

**Universal Multiple-Octet Coded Character Set
(UCS)**

ISO/IEC JTC 1/SC 2/WG 2 N2204

Date: 2000-03-24

<p>Source: WG 2 meeting 38, Beijing, China, 2000-03-21--24</p> <p>Title: Resolutions of WG 2 meeting 38</p> <p>Action: For approval by SC 2 and for information to WG 2 and WG 3</p> <p>Status: Adopted at meeting 38 of WG 2</p> <p>Distribution: ISO/IEC JTC 1/SC 2 and WG 2.</p>
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Canada, China, Ireland, Japan, Taipei Computer Association (Liaison), UK, USA, the Unicode Consortium (Liaison), and DPR of Korea (Guest) were represented when the following resolutions were adopted. **36** delegates representing **8** national bodies, **2** liaison organizations and **2** guest countries, were present at different times during the meeting (see attached attendance list).

RESOLUTION M38.1 (Feedback to DPR of Korea):

Unanimous

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 10646-1: 2000 or in 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.

RESOLUTION M38.2 (CJK compatibility ideographs from TCA/CNS 11643):

Unanimous

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 FCD 10646-2 being prepared per resolution M38.4 below.

RESOLUTION M38.3 (Request for considering splitting Extension B):

Canada, Japan and UK abstain

WG2 has examined the request for consideration for splitting Vertical Extension B, in document N2183 from Canada, and indirectly referenced by Finland in its negative ballot response to CD 10646-2 and decided against splitting the Vertical Extension B based on insufficient merits to justify the splitting, and in the interests of not delaying progression of CD 10646-2.

RESOLUTION M38.4 (CD 10646-2):**Unanimous**

WG 2 accepts the disposition of comments for the ballot on 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 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.

RESOLUTION M38.5 (Editorial Corrigenda to ISO/IEC 10646-1: 2000):**Unanimous**

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 correction 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 10646-1: 2000 (E) and (F).

RESOLUTION M38.6 (Restriction of encoding space):**Unanimous**

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 10646-1: 2000.

RESOLUTION M38.7 (Additions to the BMP - Miscellaneous):**Unanimous**

WG2 accepts to encode the following in the BMP of ISO/IEC 10646:

- 1) 17DD - KHMER SIGN LAAR, with the glyph as shown in document N2164.
- 2) 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.
- 3) 20B1 - PESO SIGN, with the shape as shown on page 1 of document N2161 (a P with two horizontal bars)
- 4) 237D - SQUARE FOOT, and,
234A - PROPERTY LINE
with shapes similar to what appear in document N2184.
- 5) 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).

RESOLUTION M38.8 (Yi radicals):**Unanimous**

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.

RESOLUTION M38.9 (Math Symbols):**Unanimous**

WG2 provisionally accepts the 951 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 10646-1: 2000 at the next meeting..

RESOLUTION M38.10 (Symbols from JIS X 0213):**China abstains**

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.

RESOLUTION M38.11 (CJK compatibility ideographs from JIS X 0213):**China Negative**

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).

RESOLUTION M38.12 (Additional Arabic presentation forms for Uighur and other languages):**China Abstains**

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.

RESOLUTION M38.13 (Collection identifiers for Multilingual European Subsets (MES)):**Unanimous**

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.

RESOLUTION M38.14 (Future amendment to 10646-1: 2000):**Japan Abstains**

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.

RESOLUTION M38.15 (Roadmap documents):**Unanimous**

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.

RESOLUTION M38.16 (Feedback to IEC - 3B on mapping of technical symbols):**Unanimous**

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.

RESOLUTION M38.17 (Feedback to Armenia):**Unanimous**

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:

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- 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.

RESOLUTION M38.18 (Feedback to JTC 1 SG on Strategic Planning):**Unanimous**

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.

RESOLUTION M38.19 (Liaison from SC2 to the Unicode Consortium):**Unanimous**

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.

RESOLUTION M38.20 (Future meetings):**Unanimous**

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)

RESOLUTION M38.21 (Appreciation to project editor and contributors)

By Acclamation

WG2 thanks its convener, project editor, its contributing editors, the IRG rapporteur, the IRG editor, and the Unicode Consortium for their dedicated effort in the successful completion and delivery of the PDF files for 10646-1: 2000 to ITTF on schedule.

RESOLUTION M38.22 (Appreciation to IRG)

By Acclamation

WG2 thanks the members of IRG, the IRG editor and its rapporteur for their continued valuable contribution on CJK-related items of WG2.

RESOLUTION M38.23 (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 M38.24 (Appreciation to the host):

By Acclamation

WG 2 thanks its hosts, Chinese Electronics Standardization Institute, CESI, and their staff Messrs. Wang Lijian, Chen Zhuang, Chen Yunfeng, Duan Jianmin, Ms. Dai Hong and Ms. Jin Qian, for hosting the meeting, for providing excellent secretarial and administrative support, and for their kind hospitality.

ISO/IEC JTC 1/ SC 2 /WG 2

Meeting 38, Beijing, China

2000-03-21—24

Attendance List

The following **36** delegates representing **8** national bodies, **2** liaison organizations and **2** guest countries 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)	Canada,	IBM Canada
Umamaheswaran	Recording Secretary	
Chen Yunfeng	China	Chinese Electronics Standardization Institute
Chen Zhuang	China	Chinese Electronics Standardization Institute
Jin Zhenrong	China	Yanbian University Computational Linguistic Research Institute
Mileti	China	Working Committee of Minorities' Spoken and Written Languages, Urumqi city, Xinjiang Province
Ms. Wang Xiaoming	China	CCID
Woshur Slamun	China	Xinjiang University
Xi Weining	China	Minority Language Committee of Yunnan Province
Zhang Zhoucai	China, IRG Rapporteur	CCID
Michael Y. Ksar	Convener	Hewlett-Packard Company
Chhit Wornnarith	Guest - Cambodia	Lemon Computer
Mony Sokha Sath	Guest - Cambodia	Cambodia Information Technology Association
Phal Des	Guest - Cambodia	Royal University of Phnom Penh
Jo Chun Hui	Guest - DPR of Korea	Committee for Standardization
Jo Nam Ho	Guest - DPR of Korea	Bureau of Computer Software, Academy of Sciences of DPR of Korea
Jon Chol Yong	Guest - DPR of Korea	Research Institute for Standardization
Kim Myong Gue	Guest - DPR of Korea	Korea Computer Center, Standardization and Information research section
Kim Pong Sam	Guest - DPR of Korea	Research Institute for Standardization
Pak Dong Gi	Guest - DPR of Korea	Committee for Standardization
Michael Everson	Ireland	Everson Gunn Teoranta
Hideki Nakade	Japan	Mitsubishi Research Institute, Inc.
Shuichi Tashiro	Japan	Electrotechnical Laboratory
Shun Ishizaki	Japan	Keio University
Takayuki Sato	Japan	Independent
Tatsuo Kobayashi	Japan	Scholex Co., Ltd.
Yutaka Kataoka	Japan	Otani University, Kyoto
Kyongsok Kim	Korea	Busan National University
Shih-Shyeng Tseng	Liaison - TCA	Computing Center, Academia Sinica
Asmus Freytag	Liaison - The Unicode Consortium	ASMUS, Inc.
Huang Yu Xiong	Singapore	Sybase (Singapore) Pvt. Ltd.
Christopher Fynn	U.K.	Independent
Ken Whistler	U.S.A.	Sybase, Inc.
Hideki Hiura	U.S.A.	Sun Microsystems Inc.
Michael Kung	U.S.A.	Microsoft
Michel Suignard	U.S.A.; Editor Part 2	Microsoft