Universal Multiple-Octet Coded Character Set (UCS)

ISO/IEC JTC 1/SC 2 N3568R
ISO/IEC JTC 1/SC 2/WG 2 N 2404R
Date: 2001-10-18

Source:	WG 2 meeting 41, Singapore, 2001-10-15/18
Title:	Resolutions of WG 2 meeting 41
Action:	For approval by SC 2 and for information to WG 2 and WG 3
Status:	Adopted at meeting 41 of WG 2
Distribution:	ISO/IEC JTC 1/SC 2 and WG 2

Experts from Canada, Cambodia (Guest), China, Japan, DPR of Korea, Republic of Korea, Poland (Guest), Singapore, Sweden, the Unicode Consortium (Liaison), and the USA were present when the following resolutions were adopted.

Twenty seven (27) delegates representing eight (8) national bodies, one (1) liaison organization and ten (10) guests attended the meeting (see attached attendance list).

RESOLUTION M41.1 (Disposition of FPDAM-1 ballot comments):

Against: Alain La Bonté (individual WG2 expert)
For: Canada, China, Japan, DPR of Korea, Republic of Korea, Singapore, Sweden, and the USA
WG 2 accepts the disposition of comments in document N2389 to ballot responses in documents N2388 (SC2 N3556) on FPDAM-1 to 10646-1: 2000. The following significant changes are included in document N2389:
   a. Add two new fixed collections corresponding to Unicode versions 3.1 and 3.2 (per Canadian comment).
   b. Fix the defect in existing fixed collections 301 and 302 per document N2377 (and Canadian comment).
   c. Add RIAL SIGN at FDFC per document N2375 (and Iranian comment) with appropriate glyph.
   d. Remove FA45 – CJK compatibility character and move the following code positions up by one (Japan and US comments).
   e. Add a new normative clause for Bi-directional algorithm with a normative reference to the Unicode Bi-Di algorithm (US comment).
   f. Postpone addition of collections MES-3A and MES-3B to Amendment 2 to Part 1 pending clarification of their contents and their names (based on several NB comments).
   g. Based on acceptance of disunification of mathematical and CJK symbols in resolution M40.7, add eight new characters per document N2389 (US comment T.6)
   h. Accept 15 new Variation Selectors at positions FE01 to FE0F per document N2370 (Unicode liaison report) and document N2389 (US comment T.9).
   i. Accept new clause on variation selectors and the identified specific variants and sequences for mathematical and Mongolian variant characters (US comment).
   j. Adjustments to the names of a few characters (see N2389).

RESOLUTION M41.2 (Inconsistency in UTF-8 definition):

Unanimous
WG 2 acknowledges the inconsistency in definition of UTF-8 in ISO/IEC 10646-1: 2000 reported in document N2369 and instructs its editor to process the correction as part of FDAM-1 on 10646, by deleting the middle sentence of Note 1 in c*lause D.4: "Values FFFE and FFFF also do not occur .. ".*
WG 2 further resolves to include this correction in Amendment 1 to 10646-1: 2000.

RESOLUTION M41.3 (Referencing Unicode Normalization Forms):

Against: Republic of Korea;
For: Canada, China, Japan, DPR of Korea, Singapore, Sweden and the USA.
WG 2 acknowledges the usefulness of referencing Unicode Normalization Forms suggested in document N2370 – Liaison report from the Unicode Consortium, and resolves to include appropriate text as proposed in document N2398 to Part 1. WG 2 further resolves to include this text in Amendment 2 to 10646-1: 2000.

RESOLUTION M41.4 (Progression of FDAM-1):

Against: Alain La Bonté (individual WG2 expert)
For: Canada, China, Japan, DPR of Korea, Republic of Korea, Singapore, Sweden, and the USA

WG 2 instructs its editor to prepare and submit the FDAM-1 text along with the disposition of comments in document N2389, and reflecting resolutions M41.1 and M41.2 above, to the SC 2 secretariat for further processing with unchanged target completion dates -- FDAM 2002-02, AM 2002-06.

RESOLUTION M41.5 (Amendment 2 to 10646-1: 2000)

Against: Republic of Korea;
For: Canada, China, Japan, DPR of Korea, Singapore, Sweden and the USA.

WG 2 accepts the following for inclusion in the BMP:
   a. 70 characters proposed in document N2373 for encoding in Part 1 with revised encodings: 268A and 268B (2 monograms), 268C—268F (4 digrams) and 4DC0—4DFF (64 hexagrams)
   b. 6 phonetic characters proposed in document N2366R at 0221, 0234—0236
   c. Limbu script proposed in document N2339 in the range 1900—194F (following the roadmap) (subject to revision based on any feedback from Nepal)
   d. Tai Le (Dai) script proposed in document N2372 in the range 1950—197F (subject to revision based on any feedback from Dai experts in China)
   e. Two recycling symbols 267E - PITCH-IN and 267F - GREEN DOT symbols from proposal in document N2342
   f. 8 Tamil Symbols at positions 0BF3 to 0BFA proposed in document N2381R (subject to revision based on any feedback from Tamil experts), with TAMIL DITTO SIGN renamed TAMIL AS-ABOVE SIGN
   g. 46 symbols with the names proposed in document N2397 for inclusion in the BMP, with the shapes and code positions as detailed in document N2395
   h. Source-reference data tables for the CJK Ideographs including information for DPR of Korea sources per resolution M41.6 below
   i. Collection identifiers and names corresponding to refined definitions of MES-3A and MES-3B (refer postponed item f under resolution M41.1)
   j. Referencing Unicode Normalization Forms per resolution M41.3 above
   k. Incorporation of policy regarding acceptable changes to 10646 per resolution M41.11 below.

WG 2 further requests SC2 to approve a project subdivision for Amendment no. 2 of ISO/IEC 10646-1: 2000, with the scope of including the above-identified characters. Document N2395 contains the code charts and name tables proposed for inclusion in this PDAM-2. The completion schedule is PDAM-2 2002/04; FPDAM-2 2002/10; FDAM-2 2003-02.

WG 2 instructs its editor to prepare the text of PDAM-2 to Part 1 incorporating the above characters and submit it to SC2 for further processing to meet the above target dates.

RESOLUTION M41.6 (CJK Source References for Part 1)

Abstention: Japan;
For: Canada, China, DPR of Korea, Republic of Korea, Singapore, Sweden and the USA.

WG 2 instructs the IRG to prepare source-reference data tables (as .txt formatted files) for the CJK, and Extension A unified ideographs in ISO/IEC 10646-1: 2000 (similar to the data tables in ISO/IEC 10646-2: 2001).

WG 2 further instructs the IRG with assistance of DPR of Korea to incorporate the source-reference data tables (including the KP sources - KPS 9566-97 and KPS 10721-2000 as sources, as identified in document N2376 for the national standards of DPR of Korea).

The above must be completed by 2001-12-15, in order to be able to meet the schedules for Amendment 2 in resolution M41.5 above.

WG 2 further instructs its editor to incorporate the above source-reference information into data tables to be processed as part of the Amendment 2 to ISO/IEC 10646-1: 2000.

RESOLUTION M41.7 (DPR of Korea source information in Part 1)

<div align="right">**Unanimous**</div>

WG 2 invites DPR of Korea to cooperate with and assist the IRG in preparation of the source information for CJK ideographs in the BMP by 2001-12-15.

RESOLUTION M41.8 (Amendment 1 to Part 2)

<div align="right">**Unanimous**</div>

WG 2 accepts the following for inclusion in the Supplementary Planes:
   a. Linear B Syllabary in code positions 10000—1007D proposed in document N2378
   b. Linear B Ideograms in code positions 10080—100FA proposed in document N2378
   c. Aegean Numbers in code positions 10100—10130 proposed in document N2378
   d. Cypriot Syllabary in positions 10800—1083F proposed in document N2378
   e. Ugaritic characters in positions 10380—1039F proposed in document N2338
   f. Shavian characters in positions 10450—1047F proposed in document N2362R
   g. Osmanya characters in positions 10480—104AD proposed in document N2361R
   h. Variation selectors -17 through 256 in positions   E0110—E01FF from document N2370
   i. Update to source-reference data tables for CJK ideographs reflecting national standards from DPR of Korea as sources, which has been prepared with assistance of the IRG.

WG 2 further requests SC2 to approve a project subdivision for Amendment no. 1 to ISO/IEC 10646-2: 2001, with the scope of including the above-identified characters. Document N2396 contains the code charts and name tables proposed for inclusion in this PDAM-1. The completion schedule is PDAM-1 2002/04; FPDAM-1 2002/10; FDAM-1 2003-02.

WG 2 instructs its editor to prepare the text of PDAM-1 to Part 2 incorporating the above characters and submit it to SC2 for further processing to meet the above target dates.

RESOLUTION M41.9 (Single column layout for CJK in Part 1):

<div align="right">**Against: Japan and Republic of Korea;**
For: Canada, China, DPR of Korea, Singapore, Sweden and the USA.</div>

Towards being able to deal with additional source information for CJK ideographs and avoid the resulting physical layout complexities in publication, arising from the request for a sixth column from DPR of Korea, WG 2 instructs the IRG and its members to review and provide feedback on the impact of reducing the number of columns in the CJK layout in Part 1 to a single column (similar to what is in Part 2) for the next edition of ISO/IEC 10646-1. The source information specified by the current multiple-column layout could be replaced with equivalent source-reference data tables.

RESOLUTION M41.10 (Additional CJK compatibility characters from DPR of Korea):

<div align="right">**Unanimous**</div>

WG2 invites DPR of Korea to examine their proposal for 160 CJK compatibility characters towards reducing the total number to maximum of 151 with the goal of being able to fit them into the available space in the BMP. WG 2 further invites DPR of Korea to input this revised proposal as part of their ballot comments to Amendment 2 of ISO/IEC 10646-1: 2000.

RESOLUTION M41.11 (Policy regarding acceptable changes to 10646):

<div align="right">**Against: DPR of Korea;**
Abstention: Japan;
For: Canada, China, DPR of Korea, Singapore, Sweden and the USA.</div>

WG 2 requests SC2 adopt the following policy regarding acceptable changes to ISO/IEC 10646 and convey the same to JTC1 for information and to SC2 membership to take note:
   a. Once a character is assigned a code position in the standard it cannot be reassigned in the interest of ensuring interoperability of standardized characters.
   b. The arrangement of the characters in the standard is fixed; sorting and collation of the characters is outside the scope of the standard.
   c. The character names chosen by WG 2 for the English version of the standard are unique, fixed and may be arbitrary; once a character name is assigned, it *cannot* be changed even if additional information is provided later. These name strings are used , for example to establish correspondences with characters in other standards.
   d. Any inconsistencies in names could be adjusted in other language versions either when the standard is translated or in supplementary external documentation.

WG2 further instructs its editor to prepare suitable text to reflect the above policy and incorporate it into Amendment 2 of Part 1.

RESOLUTION M41.12 (Principles and Procedures):

<div align="right">**Unanimous**</div>

WG 2 accepts the revisions to the principles and procedures in document N2352R. WG 2 further requests SC2 to adopt this document and the associated updated Proposal Summary Form and roadmap documents made available on the WG 2 web site dkuug.dk/JTC1/SC2/WG 2. WG2 invites national bodies and liaison organizations to use these latest documents.

RESOLUTION M41.13 (Policy regarding fonts for submissions to 10646):

<div align="right">**Against: China, Japan, Republic of Korea;**
Abstention: DPR of Korea;
For: Canada, Singapore, Sweden and the USA.</div>

WG 2 adopts the following policy and invites all proposers to take note regarding fonts, towards being able to publish the standard and its amendments on schedule:
   a. The fonts must be made available to the editor in True Type Format. The fonts provided must not be subject to restrictions that will prevent their use in the process of editing or on-line publication of the standard and other related publications such as the Unicode Standard.
   b. For a complete script proposal or addition of small repertoires to existing scripts, the font must be made available prior to the FDAM / FDIS ballot. Otherwise, they will not be included in the FDAM/FDIS.
   c. For refinements of glyphs in the standard the font must be provided to the editor – otherwise the refinement will not be done.

RESOLUTION M41.14 (Khmer script):

<div align="right">**Unanimous**</div>

With reference to document N2380R from Cambodia, WG 2 accepts document N2394 from ad hoc on Khmer. WG 2 invites Cambodia to:
   a. Take note of resolution M41.11 above regarding the policy on acceptable changes to ISO/IEC 10646.
   b. Communicate with other Khmer experts (for example, authors of document N2385) to get clarification on any question on the current Khmer encoding model, repertoire and assignments in the standard.
   c. Propose any additional characters based on the above clarification, following the guidelines in document N2352R (Principles and Procedures)
   d. Propose any explanatory texts towards clarifying the use of encoded Khmer characters.

RESOLUTION M41.15 (Co-chair of Korean ad hoc):

<div align="right">**By Acclamation**</div>

WG2 appoints Mr. YANG Song Jin from the DPR of Korea as a co-chair of the Korean ad hoc group.

RESOLUTION M41.16 (IRG Rapporteur):

<div align="right">**By Acclamation**</div>

WG 2 recommends to SC2 the appointment of Mr. Zhang Zhoucai as the IRG Rapporteur for another term.

RESOLUTION M41.17 (Future Meetings):

<div align="right">**Unanimous**</div>

WG 2 meetings:
        Meeting 42 – 2002-05-20/23 – Dublin, Ireland
               (the week following International Unicode Conference in Dublin)
        Meeting 43 – 2002-12-02/05 (to be co-located with SC 2 plenary) Japan
IRG meetings:
        IRG 18   Japan, 2001-12-03/07
        IRG 19   Macau SAR, 2002-05 (to be confirmed)

RESOLUTION M41.18 (Appreciation on completion of 10646-2):

<div align="right">**By Acclamation**</div>

WG 2 thanks its editor, contributing editors and the IRG, for their excellent effort and cooperation in achieving the completion of ISO/IEC 10646-2, which is scheduled for publication by ITTF on 2001-11-01, two months ahead of schedule.

RESOLUTION M41.19 (Appreciation to DKUUG for web services):

By Acclamation

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

RESOLUTION M41.20 (Appreciation):

By Acclamation

WG 2 thanks its host the Information Technology Standards Committee (ITSC) of Singapore, and the sponsors i-DNS net International Pte Ltd., and Sybase (S) Pte Ltd., for hosting the meeting and their kind hospitality, and Ms. Thay Yean Lan for providing excellent secretarial and administrative support.

The following twenty seven (**27**) delegates representing eight (**8**) national bodies, one (**1**) liaison organization and ten (**10**) guests attended the meeting.

Name	Representing	Affiliation
Alain La Bonté	Canada	Gouvernement du Québec
V. S. (Uma) Umamaheswaran	Canada, Recording Secretary	IBM Canada
Zhang Zhoucai	China, IRG Rapporteur	CCID
HARADA Shiro	Guest - Cambodia	University of Tokyo
Helen Jarvis	Guest - Cambodia	Advisor to H.E. Sok An, Minister for the Council of Ministers, Cambodia
LAO Kim Leang	Guest - Cambodia	Japan Quality Assurance Organization
Norbert Klein	Guest - Cambodia	National ICT Development Authority, Cambodia
Sorasak PAN	Guest - Cambodia	Under Secretary of State, Prime Minister's Office, Cambodia
UNG Vuthy	Guest - Cambodia	National ICT Development Authority, Cambodia
Mony Sokha Sath	Guest - Japan	Lemon Computer
Elżbieta Broma-Wrzesień	Guest - Poland	Polish Committee for Standardisation
Shun ISHIZAKI	Japan	Keio University
Takayuki K. SATO	Japan	Centre of the International Cooperation for Computerization
Tatsuo L. KOBAYASHI	Japan	Justsystem Corporation
Mun Hwang Ryong	DPR of Korea	Korea Computer Center
Pak Tong Ki	DPR of Korea	Committee for Standardization
Yang Song Jin	DPR of Korea	Pyongyang Informatics Centre
Yun Chang Hwa	DPR of Korea	Academy of Science of the DPR of Korea
Kyongsok Kim	Republic of Korea	Busan National University
Kohji Shibano	SC2 Chair	Tokyo University of Foreign Studies
Toshiko Kimura	SC2 Secretariat	IPSJ/ITSCJ, Japan
Cao Lin	Singapore	Sybase (Singapore) Pte Ltd
James Seng	Singapore	i-DNS.net Int'l Pte Ltd
Monica Ståhl Forsberg	Sweden	Informationstekniska standardiseringen - ITS
Michael Y. Ksar	USA, Convener	Microsoft Corporation
Michel Suignard	USA; Editor Parts 1 & 2	Microsoft Corporation
Asmus Freytag	USA; Liaison - The Unicode Consortium; Contributing editor	Unicode, Inc.