

m) Mr. Takayuki Sato: How much glyph variation is permitted to these characters? How many additional classifications (symbols) could be expected in the future?

n) Dr. Asmus Freytag: All plastics manufactured worldwide will be marked with these symbols. The question "How stable are these?" has been asked. We are to be concerned about their use in textual instructions. The instructions will work only when it is marked up for worldwide distribution. There is considerable glyph variation with various thickness etc. Six types of plastics are distinguished. There are various Logos also existing. One generic symbol -- Universal Recycling Symbols is proposed. Others are for plastics of different types. No new question has been asked on the proposal -- the same set of questions we have heard in 1997 are being brought up.

o) Dr. Ken Whistler: I would like to point out that the recycling symbols appear most everywhere. Mr. Arnold Winkler searched the web and had about 11800 hits on the topic of recycling. It is far more widely used than what one might suspect.

p) Mr. Erkki Kolehmainen: I may be able to assist in getting source information on EC directives etc. I have been traditionally opposed to these kinds of symbols etc. However, I am convinced that these symbols are useful.

q) Mr. Mike Ksar: From the usability of these symbols -- it may be wiser to use the shorter names like TYPE-1, TYPE-2 etc.

r) Dr. Asmus Freytag: Putting the number again in the name, when it appears on the symbol, may be redundant.

s) Mr. Michael Everson: That is not correct --it is what the user expects.

t) Mr. Mike Ksar: The NBs had a chance to review these earlier and still have a chance to review. I propose we PROVISIONALLY ACCEPT these characters. The proposers are requested to get some references to relevant standards / source documents etc. added to the proposal.

Disposition: WG2 provisionally accepts the eight proposed characters. Names were resolved by the ad hoc on Amendment 1 draft, and these eight symbols are included in document N2281.

Action item: The proposers are requested to get some references to relevant standards / source documents etc. added to the proposal.

Relevant resolution

RESOLUTION M39.10 (Recycling Symbols):	Japan Abstains
WG2 accepts the eight recycling symbols proposed in document N2240 at code positions 2672 to 2679 in the BMP, with the names UNIVERSAL RECYCLING SYMBOL, RECYCLING SYMBOL FOR TYPE-1 PLASTICS, … TYPE-2 PLASTICS,…, and … TYPE-7 PLASTICS.	

7.10 Proposal to add 6 Egyptological characters

Input document:
N2043 On the apostrophe and quotation mark, with a note on Egyptian transliteration characters; Everson; 1997-07-24
N2241 Proposal to add 6 Egyptological characters to the UCS; Everson; 2000-08-27

Mr. Michael Everson: I noticed a few characters widely used in Egyptology, but are not encoded in UCS. Characters proposed in document N2241, are used for a very long time -- I do not know which Egyptologist invented these. Six characters proposed are from Gardiner's textbook.
Discussion:
a) Mr. Johan van Wingen: I remember these characters in Leiden University about 10 years ago. The name of this proposal is rather confusing -- the name should be … transliteration characters. I would like to have the opinion of Netherlands national expert (from Utrecht University) and I need some time to get his opinion. It should also be verified, if the CAPITAL forms of these letters are really needed.

b) Mr. Michael Everson: Page 4 has some evidence of use of Capital letters from Gardiner's Egyptian grammar.

c) Mr. Marc Küster: Such transliteration characters are used in Oriental studies outside of Egyptology. The Yod characters look much like "I" with some diacritics -- it should me made clear why this is not unified with other possible encoding in UCS. The glyph differences should also be

kept in mind -- an elongated comma. I would like to get feedback from German Egyptological experts. I appreciate the aim of this paper. The other characters are required for transliteration purposes. The Ayin comes out as a half circle - glyph form. The Alef glyph is also -- two half circles not quite connected -- in transliteration work.

- d) Dr. Ken Whistler: I have no problems with the Alefs. I am wondering if the Yods cannot be encoded using existing characters in UCS. The AYIN signs are already encoded -- with a different Glyph Form. The Unicode 02BF annotation shows that it is Arabic Ayin. It is the lower case -- we should be able to use that character. The Gardiner's example is here -- however, it is not clear the CASE distinction is maintained in general by all Egyptologists.
- e) Mr. Mike Ksar: This document N2043 was initially submitted. Document N2241 is an update -- the national bodies have seen this before. Looks like there are questions on the Yods and Ayins. If we could get some more information on these characters it would be useful.
- f) Mr. Michael Everson: I appreciate the feedback given. I can have an ad hoc. This proposal is not simply an update of previous submission. There is no urgency to add these characters. I can accommodate the comments. The question of decomposition of Yod -- what would we decompose these to? I will ad hoc with others to get some answers.

Action item: Mr. Michael Everson is to work in ad hoc with other experts and refine the proposal.

7.11 Proposal for encoding Dehong Dai script

Input documents:
Old documents:
N966   Proposal for encoding Dehong Dai script; China; 1994-01
N967   Proposal for encoding New Xishuangbanna Dai script; China; 1994-01
N1013   Motion on coding of old Xishuang Banna Dai Writing in 10646; China; 1994-04-18
N1099   The motion on coding of old Xishuang Banna Dai Writing in BMP; China; 1994-10
New documents:
N2239   Revised proposal for encoding Dehong Dai script on BMP of ISO/IEC 10646; China; 2000-08-08
N2242   Revised proposal for encoding Xinshuang Banna Dai script on BMP of ISO/IEC 10646; China; 2000-08-27
Output document:
N2292   Ad hoc report on Dehong Dai Script; Ad hoc; 2000-09-25

Ms. Zhao Qinglian: Introduced the two documents from China. Document N2239 is a revised proposal for Dehong Dai. Document N2242 is a proposal for 72 characters for Xinshuang Banna Dai. The two scripts are different.

Discussion:
- a) Dr. Ken Whistler: Are these documents replacing any previous proposals on these scripts? If so, NBs are to note that these latest documents are to be used for review and study (replacing documents N966, N967, N1013, and N1099).
- b) Ms. Zhao Qinglian: Yes – these are replacements.
- c) Mr. Michael Everson: We have previously submitted the proposal summary forms, for Dehong Dai script, the actual count of characters may be incorrect. I will update the proposal summary forms to reflect the latest submissions.
- d) Mr. Takayuki Sato: There was some information asked from Thai proposal for ISO/IEC 8859-11 in WG3. In 10646, these Dai script proposals - should be compared with the Thai proposal, and information similar to the Thai proposal should be provided.
- e) Mr. Michael Everson: Related Xishuang Banna Dai script, there is some work on describing the sequences, the model (based on Indic scripts) etc. These will also be prepared. The coding model is different from Thai model for WG3.
- f) Mr. Zhang Zhoucai: The proposal summary form -- who is going to update it? Who is to prepare further information?
- g) Mr. Mike Ksar: Mr. Michael Everson and Chinese experts on Dai will cooperate and prepare further submissions.

(See also document N2292 prepared after the meeting- Ad hoc report on Dehong Dai Script; 2000-09-25.)
Action Item: NBs to review the submissions; Convener to add to next meeting agenda.

Relevant resolution

RESOLUTION M39.17 (Dai scripts):	Unanimous

With reference to documents N2239R and N2242R, Dehong Dai and Xishuang Banna Dai scripts, WG2 invites the Chinese national body to work with other national bodies and interested experts, and prepare revised proposals and proposal summary form, with assistance from the contributing editor Mr. Michael Everson, for consideration by WG2 at its next meeting in April 2001.

7.12 Proposal to synchronize Bengali standard with 10646

Input document:
N2261   Letter & Proposal summary form – Bengali; Bengal; 2000-09-06

Mr. Michael Everson: UCS has 098C(?) -- Bengali standard does not have it; Character KHANDATA is not in UCS. It is located at xBA in the BDS 1520:2000 standard. We do not have further evidence of use of this new character. The BSTI should be requested to provide further evidence of use of this character. I could email them to get the feedback.

Discussion:
   a) Mr. Takayuki Sato: There is no contact through Japan. Reference document N1634 - Old version of the standard June 29 1997 -- what is the relation to it? Are the old and the new versions of BSTI still in effect, and will it have impact on interoperability with 10646 -- and the new proposal etc.
   b) Dr. Umamaheswaran: Even if this character is accepted, we need to ensure that the phonetic alignment with other Indic scripts is maintained; ISCII inter-working etc. should of concern.
   c) Dr. Ken Whistler: x3A or xBA are not used in any of the Indic scripts -- it is picked from the area of consonants. Interoperation with ISCII will be an issue. There are open questions on this proposal.

Action item: Michael Everson to contact BSTI (email id, name etc. are in the cover letter) - a query was sent out to Unicode experts' list also.
   d) Dr. Ken Whistler: We enquired with the Bengali standards list, and to the Unicode list. One expert explained what is KhandaTa. It is a form of letter TA with VIRAMA. He explained the rationale for having that character in the 8-bit standard because lack of mechanism of ZWNJ etc. However, we do have the mechanism in 10646, and need not be standardized. The new BDS 1520: 2000 standard replaces the previous edition. Our response will include how you can encode the KhandaTa in 10646.

Disposition: Not accept the new character can be encoded in 10646. We understand that BDS 1520:2000 is a complete replacement of BDS 1530: 1997.
Action item: convener is to communicate to BSTI.

Relevant resolution

RESOLUTION M39.11 (Request from Bangladesh):	Unanimous

In response to the request from Bangladesh Standards and Testing Institution in document N2261 for adding KHANDATA character to 10646, WG2 instructs its convener to communicate to the BSTI:
a.   that the requested character can be encoded in 10646 using the following combining sequence: Bengali TA (U+09A4) + Bengali Virama (U+09CD) + ZWNJ (U+200C) + Following Character(s), to be able to separate the KHANDATA from forming a conjunct with the Following Character(s). Therefore, their proposal is not accepted.
b.   our understanding that BDS 1520: 2000 completely replaces the BDS 1520: 1997.

7.13 SOFT HYPHEN and some other characters

Input document:
N2268   SOFT HYPHEN and some other characters, Kent Karlsson, Sweden; 2000-09-15

Mr. Kent Karlsson: There is some discussion on SHY in the Linux discussion group -- the interpretation is LF, CR, must immediately follow SHY; otherwise it can be stripped out etc.
Discussion:
   a) Dr. Asmus Freytag: I very much welcome the intent of the proposal - on the interpretation of SHY. The concept of Line Breaking is complicated enough that we not try to get too deeply into the behaviour of some of these characters. Ideally we should point to documents on Line Breaking -- such as UTR. Some of the definitions proposed here are going too much into detail. We can correct the misinterpretation of SHY by explanatory text enough to correct the misinterpretations --

at one point we can state that the regular behaviour of hyphenation do apply whether it is caused by SHY or the grammatical rules, and point to somewhere else. We can informatively point to another document such as the Unicode Technical Report where it would be possible to point out all the possible edge cases etc. It would be better if we do a good job on the Line Breaking technical report than just addressing some of these characters.

b) Mr. Johan van Wingen: The SHY is not only included in 10646, it is also in most parts of 8859. If we put on paper some explanation on its use, where should we put a reference in 8859 series to some other document? If it is used in a normative way somewhere else, there may be some implications.

c) Mr. Mike Ksar: Speaking for 10646, there is no specific place where such information can be placed -- Annex H is informative and could be placed there. Let us not stretch -- there are too many parts of 8859 and the work could be significant. Focusing on 10646, is the proposal to address all these characters in Annex H? Was this discussed in WG3? (NO).

d) Mr. Kent Karlsson: My intent is to put all these characters into Annex H and in all parts of 8859.

e) Mr. Karl Ivar Larsson: This document is an expert contribution. It was discussed in the National Body -- when we realized that it would have impact not only on 10646 but on all other standards like 8859, 6937 etc. also. This should be discussed here.

f) Mr. Erkki Kolehmainen: Has any body else been advocating that this is the only solution to use of SHY. Should we take some practical action such as making a public statement to correct any misinterpretation?

g) Mr. Kent Karlsson: There are persons who have been arguing that a LF MUST follow SHY on the Linux forum.

h) Mr. Alain Labonté: There was discussion in WG3 back in 1990. There was ambiguity as you say. SC2 does not prescribe on the use of characters. Mr. Markus Kuhn has one interpretation. However, we cannot make that one use the mandatory way.

i) Dr. Asmus Freytag: This gets us into a very interesting issue -- we are coding various things because we need a way to express the concepts. If we maintain the position that the characters we are adding can be used by applications in their own way -- then we cannot achieve the goals of not misinterpreting. There are some characters whose semantics may have to be prescribed. We do not go into the customary behaviour of letters, numbers etc., and is well described elsewhere. In other instances, we cannot get away by not knowing anything about characters such as SHY. SC2 may have the notion sometimes that the name of the character indicates the semantic. I agree that we should not go overboard -- and accept the identity of the character as sufficient.

j) Mr. Alain Labonté: For the exchange of data, Mr. Markus Kuhn's interpretation is not correct. The data loss should not be allowed. The NBSP, SHY etc. are in similar vein.

k) Dr. Umamaheswaran: SC2 had traditionally kept the concept of control characters and graphic characters separate. There are some characters, which are classified as Graphic Characters with some SOFT CONTROL meanings where the semantics are not well specified -- their definitions will have problems.

l) Mr. Alain Labonté: SHY etc. are defined to be GRAPHIC CHARACTERS -- they were deliberately left without specific semantics if they are used as SOFT CONTROLS.

m) Mr. Evangelos Melagrakis: In 8859 we do have some characters which have the control meaning -- for example, the bidi controls in Hebrew parts.

n) Dr. Ken Whistler: In addition to the issues Dr. Umamaheswaran has pointed out, Control Function has been very well defined. The graphic characters have been left without semantics. The gray area between controls and graphic characters has been causing problems. The Unicode standard has dealt with these issues. Here we have an example of how people read the standards. One of them -- legal legislation related -- where there is a broader interpretation permitted, versus others who restrict the interpretation to the text that is written. Here is a case for interpreting the standard to suit one's implementation, even though there is ample evidence of the more liberal usage intent. SC2 has to come to grips with this problem.

o) Mr. Mike Ksar: There are issues that have been brought up here. We cannot adopt someone's implementation as the interpretation of the standardized when these are left with a broader intent. We have to be careful -- especially if there are some IPR issues associated with a specific implementation. It is document N506 in WG3.

p) Mr. Erkki Kolehmainen: There is another advocate of this particular interpretation of SHY from Finland, and I will have a dialog with that person.

q) Mr. Evangelos Melagrakis: This issue can cause a number of problems in SC2 standards. There are many characters that are encoded as Graphic Characters -- with control like behaviour. The question of what to do with Ambiguous Characters? The Arabic, Hebrew and Thai parts etc. do have these issues.

r) Dr. Ken Whistler: If we focus on this particular interpretation of SHY, we could get this committee to agree that the SHY is not intended to be arbitrarily deleted in the interest of preservation of the data integrity, it will help.

s) Dr. Asmus Freytag: The full text proposed by Mr. Kent Karlsson can also be reviewed and agreed upon, as this committee's interpretation of the set of characters in the document.

t) Mr. Michel Suignard: 8859 should not be in the business of creating semantics of soft controls. Due to the mapping relations to 10646, the semantics should be the same. The semantic should therefore be added to 10646 first. I think WG3 should not create its own semantics.

u) Mr. Mike Ksar: Much like the graphic character names being referenced on 10646 as the basis, we should also keep the semantics behind any soft controls in 10646, and reference from WG3 standards.

v) Mr. Erkki Kolehmainen: The norm should be 10646. On the consensus on agreeing to the interpretation of the specific characters in SHY etc. Mr. Kent Karlsson's document can be a start.

w) Mr. Alain Labonté: 8859 series is always dealing with INTERCHANGE and not processing. One of the basic principles is that the character loss is NOT tolerable in interchange. The characters are there for a purpose and must not be filtered out.

x) Mr. Evangelos Melagrakis: The best we could do is, at some point in time -- 8859 could possibly have a small technical corrigendum to state the semantics behind the soft controls etc., which goes into the common text pointing to 10646 for example.

y) Dr. Umamaheswaran: We will clarify that SHY implementation must not be stripped out to correct the misinterpretation in Linux community. The principle of no loss of information must be maintained for all other characters.

Action item: Messrs. Kent Karlsson and Hideki Hiura -- action item to communicate the message that SHY stripping must not be done to prevent loss of information during interchange.

Relevant resolution

RESOLUTION M39.3 (SOFT HYPHEN and others):	Unanimous
With reference to document N2268, WG2 endorses the principle that SOFT HYPHEN - SHY and other similar characters in the standard must not be lost during interchange even though their properties and behaviour are not explicitly specified in SC2 standards, including 10646. Further WG2 requests Mr. Hideki Hiura to communicate this principle to the Linux community.	

7.14 Philippine scripts

Input document:
N1933   **Revised proposal for encoding the Philippine scripts; Everson; 1998-11-10**
N2187   **Overview of characters approved by Unicode; Unicode Consortium – Asmus Freytag; 2000-03-13**
N2194   **Philippino characters; Sato; 2000-03-22**

Mr. Michael Everson: We put this proposal on hold in previous meetings. The Unicode Technical Committee has since accepted the scripts (see document N2187). Philippines was consulted, and the reference documents they suggested were the same as those used in the earlier proposal -- a vendor implementation from California.

Discussion:
a) Mr. Takayuki Sato: Check the document N2194 presented in Beijing - it contains my report. Philippines national body still has not found an appropriate expert or an alternative source for these scripts. The danger is that the reference is a single source. Technically there will be no difficult. We need to take a decision. On 21 November 2000, I will have an opportunity to meet the Philippine NB expert.

b) Mr. Mike Ksar: My proposal is to go ahead and accept these.

c) Mr. Michael Everson: There are about 9 sources listed in the proposal. It is not a single source.

d) Dr. Ken Whistler: The UTC has approved these - we have allocated code positions. It should be consistent with document N1933, but we will double check.

Disposition: Accept document N1933 - Philippine scripts – proposed code positions and shapes in the BMP.

Relevant resolution

RESOLUTION M39.12 (Philippine Scripts):	**Unanimous**

WG2 accepts the 81 characters for the four Philippine scripts proposed in document N1933 and assigns them for inclusion in the BMP as follows:

a. Tagalog - 20 characters starting at code position 1700, the block extending to 171F
b. Hanunoo - 23 characters starting at code position 1720, the block extending to 173F
c. Buhid - 20 characters starting at code position 1740, the block extending to 175F, and,
d. Tagbanwa - 18 characters starting at code position 1760, the block extending to 177F.

The character names and shapes are as shown in document N1933.

7.15 Komi Cyrillic

Input documents:
N1744   **Additional Cyrillic characters – TC46 input; Everson; 1998-05-25**
N2224   **Archaic Komi Cyrillic characters; Everson; 2000-05-25**

Mr. Michael Everson: In document N1744 in May 1998, I had proposed a large number of Cyrillic characters from one of the TC46/SC4s' ISO 10754 standards. Of these the Kildin Sámi characters were accepted -- two are already in the standard, four are in the bucket. The remaining characters - we needed additional information on their sources etc. Of these a set has been found in Komi script. It was suggested that two of these can be used in Serbian, but this is not correct. Historically the proposed 16 characters' usage; it is considered not appropriate to unify the two characters. There are still more characters from the TC46 list that are not included here.

Discussion:

a) Mr. Johan van Wingen: Several years ago, there was a Cyrillic project report that was conducted (report still available from NNI). I do not find the proposed characters in that report. If we take all historic characters, there are academic transliteration and letters used for translation. There is no use to introduce these historic characters in our standards. Some of these are used only in a single document. Acceptance of the characters based on the evidence given here will produce precedence for several other language scripts, which also need some historical characters. If we are going to cover all of the past it will be a nice exercise but there is no practical use for these.

b) Mr. Erkki Kolehmainen: This particular proposal has been prepared with the knowledge of the Finnish national committee -- however, because there was insufficient time in the NB to review it, it has been sent in as a working group expert contribution. I do not have a position to take from the national body.

c) Dr. Ken Whistler: The US committee also has not taken a position on these. The assessment on these has been that there is no current implementation for these. The only use for these would be to complete the compatibility mapping to an existing ISO standard. As to the current representation of Komi, we do not see this as an urgent matter. I do not see any urgency towards including in 10646-1 amendment.

d) Mr. Johan van Wingen: I am opposing this proposal only because of the precedence it can set allowing a potential flow of additional questionable scripts. We should not accept this at this time.

e) Mr. Michael Everson: I find this discussion disappointing. The orthography was introduced in 1919 and was in use in literature till about 1940. There may not be any urgency, but neither is there a reason for delay. In addition, they are part of an ISO standard, which has not been transferred to SC2 because of the mapping question. There are also several other characters from that standard that are still open from mapping perspective. From the historical perspective, this script was in use not too long ago. Our standard already includes many historic characters. I propose that this should be accepted for inclusion in the next amendment to the standard.

f) Mr. Erkki Kolehmainen: I understand that these characters are needed to map to another ISO standard. The question -"whether these characters got in the other standard by mistake or not?" - has been open. However for mapping purposes, I can support - as an individual expert -- inclusion of these characters.

g) Dr. Asmus Freytag: We are not absolutely bound to include this immediately.

h) Mr. Johan van Wingen: There are four references given. The lexicon for the language is from 1924. I have no idea about the 1979 reference -- not convinced of the quality of the book. I want

to make sure that WG2 mark these characters clearly as historical. One could do some research and discover all obsolete Cyrillic characters, and based on that count one could allocate the space for all supplemental characters rather than just encoding the Komi script.
  i) Mr. Mike Ksar: My proposal is to accept these characters into the bucket. There is an opportunity for national bodies to make their comments during the PDAM ballot.
  j) Mr. Michael Everson: There is a space allocation problem for these. The existing Cyrillic Block has three columns prior to the Armenian Block. There are 10 empty positions in the Cyrillic block now. We need 16 positions.
  k) Dr. Asmus Freytag: We have not completely exhausted the potential Cyrillic characters. Rather than filling the holes in the existing block, put them in an Extended Cyrillic block. It will have the advantage of being able to distinguish these from the more commonly used characters.

Disposition: Accept the proposal; create Cyrillic Supplement Block (of 3 columns) starting at 0500 of BMP. The first sixteen positions starting 0500 to 050F are to be allocated to the Komi characters. See document N2224 for the glyphs etc.

Relevant resolution

M39.13 (Komi Cyrillic):	Unanimous
WG2 accepts the 16 Komi Cyrillic characters with their names and shapes as proposed in document N2224, for encoding in positions 0500 to 050F in the BMP, in a new Cyrillic Supplementary block extending to 052F.	

7.16 JIS X0213 Symbols

Input documents:
N2256   **Circled Numbers in JIS X 0213; Japan; 2000-09-04**
N2257   **JIS X 0213 symbols - part-1; Japan; 2000-09-04**
N2258   **JIS X 0213 symbols - part-2; Japan; 2000-09-04**
Output document:
N2278   **Ad hoc report on Japanese proposal for additional symbols (N2256, N2257, N2258); Freytag, Whistler, Everson, Sato; 2000-09-19**

Mr. Mike Ksar: Documents 2256, 2257, and 2258 are all related to JIS X0213 symbols. The purpose of discussion on these would be how many of these characters could be added to Part 1 amendment. Opportunity to add more is open till FPDAM stage,
Mr. Takayuki Sato: I had discussion with Messrs. Ken Whistler, Michael Suignard and others in the ad hoc group on JIS X0213 symbols.
- Document N2256 needs some discussion. It contains a counter proposal for Circled Numbers - there is no response.
- Document N2257 - per Beijing meeting we got agreement on 21 characters. There was no further feedback from the ad hoc. These should be added to Part 1. Japan would like to get these accepted.
- Document N2258 - we did not agree on this set of symbols - these are related to Math symbols. The document contains response to some comments. There is disagreement on the Arrow and Return Sign - character names. Japan has objection on Rising symbol, Falling symbol, and the IPS symbols. For the Double Hyphen -we need confirmation -- name change is not acceptable to Japan. The Double Parenthesis - JIS defines it as double and white. If Double includes White -- then the name is OK. Otherwise there is problem. We have provided evidence for the Sesame Dots. On the Double Plus etc. Japan has no particular position. Double Bullet - Japan has alternate proposals. Japan has no preference on 56 pre-composed characters versus combining sequences at this time.

Discussion:
  a) Mr. Michael Everson: I am part of this ad hoc group. Difference between single and white single parenthesis is whether there is filling inside or not.
  b) Mr. Takayuki Sato: There are also double parentheses joined and not joined at the top.
  c) Dr. Ken Whistler: There are number of complicated issues raised by Japan - particularly in document N2557. I would suggest an ad hoc group for this afternoon to get resolution to the various points.
(Mr. Mike Ksar: Messrs. Michael Everson, Asmus Freytag, Ken Whistler, and Takayuki Sato form the ad hoc group. The documents have been out there since 4 September 2000. The ad hoc group is to consider documents N2256, N2257, and N2258, and report back.)

Ad hoc group recommendations:
a) Dr. Asmus Freytag: presented the results of ad hoc discussions (the ad hoc report was produced later as document N2278). We looked at documents N2256 and N2258 -- and then N2263 (Amd-1 draft).
    *   We propose that all the characters from document N2257 are included.
    *   Regarding document N2256 - the ad hoc proposed to name the characters based on the shape - SMALL instead of KATAKANA.
    *   Regarding document N2258:
        *   Names -- the two arrows are part of a larger set and have to be consistently named with others.
        *   Item 2 - Comment from Japan has been accepted. The character is to be used for both WHITE and BLACK ones. The WHITE one is the most common use. In Arrows we de-unified them, however, for Keyboard symbol decided not to unify. Ad hoc decided not to accept the two additional IPA Tone letters -- Japan will review these further.
        *   Double Hyphen - no need to include a general one, will call it as Katakana/Hiragana specific. (ACTION ITEM: Think of Character name.).
        *   For item 9 - there are three sets of circles inside one, progressively getting smaller. Three distinct ones are required to cover the Japanese standard.
    *   The new item however is the resolution of questions on Circled Numbers from document N2256. These should be added to the BMP somewhere in the 3300 block. The glyphs for circled numbers will match JIS X0213, from previous submission - document N2093.
b) Mr. Mike Ksar: The result of ad hoc was to change two items in document N2263. We will take up the changes while preparing document N2281, the update to document N2263. (See agenda item 7.20 on page 35 for discussions on document N2263). I would like to express my thanks to the ad hoc group for their recommendations.

Relevant resolutions

M39.14 (Dentistry Symbols from JIS X0213):	Unanimous
Per the ad hoc recommendation in document N2278, WG2 accepts the 15 Dentistry Symbols originally proposed in document N2195 for compatibility with JIS X0213 at code positions 23BE to 23CC, with their shapes (to be refined) and names as shown in document N2263.	

M39.15 (50 circled numbers from JIS X0213):	Unanimous
With reference to documents N2093, N2195, and N2256, WG2 accepts 50 circled numbers for compatibility with JIS X0213, for encoding in the BMP. WG2 further accepts the ad hoc recommendation in document N2278, to encode them in positions 24EB to 24FE, 3251 to 325F, and 32B1 to 32BF.	

M39.16 (Remaining JIS X0213 symbols):	Unanimous
WG2 adopts the recommendations for name refinements and code positions in the ad hoc report (document N2278) for the remaining JIS X0213 symbols.	

7.17 Diacritics for Medieval Studies

Input document:
N2160   Proposal to add Latin combining characters to support Middle High German; DIN – Marc Kuester; 2000-02-16
N2266   Diacritics for medieval studies; Marc Kuester & Isabel Wojtovicz; 2000-09-15

Mr. Marc Küster: Document N2160 - is the base document. Document N2266 is a contribution - on representing the Medieval German language and other scripts also use these. These consist of Superscript Vowels - these are used to indicate different pronunciations. They occur very frequently in an ongoing project, which has been active for about last 100 years or so. During the last 30 years or so, they are also being published by electronic means. These cannot be presented on the web using 10646. Literature related to German Studies uses these. Thirteen Letters are identified in the paper, extracted from databases. There is no proper way of representing these characters directly now. Page 5 of document N2266 shows the missing ones. These are proposed for encoding in the BMP.
Discussion:
a) Mr. Mike Ksar: National bodies are asked to review this document.
b) Mr. Michael Everson: The first submission was presented as document N2160 in Beijing, but was not discussed. It contains a selection of attested characters needed.
c) Mr. Marc Küster: There is some urgency to include these characters to support projects that need them.

d) Dr. Ken Whistler: Essentially, as a proposal to encode this document N2266 contains a subset from the earlier document and should be viewed as superceding what is in document N2160. This document is well researched. I am not sure how the US committee will view this. I think we can include these in the amendment and seek comments from the NB.
e) Mr. Erkki Kolehmainen: I support Dr. Ken Whistler's view.
f) Mr. Michael Everson: I concur. I need to have an ad hoc with the roadmap people to deal with what may be coming down the pipe.
g) Dr. Umamaheswaran: We could treat these characters similar to what we did with the circled numbers.

Disposition: Accept these characters; allocations as proposed in document N2263 (see also discussion under agenda item 7.20 on page 35).

Relevant resolution

M39.18 (Diacritics for Medieval Studies):	Unanimous
WG2 accepts thirteen combining letter diacritics used in Medieval European literature proposed in document N2266 along with their proposed names and shapes for encoding in the BMP at code positions 0363 to 036F.	

7.18 TCA contributions

Input document:
N2270   Updated CJK Compatibility Ideographs sets from TCA; TCA; 2000-09-19
N2271   Propose to amend two source code changes in BMP CJK Unified Ideographs block; TCA; 2000-09-19

Mr. Shih-Shyeng Tseng: Document N2270 belongs to Agenda Item 8 - related to Extension B (see discussion on document N2270 under item 8.1 on page 41). Referring to document N2271, while going through Super CJK, two errors were discovered in the BMP
- At U+0590 the wrong character is there in the China-T column (source T4-2625 should change to T4-225B). It should be corrected.
- T-source for U+7921 should be moved to U+7934.

Discussion:
a) Mr. Takayuki Sato: About the 1st one, the shape in the G-column is unchanged. Are these not unified?
b) Mr. Shih-Shyeng Tseng: The suggestion is not to unify these characters. The T4-2625 will be moved to Super CJK. The two characters T4-225B and T4-2625 have different pronunciations. The G and J columns do not have the horizontal stroke in the character.
c) Mr. Takayuki Sato: T4-2625 is in the current 10646 as part of the unified CJK at U+5B90. Taiwan would like to change this to T4-225B. This means we are now unifying T4-225B with the existing G and J column ideographs.
d) Mr. Mike Ksar: Did IRG look at this issue?
e) Mr. Shih-Shyeng Tseng: This issue was raised in the IRG. IRG has not taken an action on it.
f) Mr. Takayuki Sato: The question of error in the T column could be a corrigendum. The unification with T4-225B is a different question.
g) Dr. Ken Whistler: T4-2625 is also in Extension B -- at 2-19F7 and has to be dealt with in the Part 2 disposition of comments.

Mr. Mike Ksar: This should be an IRG matter. I want to wait till the IRG rapporteur to arrive -- we can have an ad hoc to discuss these. This should also be under agenda item 8.

(Note: This item was put on HOLD during the meeting, and was not discussed again during the meeting. However, after the meeting - based on email exchanges between myself, Mr. Michel Suignard and Dr. Ken Whistler:
Mr. Michel Suignard: The BMP corrigendum is an IRG matter and should be discussed in Seoul. BTW, isn't this going to impact vendor mapping for CNS code pages into Unicode?
Dr. Ken Whistler: Document N2271 impacts the Han tables of 10646-1. I think there was consensus that these fixes should be done. Presumably this requires a defect report, since these mapping for the unification are normative.
V.S. Umamaheswaran)
Action item: TCA and IRG rapporteur to take note.

7.19 APL characters

Input document:
N2260   Report from the APL working group meeting in Berlin, July 2000 [APL characters]; SC22 –APL, Lee Dickey; 2000-09-05
Output document:
N2283   Response to APL question on character names (N2260); WG2, Ed Hart; 2000-09-21

Mr. Arnold Winkler: 10646 has gone with the names uptack and downtack in APL. Since then the APL committee has decided to change the names of these characters. The APL committee has asked through SC22 a change in 10646 names. My personal take on this is that we cannot take any action -- on changing the names.

Discussion:
- a) Mr. Michel Suignard: I spent some time with the editor. We cannot change these names.
- b) Dr. Umamaheswaran: Annotations to the APL characters were added earlier.
- c) Dr. Ken Whistler: The annotations in Annex P -- recognized the inconsistency in names of these characters. One positive change WG2 could make is to slightly reword the existing note and point it to the new APL standard.
- d) Mr. Ed Hart: I volunteer to write the corrigendum text to the note.
  (Mr. Ed Hart prepared a document with proposed corrigendum text - see document N2283.) Document N2260 was received from the APL working group of SC22. Document N2283 is the proposed response to the APL community.
- e) Dr. Umamaheswaran: The reference that we propose to be added to the Annex P should include the dates for the APL standard.
- f) Dr. Ken Whistler: These dates are in document N2260. 10646-1: 2000 text should also include the references to the APL standards.

Disposition: Accept the proposed editorial corrigendum text - a note on APL annotation in Annex P to point to the change in the APL standard names. Await feedback from APL WG before processing it as Editorial Corrigendum.

Action item: Mr. Arnold Winkler - to communicate document N2283 as response to document N2260 from the APL working group.

Relevant resolution

RESOLUTION M39.4 (Response to APL WG):	Unanimous
WG2 accepts document N2283, and invites Mr. Arnold Winkler to send it to SC22/WG3 - APL working group, as the response to their proposal in document N2260 regarding name changes to APL characters.	

7.20 Proposal for Reserved Positions for Processing Purposes

Input document:
N2277   Proposed amendment to Part 1 of 10646; NCITS/L2; 2000-09-19

Mr. Michel Suignard: In Part 1 code positions 0000 FFFE and 0000 FFFF are marked as RESERVED with a note that these are not to be used as characters. There is a need for additional character positions that are used internally for processing purposes. The PUA cannot be used for such use, due to non-round tripping possibility etc. The proposal is to reserve 32 new values in the BMP for such internal processing purposes. These are NOT supposed to be INTERCHANGED. The proposed code positions are 0000 FDD0 to 0000 FDEF. The space that is proposed is pretty well dead space, in the Arabic Presentation Block. We have taken a resolution not to add any more to that block. The US national body has accepted these. Document N2277 has the proposed changes to Clause 7 and Clause 8 of Part 1, and moving the Note from Clause 7 to clause 8.

Discussion:
- a) Dr. Ken Whistler: This is not a request for additional characters. But a request to block these off as RESERVED permanently, and guarantee that these will not be ever assigned to any characters. There is no change to BLOCKS etc. There should not be any implications to the Road Map. There is no change to the names list.
- b) Mr. Michel Suignard: There is an inconsistency in the charts -- RESERVED, SHALL NOT BE USED, and NOT SPECIFIED IN THIS STANDARD -- appear. There is a need to clean these up in the charts. Editor will take this up.

Disposition: Accept proposal in document N2277 for inclusion in the next amendment. FDD0 to FDDF -- to permanently reserved; also FEFF and FEFF - annotations to be aligned.

Relevant resolution

RESOLUTION M39.22 (Permanent Reservation):   **Unanimous**
WG2 accepts to permanently reserve 32 character positions FDD0 to FDEF in the BMP (as proposed in document 2277) for internal processing purposes, with the following annotation for each code position: (This position is permanently reserved) For consistency, WG2 also agrees to change the annotation for all code positions ending with FFFE or FFFF in all the planes.

7.21 10646-1: 2000 - Amendment 1 draft

Input documents:
N2263   Working Draft of Tables and Character Names for proposed amendment 1 to 10646-200; US; 2000-09-15
N2228   Draft PDAM for ISO/IEC 10646-1: 2000/Amd.1: 2000; Paterson; 2000-06-06
N2264   Summary proposal form for Thaana letter Naa in the BMP; US; 2000-09-15
N2265   Summary proposal form for Terminal Graphic Symbol in the BMP; US; 2000-09-15
N2273   Draft PDAM text 10646-1:2000 – JIS compatibility characters – correction to N2142; Japan; 2000-09-19
N2293   Supplemental information of Terminal Graphics Proposal – N2265; Unicode; 2000-09-25
Output documents:
N2281   Updated N2263 – Working draft of Tables and Character Names for proposed Amendment 1 of 10646-1:2000; US; 2000-09-21
N2285   PDAM 10646-1:2000 preparation document – update N2228; Freytag; 2000-09-21
N2313   Roadmap – BMP; Everson; 2000-09-21

Document N2263

Dr. Ken Whistler: At the Beijing meeting we approved 591 math symbols. The US was charged with creating a refined proposal incorporating the comments from the Beijing meeting, and results of ad hoc discussions on some of the outstanding questions. These are included in document N2263. In addition it incorporates all the characters we have accepted for inclusion in Part 1 up to the Beijing meeting (M38). This document includes only the code charts and name tables.

- In row 3, p2, combining grapheme joiner. This was discussed but not fully accepted. It will be removed from the charts before we adopt the Amendment 1 tables. See discussion under item 7.8 on page 23.
- The square foot sign is already accepted in Beijing - resolution M38.7.
- Row 23 on p 28 and row 25 on p 30. Row 23 contains characters from earlier WG2 documents. 239B through 23B6 are all from Math Symbols proposals introduced in Beijing.
- One Variant Selector (from Math Symbol proposal)

From discussion under item 7.7 on page 23 on Zero Width Word Joiner:
- In row 20, p12, 6060 - WORD JOINER; the ad hoc had recommended change of name to WORD JOINER.

From discussion under item 7.9 on Recycling Symbols on page 25:
- 8 Recycling Symbols starting at 2672

From discussion under item 7.14 on Philippine scripts on page 30:
- 81 characters to add four new Philippine scripts in block 1700,

From discussion under item 7.17 on Diacritics for Medieval Studies on page 33:
- 13 Medieval Diacritics starting at 0300

From discussion under item 7.15 on Komi Cyrillic characters on page 31:
- 16 Komi Cyrillic starting 0500 (Cyrillic Supplementary block)

From discussion under item 7.16 on page 32, and based on ad hoc report in document N2228 on JIS X0213 symbols:
- 23BE to 23CC -- are JIS X0213 Dentist symbols, also from earlier documents from Japan.
- In addition we have accepted 50 circled numbers -- proposed locations in row 24 and row 32 where there are circled numbers and letters.
- In addition the ad hoc on JIS X0213 symbols will result in small changes in this draft.
  - RETURN SIGN - currently listed at 21F4 in row 21 along with others from Math Symbols. This is included here as a keyboard symbol rather than a general symbol. It is moved to 23CE among miscellaneous technical symbols.

- DOUBLE HYPHEN - at 30A0 - also included for compatibility with JIS X0213 - name will be changed Katakana Hiragana Double Hyphen, and not to move to CJK General Punctuation. There is no room in that CJK General Punctuation block.

Sources of characters from documents N2228, N2273, N2235, N2263, 2N264, N2265, N2240, N2266, N1933, N2224, and N2256 (2093 glyphs) should be included in the next draft Amendment 1 to additions of repertoire.

In addition there are characters which WG2 has not seen before, for which we have summary proposal forms:

Document N2264 - Thaana letter Naa
- Row 7 - Thaana letter Naa at 07B1 -- details are in document N2264 (summary proposal form) - it was not included in the original Thaana amendment. It was not in the official language -- however, the Thaana Dhivehi experts have shown evidence of this additional character's use in a Thaana dialect.

Disposition: Accept.

Relevant resolution

M39.21 (Thaana Letter Naa):	Unanimous
WG2 accepts the character THAANA LETTER NAA proposed in document N2264 for encoding in the BMP at code position 07B1 with the character shape (to be refined) as shown in document N2263.	

Documents N2265 and N2293 - 17 Terminal Graphic Characters
- Seventeen Terminal Graphic Characters - which are used in terminals. WG2 has not seen these before.
- These are used in software emulation of those terminals. Document N2265 has the summary proposal form and document N2293 gives background information. Row 25 has some more terminal graphic characters.

Disposition: Accept.

Relevant resolution

M39.20 (Terminal Graphic Symbols):	Unanimous
WG2 accepts 18 terminal graphic symbols proposed in document N2265 for encoding in the BMP at positions 2071, 23B7 to 23BD, and 2596 to 259F, with their character shapes and names as shown in document N2263.	

Discussion:
   a) Mr. Takayuki Sato: CJK Compatibility Ideographs - are new. These are different from Amendment 1 draft document N2228. For this part we should look at the table in document N2273, which should be used as the basis instead of document N2228 (that has a mistake).
   b) Mr. Mike Ksar: Document N2228 (prepared by Bruce Paterson) has a list of repertoire changes and Amendment text.
   c) Mr. Evangelos Melagrakis: Editorial comments - referring to document N2263 - Greek and Coptic. There are three characters added here.
   - The Koppa is added here. The current standard has one form already -- for the first edition we were asked to give a glyph and we gave one of the two alternate forms. This is an alternative form of the same character, and the two forms are interchangeable. I have no problem including this character. Which form should I use?
   - The preferred form of Theta in this table is the correct form. First edition has a Theta with the Glyph with a different glyph variant. Looks like a duplicate of existing character.
   - Letter like-symbols table - page 20 row 21 - Greek symbol straight Epsilon. It is an alternative form used in most official documents, old manuscripts etc. The name STRAIGHT EPSILON should be changed. It is already in the standard as EPSILON with an alternative glyph. Don't understand why we should include this. Mathematical Epsilon is already included elsewhere.
   - Open Gamma, Capital Gamma are also typographic variants of others.
   d) Mr. Mike Ksar: Document N2263 contains all the characters we have previously reviewed and accepted for inclusion in the bucket. I need to understand rationale for these.

e) Mr. Michael Everson: I have a long paper on Koppa on my web site. Although the history of Koppa is the same, typographically they diverged into two different entities. The Q shape is never ever used in the legal context -- at the same time only the Q shape form occurs in early inscriptions. The Sigmoid form never appears in words, only with numbers. In order to distinguish between these two forms, the Q form was suggested to be added. At one time it was called Alphabetic Koppa. Their usage can be distinguished with a Note in Unicode.

f) Mr. Evangelos Melagrakis: May be we can call it Alphabetic Koppa or something like that -- I have no problem on its inclusion.

g) Mr. Michael Everson: Theta - with the straight bar - this is the Capital Theta --?? As to Straight Epsilon - the name may not be appropriate.

h) Mr. Evangelos Melagrakis: I would like to give better or alternate names to these if we decide to include them.

i) Dr. Asmus Freytag: There is a deep misunderstanding -- at one point Mr. Evangelos Melagrakis said that these characters may have been seen on a sign or other. The main reason for adding these is that there exists a separate typographical tradition, used by a community of users of Greek characters, with distinction of meaning in mathematical texts along with mathematical symbols etc. They may have come from alternative typographical methods. The mathematicians call these STRAIGHT EPSILONs - we are charged with giving names, which are traditional in their user community usage. I am sure we can work offline to refine the names. There is also mathematical use of Q shaped Koppa. It has been claimed that the ordinary flavour of Theta is the form with Horizontal Line through it. Many of the fonts used in Windows seem to have the broken line through it. If that is a mistake, then we should take a look at it. We were trying to disambiguate these two forms -- based on what we have seen in the Font usage etc. We need to have a discussion on this character. It could be a mistake in the glyph and could be corrected.

j) Mr. Mike Ksar: If we add Koppas to the standard do they have equivalence etc.

k) Dr. Ken Whistler: These are not equivalents but they have the same properties.

l) Mr. Marc Küster: Theta with straight bar, if the distinction is made purely for Math purposes, it could be included. However, it should be included in the Math Symbols space. (Others of the same are included in this block). As to the Koppas, the Q form is used in linguistic text and the other form is used in modern text. These are purely GLYPH VARIANTs, even if these are used in old and new text. There is several similar glyph variant usage in other scripts as well.

m) Mr. Mike Ksar: I do not want to re-hash the previous discussions on justifying these characters.

n) Dr. Umamaheswaran: I would like the ad hoc to briefly discuss whether these characters are duplicates, and if these are not rationalize choice of their names.

o) Mr. Kent Karlsson: Open faced letters 213D-- 2140, 2145-- 2149, these are open faced glyph variants. Since we are questioning the need for similar font variants in Part 2 also, I would like to see the rationale for these. Or, why can't we include some of the Part 2 alphanumerics into Part 1?

p) Dr. Asmus Freytag: It appears that these characters are duplicates. It was a mistake in preparing the Part 2 drafts. The open face italics should have been bold face frakturs. These are not intended to be duplicates with Part 2. These characters are included specifically for software, which manipulate symbolic forms of equations and distinguish similar looking characters in mathematical equations. These are glyph variants in non-mathematical context, whereas they are distinguishable in the mathematical context.

q) Mr. Kent Karlsson: Would it be acceptable to render these characters in other font variants? I have never seen these forms.

r) Dr. Asmus Freytag: You may do that but will not be able to satisfy the mathematical community of users.

s) Dr. Ken Whistler: these symbols are used in patents - if not elsewhere at least in US Patent Office. These are generated / used by software such as Mathematika.

t) Mr. Mike Ksar: We can continue the discussion on these symbols in the ad hoc.

u) Mr. Takayuki Sato: Format of Table 27 - compatibility ideographs - are different from those in Part 2. I would like to see consistency with Part 2.

v) Dr. Asmus Freytag: Table 27 format is consistent within Part 1 entirely. A separate discussion may have to happen on what needs to get done if these are also in Part 2?

w) Mr. Michel Suignard: Did we place any compatibility ideograph in Part 2?

x) Dr. Asmus Freytag: The Unicode standard has a slightly different format -- in the names table we do have annotation capability, alternate names etc. We can do similar annotations in Part 1 if needed.

y) Mr. Takayuki Sato: Documents N2228 and N2263 - are not reflecting the Compatibility information from document N2221. The format of Part 2 is described in some way. Japan prefers the format in document N2263 - however, some information is missing. There is small possibility to change the format of Part 2. The repertoire in the original proposal for the CJK Ideographs should be based on document N2263.

Comments On Character naming conventions
Discussion:
a) Mr. Michael Everson: German Penny Symbol -- all other currency signs are named SIGNs instead of SYMBOLs. We should rename it to GERMAN PENNY SIGN.
b) Dr. Asmus Freytag: It should not be objectionable.
c) Mr. Marc Küster: As German representative for consistency SIGN is OK. It does not impact us.
Disposition: Accept name change from GERMAN PENNY SYMBOL to GERMAN PENNY SIGN.
(Note: This item was missed in the relevant resolution and in document N2285. Document N2281 DOES REFLECT the above accepted name change -- Uma.)
d) Mr. Michael Everson: For the various Open Face Symbols 213D etc. The proposal is to use the term DOUBLE-STRUCK instead of OPEN-FACE characters.
e) Mr. Michael Everson: Page 29 - positions 23BA, 23BB, 23BD, FE00 -- There is inconsistency in using digits in the names versus writing out the DIGIT's name. We use actual digits under specific instances. When we are distinguishing listed out entities, we seem to be using ONE TWO THREE etc. instead of 1, 2, 3 etc. For the terminal graphic characters, it seems to reference the heights or size etc. - can we possibly use the DIGITS? I would like WG2 to write down these principles and use these consistently. I propose "VARIANT SELECTOR ONE, TWO etc., instead of with 1, 2 etc."
f) Dr. Ken Whistler: US objects to the proposed changes. We suggest Ireland can include these in the ballot comments.
g) Mr. Mike Ksar: I invite a contribution from you on the principles used for using DIGITS or NAMES OF DIGITS etc. in the names.
h) Mr. Michael Everson: name of FORI digraph -- is it from JIS X0203?
i) Mr. Takayuki Sato: Yes.
j) Dr. Asmus Freytag: We would like take up any changes etc. and discuss this in the ad hoc and if there is still disagreements WG2 can discuss them further. We can take all the proposals together and if anyone has questions we can take address them in the ad hoc.

Action Item: Mr. Michael Everson is invited to prepare a contribution on guidelines on the use of DIGITS versus NAMES of DIGITS in character names in 10646.

Mr. Mike Ksar went over the list of documents to be considered by the ad hoc, to ensure that there are no major questions / concerns from the WG2 delegates for the ad hoc to consider on any of them. Documents N2228 and N2263 will be the starting documents, with considerations for the discussions so far and to include documents N2264, N2240, N2264 (check glyph), N2224, N2256, (and N2093 for glyphs).
a) Dr. Asmus Freytag: I have noticed that even the experts cannot separate ZWWJ from ZWJ. The ad hoc committee should come up with a better name to separate the ZWWJ from ZWJ.

Dr. Ken Whistler: Ad hoc Group recommends the following changes be accepted:
- GERMAN PENNY SYMBOL to GERMAN PENNY SIGN
(Note: This item was somehow missed in the ad hoc report, in the relevant resolution and in document N2285.)
- Page 4 of document N2263 - 03F4 - Greek Capital Theta Symbol.
- Koppa - no resolution on names - pending NB discussion.
- Page 20, 21 -- Open Face versus Double Struck -- resolved.
  All OpenFace symbols names will changed to DOUBLE STRUCK ITALIC CAPITAL LETTER D etc., DOUBLE STRUCK ITALIC SMALL I etc.

- Greek Symbol Straight Epsilons.. rename to LUNATE EPSILON SYMBOL, and move to 03F5 and 03F6. Similarly Greek Symbols are in that area and these are alternate Glyph forms for existing characters -- Greek symbols in the Letter-like symbols block do not have the word GREEK in their names.
- CJK Ideographic tables are consistent between Parts 1 and 2.

a) Dr. Asmus Freytag: In the Greek block we have used the word SYMBOL at the end of the names. Should we do the same for the new additions? The Lunate Epsilons and Theta Symbol.

b) Mr. Michael Everson: SANS SERIF should be SANS-SERIF in the name. 2141 etc. on page 21.

c) Dr. Asmus Freytag: In the proposed names we have DOUBLE STRUCK GREEK ALPHA etc., and in document 2263, we will remove the word GREEK from the name table.

Document N2285

Mr. Michael Everson: Document N2285 is a summary of all the architectural changes, characters and script additions, any changes to their names and code positions, for inclusion in the next amendment to 10646-1: 2000. It captures all the items WG2 has agreed to include in the BMP, since the publication of the 2nd edition of 10646-1. Any errors found in document N2285 that is in front of the meeting will be corrected.

Some changes noted are:
- Reference to documents N2277 and N2228 - should be added.
- Reference to A.12 versus A.1 -- A.12 could be deleted.
- Leading zeroes "are suppressed" versus "shall be suppressed". We leave it to the editor avoiding connotations of words like shall.

Revised document N2285 will be prepared by Mr. Michael Everson and will be posted to the web site.

Document N2281 -- contains the revised tables and name lists based on all the agreements to date for PDAM-1. There were two additional sheets that go with document N2281.

Dr. Ken Whistler: One additional advantage of the proposed revised replacements for the tables is for Khmer, the editorial corrections will also be reflected.

Disposition: Accept and process as PDAM to 10646:1 2000. New document N2281 shows all the revisions to document N2263, including the agreements at this meeting. These code charts and name tables will be input to the editor.

Action Items: Messrs. Michael Everson and Takayuki Sato - will provide better glyphs for the DENTIST Symbols (from document N2093). The amendment text is to be prepared by the editor. Submit for PDAM Ballot to the SC2 secretariat. The ad hoc group member on principles (Mr. Michael Everson) is to update the BMP roadmap document to reflect results of this meeting (see document N2313).

Relevant resolutions

RESOLUTION M39.24 (Draft tables and name lists for PDAM):	Unanimous

WG2 accepts document N2263 as the working draft for PDAM-1 text, with the following changes to the Mathematical symbols, as recommended by the ad hoc on the PDAM text:
   a. Remove the word GREEK from all new letter-like symbols in the code positions 213D to 2140
   b. Change SANS SERIF to SANS-SERIF wherever it occurs in the new character names
   c. The Greek Straight Epsilon symbols to be renamed Greek Lunate Epsilon Symbols
   d. All new Open Face symbols to be renamed Double-Struck symbols
   e. 03F4 will have the name GREEK CAPITAL THETA SYMBOL
   f. Q-shaped Koppas will be renamed Archaic Koppas (with a suitable annotation on the use of these characters).

WG2 further invites the US national body to revise document N2263, incorporating the above changes and additions and reflecting all the new characters, name and shape changes accepted during this meeting (see resolutions M39.9 to M39.22 above), and reflecting the resolution M39.23 on the format to be used.

RESOLUTION M39.25 (Initiating PDAM-1 to 10646-1:2000):	Unanimous

WG2 accepts documents N2228 (working draft for PDAM-1 from the editor) and document N2285 (summary of all the technical changes to the BMP accepted to date), and documents N2281 and N2273 (containing the updated code charts and name lists) as the base documents for preparing the PDAM text. Further, WG2 instructs its editor, with assistance from the contributing editor and the US national body, to prepare the text for PDAM-1 to 10646-1: 2000, with the title MATHEMATICAL SYMBOLS AND OTHER CHARACTERS, and submit it to the SC2 secretariat

for further processing. The target completion dates are: WD 2000-10, PDAM 2001-04, FPDAM 2001-10, FDAM 2002-02, AM 2002-06

7.22 Format of Charts and Tables in Future Amendments to 10646

Dr. Umamaheswaran: During the preparation of draft resolutions, myself and Mr. Michael Everson realized WG2 has to acknowledge the format of the charts and tables from the draft in document N2263 and adopt the format of the amendment charts and name tables more useful than current amendment formats for the users of the standard. The following is proposed:

> The format of the PDAMs will be changed. Instead of identifying single characters with their names and glyphs that we have done in the past amendments, complete replacement pages for tables will be printed. A clear indication of which code positions have new characters assigned will be in the text of the PDAM.

Discussion:

a) Mr. Alain Labonté: Do we have an example?
b) Dr. Asmus Freytag: You could also refer to document N2281 as an example, though it needs refinement.
c) Mr. Alain Labonté: As a constructive remark, it would be better if the new names in the table are somehow highlighted.
d) Dr. Asmus Freytag: The tables themselves are normative. The ultimate goal is to replace the old tables with the new ones, from the end user point of view. It allows us to use the same set of tables that we will use for the final charts when we incorporate all the amendments into a single document. Any additional annotation just for PDAM is a non-trivial exercise.
e) Mr. Marc Küster: Mr. Alain Labonté has raised the issues I had. It would be nice to have some visual indication in the charts to see the changes easily. If it is going create production difficulties then we can live without it.
f) Dr. Ken Whistler: If one looks at document N2285, among other things, the document explicitly shows the ranges of code positions that will be affected. This information will be carried through to the PDAM text, so that there will be no ambiguities in the amendment. The tables and names lists will be aimed at replacement of existing charts and tables.
g) Mr. Alain Labonté: If the annotations will pose production difficulties it is OK with me.

Relevant resolution

RESOLUTION M39.23 (Format of Character additions in Amendments to 10646):

Unanimous

WG2 resolves that the format for amendments that involve character additions will be in the form of complete replacements of tables and character name lists where they exist, with an explanatory text listing the code positions or ranges of code positions to which new characters are assigned. If it is a new block it will be presented as a complete new table and names list.

7.23 New Editor for 10646-1

Mr. Mike Ksar: UK has withdrawn from SC2 participation. We will take a resolution to thank Mr. Bruce Paterson for his editorship. Mr. Michel Suignard has agreed to be the new editor for Part 1. We will make the nomination to SC2.

Mr. Michael Everson: Ireland seconds the appointment.

Relevant resolutions

M39.27 (Editor for 10646-1):   **By Acclamation**

WG2 expresses its thanks to Mr. Bruce Paterson, the current editor of 10646-1, for his valuable contribution to the work of WG2.

M39.28 (Editor for 10646-1):   **By Acclamation**

WG2 nominates Mr. Michel Suignard to succeed Mr. Bruce Paterson.

8   10646-2

8.1   Disposition of ballot comments on FCD 10646-2

Input documents:
SC 2 N 3442 (N2205)   FCD 10646-2: Secondary Multilingual Plane for scripts and symbols, Supplementary Plane for CJK Ideographs, Special Purpose Plane; 2000-05-19
N2270   Updated CJK Compatibility Ideographs sets from TCA; TCA; 2000-09-19

N2272	On the requirements for alphanumeric fonts for mathematical use; Asmus Freytag; 2000-09-19
N2276	Ballot results on FCD 10646-2; SC2 Secretariat; 2000-09-20
N2279	Draft FDIS 10646-2; Suignard; 2000-09-21
N2280	Proposed disposition of comments - FCD 10646-2; Suignard; 2000-09-21
N2284	CJK Unified Ideographs Extension B for pre DIS 10646-2; IRG; 2000-09-14

Mr. Michel Suignard: Document N2276 contains the Table of replies and comments from national bodies. Of the 36 P-members, 16 - Approved; 4 - Approved with comments (Canada, China, Germany, USA); 4 - Disapproved (Ireland, Japan, DPR of Korea, Sweden); 2 - Abstained; and 10 - No responses.

Document N2280 contains the proposed disposition of comments to be discussed and finalized during this meeting. Document N2280 - cover page - there were no comments from Republic of Korea -- only from DPR of Korea. Document N2279 contains the draft for FDIS 10646-2 reflecting many of the proposed disposition of comments. Please refer to old FCD in document N2205 for old clause numbers etc. -- the clauses have been renumbered in the newer draft – document N2279.

Document N2270 from TCA

Mr. Michel Suignard: Document N2270 - contains updated CJK compatibility characters. In rushing the FCD text format in document N2205 FCD were not quite OK. N2270 describes the updates. We will need some input from the editors. The indexing schemes are from IRG.

(Note: The following is included here based on email exchanges between myself, Dr. Ken Whistler and Mr. Michel Suignard after the meeting. Discussion on the TCA contributions were left on HOLD during the meeting (see item 7.18 on page 34, and were not brought back up again before the meeting adjourned.

Document N2270 - contains the revised CJK Compatibility listing for 10646-2, Plane 2. Messrs. Shih-Shyeng Tseng, Michel, Suignard and Ken Whistler discussed 1F86D in the context of the document N 2271 change (see discussion under item 7.18 on page 34), and Mr. Shih-Shyeng Tseng acknowledged that it was a mistake to add it to this list, and he will instead submit it for Vertical Extension C. As a result, this character (corresponding to T4-2625 from TCA) will be removed from Compatibility characters in Part 2, and will be proposed for Extension C to IRG by TCA.

*Another point to note is that document N2270 **includes an additional 6 compatibility characters with Hong Kong SAR as the source**. This is a result of IRG Extension B refinements by IRG editor. Though, not recorded in a WG2 resolution, these 6 compatibility characters are now deemed to have been accepted since WG2 accepted the final charts from IRG editors for Extension B, and for the FDIS.*

V.S. Umamaheswaran)

Comments from Canada

a) Mr. Mike Ksar: We have to wait for the IRG rapporteur to know the status of Extension B R2. Let us assume that IRG will deliver what they promised.

b) Mr. Takayuki Sato: No. As far as I know the font verification of Extension B is not completed yet. The proposal from IRG is that the logical data will be completed by this time. The font review will start later. We may have to ask for earlier delivery. It is better to wait for IRG to come here.

c) Mr. Mike Ksar: We will go through the disposition of comments today, and the questions regarding Extension B glyphs can await the IRG to be here.

d) Mr. Michel Suignard: Do we know what the hold up is in the glyph verification?

e) Mr. Takayuki Sato: At the last IRG meeting, there were many errors - we pointed out the errors to them - document N744 (IRG). The unification is not completed yet. The source data is in error for some characters. The printed glyphs for some are not acceptable. Early summer was the target for the glyph shapes.

Accepted - (we will await IRG rapporteur / editor input)

Comments from China
> Accepted - (we will await IRG rapporteur / editor input)

Comments from Germany
- Etruscan - same comments from Ireland and USA.
  - Major 1 - Accepted - change block name to Old Italic; also the character names to reflect the block name change.
  - Major 2 - remove 5 numerals; one more numeral than what USA and Ireland have requested.
    a) Mr. Michael Everson: The last four characters were inconsistently attested. However we did not find inconsistency for the Numeral One Hundred. We can always add it later if we remove the consistency discovered by Germany.
    b) Mr. Marc Küster: We consulted the scholars - expressed doubt on these five numeric characters as well as others. These five may be included at a later date -- once we have better evaluation.
    Accept - remove the FIVE Numeral 10325 through 10329.

  - Major 3 - Remove Word Separator - 10320. Also requested by USA and Ireland.
    Also, the block will be moved up by one -- there is another hole also, but we will keep this.
    a) Mr. Marc Küster: explained the views of the experts and the rationale behind the Etruscan removal requests.
    Accepted.
- Deseret
  Request to remove Deseret completely.
  a) Mr. Michael Everson: It was invented in the last century. As marginal as it may be, there are documents printed in the Mormon community. This script is far less artificial than other scripts.
  b) Mr. Marc Küster: We were unanimous in Germany - against such scripts including Deseret.
  Not accepted.
- Western Musical Symbols
  - Minor - examples are requested in Annex E or elsewhere.
    a) Mr. Michel Suignard: The editor welcomes contributions as informative material. If the editor receives examples it could be added.
    b) Mr. Marc Küster: We were not clear how the standard coding will turn into in practice. The request is to either insert an example or a pointer to where we can find it.
    c) Mr. Michel Suignard: In 10646 - it is pretty limited on the use of scripts, examples etc. When we attempt to add some information, it is either too much or too little. There are potentially other sources that could be referenced such as the Unicode Standard.
    d) Originator is Mr. Terry Roland - who is expected to provide information. It will be included in the future Unicode standard.
    Accept in principle.

Action item: Mr. Terry Roland is invited to provide examples of use of the Western Musical Notation, as requested by Germany. Future inclusion of a reference or a pointer to Unicode can be added to the standard once material is published therein.

- Mathematical Alphanumeric Symbols
  - Errors in glyphs pointed out - also by USA.
    1D42C -- 1D42F --- glyphs have been corrected. See document N2279.
    Quality of glyphs has been improved. See document N2279.
  Accepted.
- Annex E - Minor - expand "non-SPP"
  Accepted - see document N2279.

Comments from Ireland

Ireland has submitted an enormous number of comments:
  Technical:
- T.4.1 Notation in Part 2 -- five or six digits notation.
    a) Mr. Michel Suignard: One will need six digits to cover up to plane 16. However, we need to address only up to plane 14 and therefore only 5 digits are needed. When we asked the question earlier Germany was the only on who responded with 6. There is strong feedback to use only 5.
    b) Dr. Asmus Freytag: We can take a note that we accepted the variable length 4 to 6.
    c) Mr. Marc Küster: Germany prefers to use 6 -- however, there is no harm beyond 6.
    ACCEPTED - go with 5-digit notation.
    - T.4.2 - Accepted in principle. Above fix satisfies the comment.
- T.6.1
  Editor of Part 1 advised on the proper use of SHALL unless it applies to a device etc.
  ACCEPTED In Principle -- change "is reserved" to "is not used".
- T.6.2
  A note on the possible use of 1FFFE, 1FFFF values as not a character will be added.
  (This note is to be synchronized in Part 1 amendment for not a character).
- T.7.1 and T.8.1 - comments were withdrawn by Ireland, in light of discussions for the previous clauses.
- T.8.2 - Accepted. Reference changed to clause 20 of Part 1.
- Clauses 10 - all comments except the following (listed as T.10-xx below) were accepted.
    - Etruscan
        - T.10-T1.4 on name of character at 1031F, which was withdrawn by Ireland.
        - T.10-T-1.6 - Name change CE to KE, QO versus KU -- for 10302 and 10312.
            a) Mr. Marc Küster: German experts were happy with the names other than changing to Old Italic. I would counsel against the change -- though I am not an expert on this topic.
            b) Mr. Michael Everson: One of the experts has expressed the opinion that transliteration method should be used-- Ireland included that opinion as an Irish comment.
            c) Dr. Ken Whistler: Under the circumstances US is reluctant to change.
            Not accepted.
    - Deseret
        - T-13.1 10428: extra space in the name - accepted. A new mechanism to generate the charts is now used, and is less prone to introduce such errors.
    - Byzantine musical symbols - all comments T-10-T3.x, except the following ones, were accepted, without any discussion:
        - T-10-T 3.3 - remove parenthetical u, m, and l annotations.
            a) Mr. Michael Everson: Upper Medial and Lower annotation was in the standard based on the information received for the CD text. Since then we got feedback with conflicting information. Ireland is requesting its removal at this point till the conflicts are resolved and more definitive positions are known.
            b) Mr. Evangelos Melagrakis: In a late contribution we tried to provide the relevant information on the subject. It was late. We agree with your conclusion to remove these annotations. We also note that you have an informative annex in the standard. We will provide more detailed information on the implementation of Byzantine implementation at a later date.
            Accepted; REMOVE the notations.
        - T.10-T3.4: Consistent naming between SIGNS and SYMBOLS for Byzantine.
            a) Mr. Evangelos Melagrakis: Our preference is to use the word SIGN for Both Western and Byzantine Musical characters. Usage of SIGN has some meaning behind it - a pointer to do it - compared with Symbol -- does not symbolize. For consistency reasons we agree that we should use the same term for both.

b) Mr. Mike Ksar: Can we remove the name GREEK from the character names - to make it shorter?

c) Mr. Evangelos Melagrakis: The word Greek was used only to indicate the origin of the notation system. There may be some Byzantine symbols which are not of Greek origin. We do not object removing the name GREEK from the names. There are some characters without the word SIGN in them.

d) Dr. Asmus Freytag: If we want to shorten the names, one could drop both SIGN and SYMBOL in both WESTERN and BYZANTINE musical symbols. The word SYMBOL is preferable instead of SIGN under certain circumstances.

e) Dr. Ken Whistler: The typical use of SIGN in the naming convention of 10646 characters is as the LAST element of the name. In the cases of Musical symbols, it may be appropriate to call them as SIGNs. I have no problem with BYZANTINE MUSICAL SIGN x, etc.

f) Mr. Evangelos Melagrakis: For sorting of names list etc. one can have these in front, versus BYZANTINE MUSICAL xxx SIGN.

g) Dr. Ken Whistler: the preference is to keep SYMBOL in Western Musical Symbol etc. For Greek -- if we keep the terminology as is for Byzantine, then it would be easier on the editor.

h) Mr. Michel Suignard: The block name was BYZANTINE MUSICAL SYMBOLS without the word GREEK in it. The editor prefers to drop GREEK in character names. New name of ARCHAIC OLIGON SIGN versus SYMBOL ARCHAIC OLYGON -- would there be a problem with this renaming?

i) Mr. Mike Ksar: We will assume this is not a problem -- unless we receive feedback from Greece.

Disposition: Accepted: Term Greek will be dropped in the names; all character names will be now Byzantine Musical Symbol xxx.

- Western musical Symbols
  - T10-T7.1 -- Accepted. Editor's error
  - T10-T7.2 -- old style C Clef -- removed -- duplicated glyph variant.
  - T10-T7.3 - name change - WESTERN MUSICAL to MUSICAL …
    a) Mr. Marc Küster: If there are only Western and Byzantine -- it may be OK. However, if there are other musical notations in the future, it will be desirable to keep the distinction.

Accepted. We will remove WESTERN for the block name and in character names -- these are used worldwide - it will result in shorter names. A number of characters are enumerating different kinds of symbols etc. We discussed this item earlier.

An ad hoc group is to decide on the alignment of names that contain Numbers ONE, TWO etc. based on consistent naming (under item 7.21 on page 36). The results are incorporated in document N2281 - updated tables and names lists for PDAM-1 for 10646-1: 2000 based on ad hoc agreement. The convention should be adopted for Part 2 also.

- T10-T7.4: Add new END OF STIMME - see rationale in T.10-T7.4 -- for completeness of the similar characters. Accepted: It will be at 1D1A8 after the rearrangement of the complete set.
- T10-T7.5: Proposal for two additional symbols FINGERED TREMOLO ONE, FINGERED TREMOLO TWO; names to be checked; for completeness. Accepted - assigned positions 1D16A and 1D16B.
- T10-T7.6: Rearrange the table in more logic manner - shown in Annex 2 to Irish comments - Accepted.
- Mathematical Alphanumerical Symbols
  - T10-T7.7: The table in the Irish comments was hard to follow. Adding 'Combining' in names for combining characters, x-START, y-END etc. accepted in principle. Ad hoc to recommend (All accepted; also names containing numbers changed to be consistent with Part 1).

- T10-T10.1 and T11.1: OPEN-FACE to DOUBLE-STRUCK -- accepted. It has been also accepted for Part 1 (Also USA comment T.8).
  a) Dr. Asmus Freytag: Feedback from Mathematical Community is that they welcomed this change emphatically.
- T10-T10.2 and T11.3: OPEN FACE ITALIC should be BOLD FRAKTUR. This is caused by an error in the transcription from the original submission. US also requested this. This applies to change whole range of characters -- both names and the corresponding glyphs will change (see also document N2279). Accepted.
- T10-T11.2, T12.1, T14.1, and T15.1: SANS SERIF should change to SANS-SERIF; Accepted. For Part 2 all characters with only SANS in it should change to SANS-SERIF.
- Clause 11 - Accepted. See new text for clause 7.2 in document N2279.
- Clause 12
- T.12.1.1: Figure 3 title - fix - Accepted.
- T.12.2.1: Change names for planes 1, 2 and 14
  a) Mr. Michel Suignard: Name change for supplementary planes. I have been resisting this request - however, some more thought is required. BMP is now well known and well used. We would like to get to similar situation with other planes. SPP -- suggestion is to replace Special Purpose Plane - with SUPPLEMENTARY SPECIAL - etc. Part 1 uses the term SUPPLEMENTARY etc. This would make Part 2 as SUPPLEMENTARY planes and will help distinguish it from Part 1.
  b) Dr. Asmus Freytag: I like the input from Ireland. I have been writing articles on Part 2. The title of the second Part 2 is unwieldy at the moment. I wholeheartedly support this exercise.
  c) Mr. Michel Suignard: Part 2 - title will change to SUPPLEMENTARY PLANES. This title change will be reflected wherever the reference to Part 2 appears. For example, in Part 1 and in SC2/WG2 program of work.
     SUPPLEMENTARY MULTILINGUAL PLANE -- SMP
     SUPPLEMENTARY IDEOGRAPHIC PLANE -- SIP -- in the body we will place only CJK unified ideographs
     SUPPLEMENTARY SPECIAL-PURPOSE PLANE – SSP.
  d) Mr. Michael Everson: Ireland can accept this. IRG opinion should be sought.
  e) Dr. Asmus Freytag: We should indicate in clauses 6, 7 and 8 that UCS-2 cannot be used to access any of the characters in the supplementary planes.
- T-12-2.1: Comment on visual representation of characters in this plane. Accepted.
  Sweden had similar comments. See first sentence in clause 8.2 in document N2279. There is a similar text in the Note under clause 8.1. The editor may do some further collapsing of section 8. Similar comment from Japan (last sentence of new clause 8.2) – comment from CD ballot was missed in the FCD text.
- T-12-T16.1: P=14 should be P=0E to indicate plane number in hex,
  There are mistakes in the plane numbering in document N2279. These will be fixed.
  Accepted.
- Annex A
  - T.A1.1: Accepted.
  - T.A1.2: Accepted. See document N2279
  - T.A1.3 and 4 -- notes were not applicable, and so comments are moot.
  - T.A1.5, through to A.4.2 -- all accepted. Most of these fixes are in document N2279 -- remaining will be fixed. (USA also made similar comments.)
- Annex B. T.B.1 - Accepted. Also USA comment T.14. See document N2279 -- more to be added to the list.
- Annex D. T.D.1-8 – Names List is automatically generated – accepted in principle.

Editorials:
- E.C.1: Not accepted
- E.C.2: Not accepted.
- E.C.3: Follows Part 1. Not accepted.
- E.C.4: All CAPS in Annexes lines - Accepted.
- E.C.5: Annex Titles -- automatically generated. Accepted.

- Clause 1, Clause 2, Clause 5, Clause 6, Clause 8, Clause 9, Clause 10, Clause 11, Clause 12, and Annex B – all accepted.
  - E.10.2 – Accepted in principle; remove Messapic from the list. Some of the changes have been made also from US comments. There is difference in the word character-ORIENTATION and Line-DIRECTION
    a) Dr. Ken Whistler: The text as is written is fine with UTC, Ireland, and US. In Amendment 1, we have to possibly list some more characters in the list of Mirrored Characters.
    b) Dr. Umamaheswaran: Are we going to keep a list of mirrored characters all together in Part 1? From Part 2 also? I think we should add another Annex on mirrored characters in Part 2. Otherwise if we add mirrored characters in Part 2 we have to amend Part 1.
    c) Mr. Michel Suignard: Will add an annex to Part 2.
- Annex D
  - E.D.1 -- not accepted.
  - E.D.2 – Accepted.
- Annex E – All comments except E.E1.3 were accepted. E.E1.3 -- not accepted. It is INFORMATIVE - ASCII vs. 646 reference.
  - This particular topic became controversial during discussion. (Details could not be captured accurately. Strong views expressed by Messrs. Asmus Freytag, Umamaheswaran, and Marc Küster - on the use / misuse of the term ASCII versus ISO/646-IRV).
- Annex F – All comments accepted, excepting E.F2.10 and E.F2.11 – not applicable and E.F2.12 – not accepted.
  - Byzantine has to be reviewed in Annex F.
- Annex G – All comments were accepted.

Ireland reverses its ballot based on the above disposition of comments.

Comments from Japan:

Technical
- J-1 -- Accepted. Check document N2279.
  The FCD did not get the correct presentation form out in time. Now it is similar to what is proposed for compatibility ideographs for Part 1. We could present -- the mapping to unified characters for example using the parenthetical annotation, or using the source information. Typically compatibility characters are single source - there may be multiple sources.
- J-2
    a) Mr. Takayuki Sato: Somewhere, I would like to see the source for the compatibility of characters is identified. In section 3 we do have source identification. For expansion purposes, we should probably identify the ranges 2yyyy to 2zzzz - to show the source.
    b) Mr. Michel Suignard: We can change the source identification to be more precise in range. The parenthetical name can include the unification information for each compatibility character.
    c) Dr. Ken Whistler: Such information can be added to the database much similar to the other annotations. I am the one who has the ownership of these databases.
    d) Dr. Asmus Freytag: Unicode can help make the changes -- it is preferable over other information.
    e) Mr. Takayuki Sato: In particular document N2221 requires some other information that may go into Part 1 instead of Part 2. Is there additional text needed to be included in Part 1?
      On the formatting: We should have similar presentation of CJK Compatibility ideographs between Part1 and Part 2; and parenthetical notation in table of names regarding unification. Part 1 - should have appropriate common texts as well. For example, a description of "What are Compatibility Ideographs". We should add a description of the format we use in Part 1 and Part 2 to explain.
    f) Dr. Ken Whistler: This is an inappropriate use of the names list and such information should be carried in different data resources. This is an issue of mapping the compatibility ideographs to the base ideographs. Such information should not be carried in the names lists, should be carried in another data table.

g) Mr. Takayuki Sato: I would like to have this information somewhere. It should not be part of Annex P, because it becomes too big.

h) Dr. Ken Whistler: The source data for annotation for Annex P is in a particular field in the database. The compatibility equivalents etc. are in another database. The correct way to do this is to extract the relevant information from the database, and carry as a separate table / data structure on the standard CD. It is inappropriate to make these annotations of Annex P equivalent in Part 2.

i) Mr. Michel Suignard: We have similar complexity for Annex C also.

ON HOLD TILL CHINA arrives. (Resolved - see final disposition of comments in document N2280).

- J-3 a, b, c, J-4, J-5 a, and b – were all accepted.
- J-6 Printing of Source Data

a) Mr. Michael Suignard: To some extent this applies to Part 1 also. If the standard is to be distributed electronically, what is the point in printing this out.

b) Mr. Takayuki Sato: This Annex is a NORMATIVE part of the standard. There is a formality. If ISO or ITTF says that it is going to be somewhere, it is fine. However, we need that directive from Geneva.

c) Mr. Mike Ksar: We asked ITTF: If we give the information on a CD as Part 2 -- both the pdf files and the data files are given on the same CD, then it is fine with them. It is up to them to print if they think it is appropriate. As far as we are concerned when we deliver the standard both the source information and the pdf file will be on the same CD.

d) Mr. Michel Suignard: We can do the local linking to the source files / data files from the link in the pdf file. For online version we could do some variation. The same should apply to the names lists. This also should go into a database so that programs can manipulate them etc.

- J-7: Source information from DPRK. Await IRG rapporteur – related to production of FDIS.

Based on resolution of FDIS publication issue from IRG rapporteur on Extension B and source information tables, Japan reversed its vote to Positive. See final disposition of comments in document N2280.

Comments from DPR of Korea:

- Attachment 6 in document N2276 requests source information for DPRK standards are added. The input is good and is nice to have. We invite that you provide the source information to IRG. We rely on IRG to produce this information to us. It is not crucial in the sense that we are not changing any existing characters etc. The source information is normative. The timing of the output from the IRG is important to the timing of being able to product the FDIS text / tables / data files. Await IRG rapporteur. Resolved - see final disposition of comments in document N2280.

Comments from Sweden:

- SE-1: Sweden would like to remove SPP and Math Symbols etc. from the SMP. At this point in time, it is too late. We had enough debate and arguments on their inclusion / exclusion etc. There are good rationales for both sides. At this point in time sufficient number of national bodies have accepted these. So we cannot accept the Swedish comment.

a) Mr. Kent Karlsson: There are better methods than to use plane 14. There have been discussions on other forums widely.

b) Mr. Mike Ksar: We have not seen any other methods proposed here. If they don't hurt you can you live with it?

c) Mr. Kent Karlsson: Will the systems with these characters be of lesser quality compared to better systems? I may be stuck with systems that implement these instead of possible better systems. They may not provide me with the functionality that I would like by systems that may have implemented these characters.

d) Mr. Mike Ksar: Sweden is the only country who has brought up this objection. Other NB-s have not raised any opposition.

- SE-2: Accepted.
- SE-3a: Swap clauses 4 and 5 -- Accepted.

- SE-3b: We have to be consistent with Part 1. For example, "Part 1" is a reference; "SMP, SPP etc." are all names. Move text from 4.1 up into clause 3. Partially Accepted.
- SE-4a: Not applicable to Part 2. Will be in amendment to Part 1.
- SE- 4b: Accepted. Remove a sentence about "removing leading four digits may be omitted."
- SE-5: Accepted. (See disposition to Irish comments).
- SE-6: Byzantine: These symbols are not combining, and they do not have combining property, Not accepted.
- SE-7: Accepted.
- SE-8: Partially accepted. 1D100 - 1D102 were errors. 1D19F--1D1A0 are duplicates? However the Musical experts believe that the ones corresponding to these in the BMP are considered as DINGBATs - and are considered to be ornamental. -- Quarter note and Eighth note in the SMP are for use with Musical Symbol properties along with other Musical Symbols.
- SE-8, and 9: Similar to SE-1. We cannot re-open the issue -- has been accepted to be included in the standard.
- SE-10: Accommodated.
- SE-11: Cannot be accommodated.
- SE-12: Partially accepted. There are two ways of producing the information. IRG produces the database in fixed field format rather than in Tabular Form. It is easy to introduce errors if we do any kind of massaging on the original data base formats. One could write filtering software to be able to render in different forms. While we agree that it is nice to read. This information is not to be part of a printed document.
- SE-ed 1: Accepted.
- SE-ed 2: Title is changed.
- SE-ed 3: Foreword added -- accepted
- SE-ed 4: When there are occasions to use dated standards have to be used, dates will be used. However short names are used – like Part 1 for 10646-1.
- SE-ed 5, ed-6, ed-7: Accepted.
- SE- ed 8, and 9: Not accepted
- SE-ed 10: Not accepted.
- SE ed 11: Accepted.
- SE-12: Accepted in principle. UTF-16 and UTF-8 will be given equal status, and the table as informative / explanatory.
  Make the following into a note:
  "The following .. including the Table".
  Remove "NOTE -" in front of UCS ..UTF-8 ..
- SE-13a: Not accepted.
- SE-13b: Accepted in principle.
- SE-ed 14 through SE ed-22: Accepted.
- SE-ed.23: Multicolumn layout .. Not accepted.
- SE-ed 24.. SE-ed 29 … all accepted or accepted in principle, per document N2280

Sweden changes their ballot to POSITIVE based on the resolution to their comments.

Comments from USA:
- Draft dispositions of comments in document N2280 were referenced; all of the US comments have been satisfactorily resolved.
  a) Mr. Ken Whistler: The US is particularly pleased with the disposition of comments and the discussion on E-1 on page 19 in document N2280 – i.e. rearranging the clauses so that the charts will be all consecutive.

Outstanding IRG issues regarding Extension B:
Discussion:
  a) Mr. Michel Suignard: IRG should supply the final charts with the correct fonts by the next IRG meeting.

b) Mr. Zhang Zhoucai: General information supplied in document N2242 -- the mappings may change however, the source information will be frozen.

c) Mr. Michel Suignard: The Annex C on source information has to be frozen because it is part of the normative source information. Even though Annex C is a plain text file, it has to be part of the standard. It is made available as part of the standard. We may not print it. I would like to have a date for completing the DPRK information in that Annex C. You have to stabilize and freeze it.

d) Mr. Zhang Zoucai: There are two unstable factors -- one is the Hong Kong, which were updated recently reflecting China's comments to FCD. The DPRK information, which has to be reviewed and verified in one month's time. These have to be sorted out, before we can freeze this.

e) Mr. Michel Suignard: I would like to hear also from the two Korean national bodies.

f) Professor Kyongsok Kim: My understanding is that Annex C is part of the standard even though it is not printed.

g) Mr. Mike Ksar: It looks like the source information cannot be frozen today. Hong Kong information was changed. The DPRK source is yet to be verified and frozen.

h) Mr. Takayuki Sato: We may decide to include the DPRK source information or not at this meeting.

i) Dr. Ken Whistler: It is a matter of inclusion of DPRK information in the super CJK database. Most of the DPRK should be in the CJK or Extension A in the BMP. I would like to know if there are any characters from DPRK from Extension B.

j) Mr. Mike Ksar: Could you please check if all the DPRK characters in Part 1 or there are some characters in Extension B. I would like to see if IRG could freeze the contents to the source information after the 31 October 2000.

k) Mr. Hong Yong: DPRK does not have a clear understanding at this time. I would like to have a clear opinion from the IRG experts on our input to them.

l) Mr. Takayuki Sato: Document N2275 indicates that there are many mappings in Extension B. It looks like there are some characters from DPRK in Extension B. IRG has to review this proposal.

m) Mr. Mike Ksar: Am I hearing that IRG cannot freeze it before end of October.

n) Mr. Takayuki Sato: Clear instruction to IRG is required.

o) Mr. Zhang Zhoucai: We have to get DPRK to review the tables first. There are regional mapping tables submitted.

p) Professor Kyongsok Kim: 5669 characters are included in DPRK submission and they do not expect these to be changed.

q) Mr. Michel Suignard: IRG has to check the DPRK submission. Other countries' input is needed. Are we confident that the Hong Kong information is stable now and we can freeze? Can the IRG members verify and be confident that the DPRK information can also be frozen?

r) Mr. Zhang Zhoucai: The mapping that was provided earlier was to the older version -- now they have to map to the new information.

s) Mr. Takayuki Sato: I took a look at the extension C proposal from DPRK, and found that there is some misunderstanding of the unification principle.

t) Mr. Michel Suignard: The question is whether the information on JIS - level 1, 2 etc. stable?

u) Mr. Takayuki Sato: The information from Japan is OK.

v) Mr. Mike Ksar: Is Hong Kong information frozen? Annex C will part of the CD ROM.

w) Mr. Zhang Zhoucai: The Hong Kong change is only the FORMAT. The requirement from Hong Kong has been accepted? China's ballot response includes the required change.

x) Mr. Takayuki Sato: Source information is almost frozen -- however, it is not in the form required for Annex C. IRG rapporteur is asking the question on the format.

y) Mr. Michel Suignard: Annex C is in a format that could be used in products etc. I do not understand the issue or the question from the IRG? There is a minor issue that we discussed yesterday -- should it be in two pieces. A description of the format, how to use etc. and a link to the data tables on the same medium.

z) Dr. Ken Whistler: It is not clear to me whether the question is the data tables which the editor has been asked for, or whether the information in the Super CJK data base is frozen or not?

aa) Mr. Michel Suignard: I get two pieces of information. I get the Super CJK database and the source information for Extension B. The latter is produced automatically from the Super CJK database. Annex C is created by adding a few header lines to the data tables for Extension B subset.

bb) Mr. Takayuki Sato: The Information is available, and the format required for Annex C is explained to IRG rapporteur, we can check when the data tables can be made available?

cc) Mr. Zhang Zhoucai: I have already provided the Super CJK and data table information to the editor.

dd) Professor Kyongsok Kim: Will Annex C be printed? … NO. It will be included in the CD ROM -- anyone can print it from the files.

ee) Mr. Michel Suignard: Referring to the ballot comments from China -- Content from document N2284 will be incorporated into the FDIS. As a minimum we will include the source information from the IRG rapporteur. The IRG will update the information with DPRK source information. By when – is the question.

ff) Dr. Ken Whistler: It looks like it is premature to rush the DPRK information into FDIS. We are concerned about its stability. We would suggest treating the DPRK information as an amendment to FDIS rather than delaying the FDIS. IRG review and approval is necessary.

gg) Mr. Michael Everson: It seems that given a clear deadline, it may be doable. However it seems the amendment route is safer.

hh) Mr. Mike Ksar: We may have to target the final approval by IRG by the time next IRG meets. The pdf file in the correct format, including the page numbers etc. must be made available to the editor. I would like to see the work done between now and the next IRG meeting by early December -- review and confirm that all the unification is done correctly, prepare the mapping information, and the tables for Annex C, and the pdf file suitable for inclusion in the FDIS text. The format required is the data file in Annex C.

Disposition:

If the DPRK information is not ready by end of November (?) it will not be included in FDIS of Part 2. The only change acceptable is the addition of DPRK source information and associated data tables. IRG must freeze the DPRK source information at the next IRG meeting in December 2000.

a) Mr. Zhang Zhoucai: As to the fonts, no vendor is capable of providing the fonts. Even if it is available, it is only under certain conditions.

b) Mr. Michel Suignard: Bit mapped characters is OK for the FDIS. However, we need the fonts for the final publication. What is in the FDIS could be used as the basis for the font vendors to create the required fonts. I understand the constraints under which IRG is working on. The source information is frozen -- except for DPRK. In December we can take another pass at the DPRK information and Glyphs provided to get the final approval.

c) Mr. Zhang Zhoucai: For China, we would like to see the updated Hong Kong source information be included in document N2280.

d) Mr. Michel Suignard: I will update document N2280. Accepted. As a result of the above, Canada's comment is also resolved.

DPRK Negative Ballot

a) KPS source information -- we can add this if it is reviewed and frozen by IRG in the next IRG meeting by December 2000. Has the DPRK concern been addressed -- so that DPRK can change the ballot to ACCEPTANCE?

b) DPRK: (to get back to the editor)

c) Dr. Ken Whistler: Since you have expressed that the DPRK information will be reviewed by IRG before inclusion in the standard, it is sufficient to address our concern for now.

d) Mr. Michel Suignard: Korea Hanja source should be K4-. This makes sense in that it permits DPRK to identify their sources properly. The updates needed by HKSAR are not reflected in the CD provided to the editor. The sources for HKSAR need some clarification. One character from Extension B was removed. The consequence is 2F86D from the compatibility set has to be removed.

    Change of "K-xxxx " to "K4-xxxx" for DPRK is OK.

e) Dr. Ken Whistler: Clause 7.2 and Annex C description will need to change. This will add a column to the tables. The number of octets in the filed is not changed. If there is a format by having uniformly a trailing blanks it is easier to import the data easily. If there are fields some with trailing blank and others without trailing blank, it will need specialized programs to deal with fixed field lengths. The Annex C table in the CD provided therefore is not the final form. The next version to be done by IRG will fix this. There is a trailing blank currently. If this is removed, there will be

difficulty in being able to separate the following field. The South Korea field does not have a trailing blank. HK A, B and C -- it makes sense to keep these, than getting it out. In document N2284, Hong Kong is asking for changing HA, HB and HC to H. If we remove the A, B and C, we will have problems -- for example: HA1234, HB1234 will become H1234 and H1234 which makes the entries invalid. The source information is important. See reference document IRG N753.

f) Mr. Shih-Shyeng Tseng: Document N2270 shows new HKSAR source information.

g) Mr. Takayuki Sato: Consequent to the resolution to HK source issue, Japan has reversed its vote to YES.

Disposition: DPRK, Sweden, Ireland, and Japan have all changed their ballot to YES. All the negative ballots have been satisfactorily resolved by the disposition of comments. Final disposition of comments will be prepared (see final document N2280). Editor to prepare text of FDIS along with Extension B tables and data tables from IRG by end of next IRG meeting in December 2000.

Relevant resolution

M39.6 (FCD 10646-2):	**Unanimous**

WG2 accepts document N2280, modified based on the review at this meeting, as the disposition of comments to the ballot responses in document N2276. The only further changes to be accepted in FDIS would be refinements to the character shapes and additions to DPR of Korea sources for CJK ideographs; the target dates for these changes is 2000-12-12. WG2 instructs its editor to prepare the final disposition of comments, and with assistance from the contributing editors, to prepare the text for FDIS 10646-2, and submit these documents to the SC2 secretariat for further processing, with unchanged target completion dates: FDIS 2001-05 and IS 2001-12.

8.2   Alphanumeric Fonts for Mathematical Use

Input document:
N2272   On the requirements for alphanumeric fonts for mathematical use; Asmus Freytag; 2000-09-19

Covered under disposition of comments above.

8.3   Status of Meroitic encoding

Input document:
N1638   Proposal to encode Meroitic in Plane 1 of ISO/IEC 10646-2; Everson; 1997-09-18

One Meroitic scholar from Germany is in contact with Mr. Michael Everson. He has some issues on the Glyphs. Some progress is being made.

8.4   Status on Early Aramaic and other scripts

N2042   Unicode Technical Report #3: Early Aramaic, Balti, Kirat (Limbu), Manipuri (Meitei), and Tai Lü scripts; Rick McGowan and Michael Everson; 1999-07-20

In Manipur they are using the Meitei script. Messrs. Rick McGowan and Michael Everson are working with the experts.

9   Architecture issues

None.

10   Publication issues

None.

11 IRG status and reports

11.1 IRG 15 Resolutions

Input document:
N2229   IRG#15 Resolutions; IRG; 2000-06-23

Mr. Zhang Zhoucai: Extension C work will start at the next IRG meeting.
Future meeting is in M15.7 -- IRG 16 is in Seoul, Korea, 2000-12-4--8, IRG 17, HKSAR in June 2001.

DPRK requirement has been covered in IRG resolution M15.8.
Mr. Zhang Zhoucai has been nominated to continue for another term. IRG resolution M15.12 - new term for Rapporteur.

Relevant resolution

M39.29 (IRG Rapporteur):	By Acclamation
With reference to IRG resolution M15.12 in document N2229, WG2 recommends to SC2 the appointment of Mr. Zhang Zhoucai as the IRG Rapporteur for another term.	

Mr. Mike Ksar: IRG charter is to focus on CJK unification etc. Items related to formatting, six columns etc. should be brought to WG2 attention.
Mr. Zhang Zhoucai: DPRK was asked to make the format related requirements to WG2.
Dr. Umamaheswaran: I want to ensure IRG take note of the DPRK requirement for Part 1.

(See relevant resolution M39.26 under item 7.2.4 on page 18.)

The IRG resolution on Extension B schedules is consistent with what we discussed earlier.

12 Defect reports

See editorial corrigenda items 7.3 on page 19 and 7.4 on page 20.

13 Liaison reports

13.1 Unicode Consortium

Dr. Asmus Freytag: The Unicode has released an update 3.0.1 to the standard. It does not include any new characters, but updates to character properties. We intend to release another interim one called 3.0.2. We have no plans at the moment to address amendment 1. 3.1 is slated to be synchronized with Part 2. Editorial work is jointly synchronized with editor of 10646. There is an explosion in the membership of the Unicode Consortium. Even the Unicode conferences are showing larger attendance numbers. The conference organizers did not have enough hardcopies of the proceedings at the last meeting. Most of the consortium's information is available online on the Unicode web site. We had contacts from IETF -- on the question of referencing the Unicode standard in the various RFCs etc. Many of the core groups involved in IETF like utilities, public service groups etc. are very conservative and they question the stability of the Unicode standards etc. The next IUC meets in Hong Kong.
Dr. Ken Whistler: IETF did not want to reinvent the wheel related Unicode standard (and indirectly 10646). A good example is the normalization. The IETF has been concerned about how to do normalization. The UTR on normalization -- has been changed in status to Unicode Standard Annex. Part of Unicode 3.0.1 changes was to clarify which of the UTRs have status as part of the standard etc. IETF would like ISO standards -- however, this would be reinventing the wheel from the Unicode point of view. We were looking for the most appropriate forum to develop the standards and be able to reference these by other organizations. The Unicode consortium has taken the lead in implementation standards that IETF could reference. The other area is the i18n of International Domain names. Host names and domain names -- then could be extended in a culturally friendly manner. This raises a whole set of issues, when going beyond the traditional ASCII etc. Issues like SPOOFING, security etc. are being raised and participants from the Unicode are trying to resolve.

Discussion:
  a) Mr. Erkki Kolehmainen: There are several competing draft proposals for IDNs and is getting out of hand.
  b) Dr. Ken Whistler: One of the necessary evils is just that -- there can be several RFCs getting the status of IETF drafts. The current status of IDNs etc. is not typical of how internet standards have been developed in the past.

13.2 IETF

Input document:
N2275   IETF liaison; Keld Simonsen; 2000-09-19

Mr. Mike Ksar: Document N2275 from Mr. Keld Simonsen reports on the registration of character sets in IETF IANA registry. The new RFC 2781 has been approved as an informational RFC.

13.3 TC304

Input document:
N2227   Liaison Report from CEN TC 304; Erkki I. Kolehmainen, co-operation officer; 2000-06-02

Mr. Erkki Kolehmainen: Document N2227 contains my liaison report to SC2. CEN TC304 is going through a Market Relevance study by Price Waterhouse. That study was delayed. The results will influence the future of CEN TC304. An interim report is expected by mid December. A meeting of CEN TC304 is planned for early December - postponed from October. The liaison report lists the resolutions from the last meeting -- with comments added by me to bring the matter to the attention of SC2 for information. WG2 experts also should take note. Please take note that the invitations from CEN TC304 to potentially interested parties will be sent out only after the study is conducted.

13.4 W3C

Mr. Mike Ksar: W3c- i18n-wg has been meeting at 3-month intervals. We have reviewed most of the w3c recommendations for i18n. Mr. Michel Suignard is one of the active members. Mr. Arnold Winkler is the liaison from WG20. Dr. Umamaheswaran was participating earlier. Most of the w3c members are IT companies from different parts of the world. My name has to be confirmed as liaison from SC2 to w3c-i18n-wg by SC2.

14 Other business

14.1 Web Site Review

Mr. Mike Ksar: We appreciate the help of Mr. Keld Simonsen and DKUUG for their excellent support. I did not have to carry any paper copies to this meeting -- all the latest documents were made available at the web site. The document list will be ordered in the reverse order. We have provided zipped files for each of the meetings for the last three meetings. The host organizations are also helping us out by printing the documents locally and make it available to the delegates. (See relevant resolution M39.31 under item 15.2 on page 55.)

14.2 Future Meetings

Relevant resolution

M39.30 (Future Meetings):	**Unanimous**

WG2 meetings:
      Meeting 40 – week of 2 April 2001 – Mountain View, CA, USA; Hosts: Microsoft Corp. and Unicode Consortium.
      Meeting 41 – week of ~~September 24~~ **October 15**, 2001 (tentative),
      Singapore, Hosts: Singapore NB and Sybase, co-located with SC2 plenary
      Meeting 42 – March/April 2002 - Europe. Possible hosts: Ireland, Finland, Greece, Norway, or Netherlands.
IRG meetings:
      IRG 16   Seoul, Korea, 2000-12-04/08
      IRG 17   HKSAR, 2001-06

15 Closing

15.1 Approval of Resolutions of Meeting 39

Output document:
N2254   WG2 resolutions – meet 39; Ksar/WG2

Canada, China, Finland (proxy), Germany, Greece, Ireland, Japan, DPR of Korea, Republic of Korea, Norway, Poland, Sweden, Taipei Computer Association (Liaison), the Unicode Consortium (Liaison), and

the USA were represented when the following resolutions were adopted.

WG2 discussed the draft resolutions in document N2254Draft- prepared by V.S. Umamaheswaran, and reviewed by the drafting committee (Messrs. Mike Ksar, Michael Everson, Asmus Freytag, Ken Whistler, Takayuki Mr. Takayuki Sato, and Erkki Kolehmainen). They were adopted with modifications based on discussion during the meeting. See document N2254 for the set of adopted resolutions.

Some comments are noted below:
- General:
  Mr. Keld Simonsen: Use ISO 8601 date formats everywhere - ex: 2000-09-19/26 instead of … 19--26.
- Resolution on Armenian feedback
  Dr. Asmus Freytag: The fax message readout is in the minutes; We could point out that 10646-1 has been published since 1993.
- Resolution on DPRK items
  China Abstained - Some Korean experts in China have different opinion on the Korean names etc. in the standard.
- Resolution on USIs
  Norway NEGATIVE. Based on the concern that the USIs may be used to prevent adding further fully composed characters in the standard.
  Mr. Mike Ksar: The intent of the USIs is NOT to prohibit any such characters. We are adding a number of precomposed characters where there has been sufficient justification for them, independent of USIs. USI is a notation to facilitate enumeration of the sequences.
- Resolution on Recycling symbols:
  Mr. Alain Labonté: Commented on annotations to names.
  Dr. Asmus Freytag: there is misunderstanding on whether or not to add annotations to the names. National bodies are requested to comment on the PDAM ballot.
  Japan - Abstains on Recycling Symbols -- there may be more to be added.
- Resolution on Amd 1 text
  On Greek Koppa - there will be comments from the Greek NB during the ballot of PDAM.
- Resolution on Meeting dates
  Meeting dates for Singapore changed to September 24, 2001 (tentatively).
  (Note: This date was changed back to October at the SC2 plenary on September 26, 2000; a revised resolution document reflects this change).

15.2 Recognition

Professor Kohji Shibano: Mr. Ed Hart had suggested a new recognition procedure to SC2. In conjunction with the conveners of WG2 and WG3 and chair of SC2, I would like to present a certificate of appreciation to Mr. Johan van Wingen for his valuable contribution to the work of SC2 as a project editor and for his expert advice to WG2 matters. Unfortunately he will not be able to join us for the Thursday evening reception.
Mr. Johan van Wingen - this may be my last meeting of SC2 I may be attending.

At the evening reception on Thursday, 2000-09-21, sponsored by EPOFOS, the following participants in WG2 were recognized for their contribution to WG2's work: Messrs. Mike Ksar, Ed Hart, Michel Suignard, Michael Everson, Asmus Freytag, and Umamaheswaran. A plaque enumerating their valuable contribution to the work of WG2 over the last several years was presented to each on behalf of JTC1/SC2/WG2. Mr. Zhang Zhoucai was recognized with a plaque on Monday, 2000-09-25. The convener will send a plaque for Mr. Bruce Paterson.

15.3 Appreciation:

Relevant resolutions

M39.31 (Appreciation to DKUUG for web services):	By Acclamation
WG 2 thanks DKUUG, in particular Mr. Keld Simonsen, for its continued support of the web site for WG2 document distribution and the e-mail server.	
M39.32 (Appreciation):	**By Acclamation**
WG 2 thanks its host ELOT for hosting the meeting, and its staff for providing excellent secretarial and administrative support. WG2 further thanks ELOT and the sponsors EPOFOS, INTRASOFT, and HEWLETT PACKARD, for their hospitality and the weekend excursion to the Santorini island.	

15.4 Adjournment

The meeting was adjourned at approximately 13:00h.

16 Action Items

16.1 Action items from previous WG 2 meetings (numbers 25 to 32)

All the action items from meeting 25 in Antalya, Turkey, meeting 26 in San Francisco, CA, USA, meeting 27 in Geneva, Switzerland, meeting 28 in Helsinki, Finland, meeting 29 in Tokyo, Japan, meeting 30 in Copenhagen, Denmark, meeting 31 in Québec City, Canada, meeting 32 in Singapore, meeting 33 in Heraklion, Crete, Greece, meeting 34 in Redmond, WA, USA, and meeting 35 in London, UK, have been either completed or dropped.

16.2 Outstanding action items from meeting 36, Fukuoka, Japan

Item	Assigned to / action (Reference Meeting 36 Resolutions in document N2004 and Unconfirmed Meeting 36 minutes in document N2003 - with the corrections noted in section 3 of document N2103).	Status
AI-36-6	**Ad hoc group on principles and procedures (lead - Dr. V.S. Umamaheswaran)**	
a	M36.20 (Criteria for encoding symbols): WG 2 accepts the Criteria for Encoding Symbols proposed in document N1982 in principle and instructs the ad hoc group on Principles and Procedures to incorporate the material from this document into the WG 2 standing document on Principles and Procedures, document N2002. M37, M38 and M39 - in progress.	**In progress**

16.3 Outstanding action items from meeting 37, Copenhagen, Denmark

Item	Assigned to / action (Reference Meeting 37 Resolutions in document N2104 and Unconfirmed Meeting 37 minutes in document N2103 – with the corrections noted in section 3 above.)	Status
AI-37-6	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
a	With assistance from the Unicode representative, to include a warning in the Principles and Procedures document to proposers of future precomposed characters into the standard on the effect of normalization UTR on the integrity of the characters. M38 and M39 - in progress,	**In progress**
AI-37-11	**Japanese national body (Mr. Takayuki Sato)**	
b	To communicate document N2055 - Comment on Proposal for Nepalese Script, Hugh McG. Ross, 1999-07-29, as feedback to Nepal. M38 and M39 - in progress.	**In progress**
AI-37-13	**Germany (Mr. Marc Küster)**	
a	With reference to Encoding Egyptian Hieroglyphs, is invited to contact the German experts, encourage them to participate and report to them on the WG2 discussion, and to supply the contact names etc. to Messrs. Michael Everson and Rick McGowan. M38 and M39 - in progress.	**In progress**

16.4 Outstanding action items from meeting 38, Beijing, China

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203.)	Status
AI-38-5	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
a	To add text to the principles and procedures document concerning formats of documents to be submitted to the convener, along the following: "Preferences are for Word .DOC format, or printable .PDF formats, with unprotected TEXT portions and possibly copyrighted Font portions. Whereas, files could be ZIP-ped for compressing them, It should be noted that .EXE files may not be accepted in many organizations as part of their Security Policy and self-extracting .EXE files should be avoided." M39 - in progress.	**In progress.**
b	Per Resolution M38.15 (Roadmap documents), to provide links to the updated documents N2213, N2214, N2215 and N2216 on the SC2 web site, once they are posted there, from Annex A of the principles and procedures document. M39 - in progress	**In progress.**
c	To capture the WG2 resolve, in Resolution M38.12 (Additional Arabic presentation forms for Uighur and other languages), …. WG2 resolves not to add any more Arabic presentation forms to the standard and …. M39 - in progress	**In progress.**
d	To take document N2176R - Implications of Normalization on Character Encoding; Unicode Consortium – Mark Davis; 2000-03-07, and incorporate it into Principles and Procedures document. M39 - in progress	**In progress.**
AI-38-9	**Japanese national body (Mr. Takayuki Sato)**	
b	To get feedback from the Philippines on Philippines script (documents N1933 and N2194). M39 - in progress	**In progress.**
AI-38-12	**Myanmar national body**	
a	(Myanmar script experts in particular) to review document N2033 - Proposal for Extension of Myanmar Coded Set, John Okell and Hugh McG Ross, UK, 1999-06-03, with particular attention to the proposed DOUBLE COMBINING MARKS in the document. M38: action item M17-5 d, reassigned to Myanmar national body. M39 - in progress.	**In progress.**
AI-38-14	**Cambodian national body (Mr. Mony Sokha Sath)**	
a	To work with other Cambodian experts (including Messrs. Ken Whistler, Michael Everson, Maurice Bauhan), to come to an agreement on the kind of annotation / explanatory text needed regarding Khmer characters referenced in document N2164) based on discussion at meeting M38. M39 - in progress	**In progress.**
AI-38-15	**All national bodies and liaison organizations**	
c	With references to documents N2148 - Proposal: ISO/IEC TR 15285 extension – Character Glyph Model; Takayuki K. Sato Shuichi Tashiro; 2000-01-05; N2198 - Proposal to amend TR 15285 – Char Glyph Model; Japan; 2000-03-15; N2199 - Requirements for coded elements – proposed annex to TR 15285 – Char Glyph Model; Japan; 2000-03-13, and, N2206 - Proposal to develop new Anex for TR 15285 – Char Glyph Model; Kobayashi, Kataoka, Kuwari; 2000-03-13, to review and feedback to Mr. Takayuki Sato, towards assisting users of ISO/IEC TR15285 to better understand how to bridge the worlds of glyphs and characters especially in the end-user interfacing. **(Item carried forward to next meeting).** M39 - in progress	**In progress.**

16.5 New action items from meeting 39, Vouliagmeni, Athens, Greece

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
AI-39-1	**Meeting Secretary - Dr. V.S. UMAmaheswaran**	
a	To finalize the document N2254 containing the adopted meeting resolutions and send it to the convener as soon as possible.	Completed.
b	To finalize the document N2253 containing the unconfirmed meeting minutes and send it to the convener as soon as possible.	
AI-39-2	**Convener - Mr. Mike Ksar**	
a	To act on Resolution M39.1 (Feedback to Armenia): With reference to the fax message received from SARM, the Armenian national body, via the Armenian embassy in Athens, WG2 instructs its convener to respond as follows: d. reaffirming the previous resolution M38.17 e. informing SARM that ISO/IEC 10646-1 is a published standard, not a DRAFT, and cannot be suspended, and, f. inviting SARM to participate in SC2 and its working groups towards better harmonization of Armenian standards with SC2-developed standards and to actively participate in the technical program of work of SC2/WG2.	
b	Resolution M39.11 (Request from Bangladesh): In response to the request from Bangladesh Standards and Testing Institution in document N2261 for adding KHANDATA character to 10646, WG2 instructs its convener to communicate to the BSTI: c. that the requested character can be encoded in 10646 using the following combining sequence: Bengali TA (U+09A4) + Bengali Virama (U+09CD) + ZWNJ (U+200C) + Following Character(s), to be able to separate the KHANDATA from forming a conjunct with the Following Character(s). Therefore, their proposal is not accepted. d. our understanding that BDS 1520: 2000 completely replaces the BDS 1520: 1997.	
AI-39-3	**Editor of ISO/IEC 10646-1 Mr. Michel Suignard with assistance from contributing editors**	
	To prepare the appropriate AM, DAM or PDAM texts, sub-division proposals, collection of editorial text for the next edition, corrigendum text, or entries in collections of characters for future coding, with assistance from other identified parties, in accordance with the following:	
a	Resolution M39.5 (Editorial Corrigenda): WG2 accepts the following proposed changes: e. revised character shapes for code positions 066B, 066C, 125C, 2216, 224C, 25AA, 25AB (from document N2238) in the BMP f. the updated Table 47 for Khmer in document N2274, with correction to the glyph for RIEL SIGN at 17DB per document N2238, and, g. the proposed changes to the glyphs of Letter-like Symbols in the BMP as suggested in document N2272 h. FEFF (ZWNBSP) - add the missing glyph. Further WG2 requests the Unicode Consortium to prepare the updated Tables reflecting the above corrections in a form suitable for replacing the corresponding Tables in 10646-1: 2000. Further, WG2 instructs its editor to update document N2232 - cumulative list of editorial corrigenda, and forward the corrigenda to ITTF with a request to publish the set as a Minor Revision to the standard.	
b	Resolution M39.23 (Format of Character additions in Amendments to 10646): WG2 resolves that the format for amendments that involve character additions will be in the form of complete replacements of tables and character name lists where they exist, with an explanatory text listing the code positions or ranges of code positions to which new characters are assigned. If it is a new block it will be presented as a complete new table and names list.	

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
c	Resolution M39.25 (Initiating PDAM-1 to 10646-1:2000): WG2 accepts documents N2228 (working draft for PDAM-1 from the editor) and document N2285 (summary of all the technical changes to the BMP accepted to date), and documents N2281 and N2273 (containing the updated code charts and name lists) as the base documents for preparing the PDAM text. Further, WG2 instructs its editor, with assistance from the contributing editor and the US national body, to prepare the text for PDAM-1 to 10646-1: 2000, with the title MATHEMATICAL SYMBOLS AND OTHER CHARACTERS, and submit it to the SC2 secretariat for further processing. The target completion dates are: WD 2000-10, PDAM 2001-04, FPDAM 2001-10, FDAM 2002-02, AM 2002-06. (See also document N2254 for related resolutions from Meeting M39.	
AI-39-4	**Editor of ISO/IEC 10646-2: Mr. Michel Suignard with assistance from contributing editors**	
	to take note of the following and incorporate the needed text in the next draft of ISO/IEC 10646-2:	
a	Resolution M39.6 (FCD 10646-2): WG2 accepts document N2280, modified based on the review at this meeting, as the disposition of comments to the ballot responses in document N2276. The only further changes to be accepted in FDIS would be refinements to the character shapes and additions to DPR of Korea sources for CJK ideographs; the target dates for these changes is 2000-12-12. WG2 instructs its editor to prepare the final disposition of comments, and with assistance from the contributing editors, to prepare the text for FDIS 10646-2, and submit these documents to the SC2 secretariat for further processing, with unchanged target completion dates: FDIS 2001-05 and IS 2001-12.	
b	Resolution M39.22 (Permanent Reservation): WG2 accepts to permanently reserve 32 character positions FDD0 to FDEF in the BMP (as proposed in document 2277) for internal processing purposes, with the following annotation for each code position: (This position is permanently reserved) For consistency, WG2 also agrees to change the annotation for all code positions ending with FFFE or FFFF in all the planes.	
AI-39-5	**Ad hoc group on principles and procedures (lead - Dr. V.S. UMAmaheswaran)**	
a	Update the guidelines for submitting collections to add USI in accordance with RESOLUTION M39.7 (UCS Sequence Identifier): WG2 accepts the notation for sequence identifier proposed in document N2230 for inclusion in the next amendment of 10646-1: 2000, with the following changes: a. The identifier is called "UCS Sequence Identifier (USI)" instead of Unique Sequence Identifier. b. The delimiters are LESS THAN and GREATER THAN signs instead of the angle brackets. c. There must be at least two UIDs in a sequence.	
b	To update the BMP roadmap documents to reflect results of this meeting M39 (see document N2313).	
AI-39-6	**Irish national body (Mr. Michael Everson)**	
a	With reference to document N2240 on 8 recycling characters, to add references to relevant standards or other source documents to the proposal.	
b	With reference to document N2241 on Egyptological characters, to refine the proposal working in an ad hoc group with other experts in Egyptology.	
c	Is invited to prepare a contribution on guidelines on the use of DIGITS versus NAMES of DIGITS in character names in 10646.	
d	To assist Mr. Takayuki Sato in providing better glyphs for the DENTIST Symbols (from N2093).	
AI-39-7	**National body of DPR of Korea**	

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
a	To take note of and act on Resolution M39.2 (Proposals from DPR of Korea): f. With reference to documents N2231, N2245, and N2246, WG2 reaffirms its resolution M38.1 on the WG2 principles. g. WG2 officially creates an ad hoc group on the Korean script and invites DPR of Korea; Republic of Korea and other interested national bodies and experts to participate in it. h. With reference to documents N2243 and N2244, WG2 invites DPR of Korea to separate and refine their proposals according to the ad hoc recommendations in document N2282. i. With reference to document N2247, WG2 regrets it cannot add an additional column to the CJK tables in 10646-1: 2000, due to production and formatting complexities. j. WG2 invites DPR of Korea to participate in the IRG, and contribute towards developing a set of Data Tables containing the CJK Character Sources for the CJK ideographs in 10646-1 (similar to the corresponding data tables in FCD 10646-2). The target date for the DPR of Korea data tables is 2000-11-15.	
AI-39-8	**The US national body (Messrs. Hideki Hiura, Arnold Winkler, Ken Whistler)**	
a	Mr. Hideki Hiura - to act on Resolution M39.3 (SOFT HYPHEN and others): With reference to document N2268, WG2 endorses the principle that SOFT HYPHEN - SHY and other similar characters in the standard must not be lost during interchange even though their properties and behaviour are not explicitly specified in SC2 standards, including 10646. Further WG2 requests Mr. Hideki Hiura to communicate this principle to the Linux community.	
b	Mr. Arnold Winkler - to act on Resolution M39.4 (Response to APL WG): WG2 accepts document N2283, and invites Mr. Arnold Winkler to send it to SC22/WG3 - APL working group, as the response to their proposal in document N2260 regarding name changes to APL characters.	
c	To revise document N2263 per Resolution M39.24 (Draft tables and name lists for PDAM): WG2 accepts document N2263 as the working draft for PDAM-1 text, with the following changes to the Mathematical symbols, as recommended by the ad hoc on the PDAM text: g. Remove the word GREEK from all new letter-like symbols in the code positions 213D to 2140 h. Change SANS SERIF to SANS-SERIF wherever it occurs in the new character names i. The Greek Straight Epsilon symbols to be renamed Greek Lunate Epsilon Symbols j. All new Open Face symbols to be renamed Double-Struck symbols k. 03F4 will have the name GREEK CAPITAL THETA SYMBOL l. Q-shaped Koppas will be renamed Archaic Koppas (with a suitable annotation on the use of these characters). WG2 further invites the US national body to revise document N2263, incorporating the above changes and additions and reflecting all the new characters, name and shape changes accepted during this meeting (see resolutions M39.9 to M39.22 above), and reflecting the resolution M39.23 on the format to be used.	
AI-39-9	**IRG Rapporteur (Mr. Zhang Zhoucai)**	
a	Resolution M39.26 (DPRK - Ideographs in the BMP): The IRG is instructed to investigate creation of mapping tables of CJK ideographs and compatibility ideographs included in the BMP to their sources, including consideration for adding DPRK sources, similar to the data tables provided for CJK sources in 10646-2.	
b	To examine the proposal in document N2271 -- Proposal to amend two source code changes in BMP CJK Unified Ideographs block; TCA; 2000-09-19 – and advise WG2 on a possible corrigendum to 10646-1 for the T-Column entries in the CJK tables.	
AI-39-10	**The Unicode Consortium (Dr. Asmus Freytag)**	

Item	Assigned to / action (Reference Meeting 38 Resolutions in document N2204 and Unconfirmed Meeting 38 minutes in document N2203 – this document you are reading.)	Status
a	With reference to document N2236 - Proposal for addition of COMBINING GRAPHEME JOINER; UTC – Mark Davis; 2000-08-10; the proposers are invited to update the proposal addressing the concerns raised during the discussions at the meeting.	
b	To assist the editor in regard to Resolution M39.5 (Editorial Corrigenda): WG2 accepts the following proposed changes: a. revised character shapes for code positions 066B, 066C, 125C, 2216, 224C, 25AA, 25AB (from document N2238) in the BMP b. the updated Table 47 for Khmer in document N2274, with correction to the glyph for RIEL SIGN at 17DB per document N2238, and, c. the proposed changes to the glyphs of Letter-like Symbols in the BMP as suggested in document N2272 d. FEFF (ZWNBSP) - add the missing glyph. Further WG2 requests the Unicode Consortium to prepare the updated Tables reflecting the above corrections in a form suitable for replacing the corresponding Tables in 10646-1: 2000. Further, WG2 instructs its editor to update document N2232 - cumulative list of editorial corrigenda, and forward the corrigenda to ITTF with a request to publish the set as a Minor Revision to the standard.	
AI-39-11	**Japanese national body (Mr. Takayuki Sato)**	
a	With help from Mr. Michael Everson, to provide better glyphs for the DENTIST Symbols (from N2093).	
AI-39-12	**Chinese national body (Mr. Chen Zhuang)**	
a	To act on Resolution M39.17 (Dai scripts): With reference to documents N2239R and N2242R, Dehong Dai and Xishuang Banna Dai scripts, WG2 invites the Chinese national body to work with other national bodies and interested experts, and prepare revised proposals and proposal summary form, with assistance from the contributing editor Mr. Michael Everson, for consideration by WG2 at its next meeting in April 2001.	
AI-39-13	**All national bodies and liaison organizations**	
a	To review and feedback on the following items carried forward to next meeting. i) Document N2241 on adding 6 Egyptological characters j) Document N1638 on adding Meroitic in Plane 1 of ISO/IEC 10646-2 k) Document N2042 - Unicode Technical Report #3: Early Aramaic, Balti, Kirat (Limbu), Manipuri (Meitei), and Tai Lü scripts. l) To take note of and contribute regarding Resolution M39.17 (Dai scripts), regarding documents N2239R and N2242R, on Dehong Dai and Xishuang Banna Dai scripts.	
b	To take note of Resolution M39.30 (Future Meetings): WG2 meetings: Meeting 40 – week of 2 April 2001 – Mountain View, CA, USA; Hosts: Microsoft Corp. and Unicode Consortium. Meeting 41 – week of ~~September 24~~ **October 15**, 2001 (tentative), Singapore, Hosts: Singapore NB and Sybase, co-located with SC2 plenary Meeting 42 – March/April 2002 - Europe. Possible hosts: Ireland, Finland, Greece, Norway, or Netherlands. IRG meetings: IRG 16 Seoul, Korea, 2000-12-04/08 IRG 17 HKSAR, 2001-06	
c	To take note of and contribute regarding Resolution M39.2 (Proposals from DPR of Korea) - item b: WG2 officially creates an ad hoc group on the Korean script and invites DPR of Korea, Republic of Korea, and other interested national bodies and experts to participate in it.	