

Universal Multiple-Octet Coded Character Set (UCS)

ISO/IEC JTC 1/SC 2/WG 2 N2254R

Date: 2000-10-11

<p>Source: WG 2 meeting 39, Athens, Greece, 2000-09-19/25 Title: Resolutions of WG 2 meeting 39 Action: For approval by SC 2 and for information to WG 2 and WG 3 Status: Adopted at meeting 39 of WG 2 Distribution: ISO/IEC JTC 1/SC 2 and WG 2.</p>

(Note: This revised document updates the WG2 M41-meeting date in resolution M39.30 to 15th of October 2001, to reflect the relevant SC2 resolution from the following week - Umamaheswaran).

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.

38 delegates representing 14 national bodies, and 4 liaison organizations were present at different times during the meeting (see attached attendance list).

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.

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.

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.

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.

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.

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.

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.

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".

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.

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.

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.

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.

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.

RESOLUTION 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.

RESOLUTION 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.

RESOLUTION 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.

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.

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.

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.

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.

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.

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.

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.

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

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.

RESOLUTION 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.

RESOLUTION M39.28 (Editor for 10646-1):

By Acclamation

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

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.

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

RESOLUTION 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.

RESOLUTION 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.

The following thirty-seven (38) delegates representing fourteen (14) national bodies and four (4) liaison organizations attended the meeting.

Name	Representing	Affiliation
Alain La Bonté	Canada	Direction du soutien au déploiement de l'infrastructure gouvernementale, 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
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	Schalex Co., Ltd.
Kohji SHIBANO	Japan, SC2 Chair	Tokyo University of Foreign Studies
Toshiko Kimura	Japan, SC2 Secretariat	ITSC-J
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
Kyongsok Kim	Republic of Korea	Busan National University
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.
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