

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

ISO/IEC JTC 1/SC 2 N _____
ISO/IEC JTC 1/SC 2/WG 2 N 3804
Date: 2010-04-23

Source: WG 2 meeting 56, San Jose, CA, USA; 2010-04-19/23
Title: Resolutions of WG 2 meeting 56
Action: For approval by SC 2 and for information to WG 2
Status: Adopted at meeting 56 of WG 2
Distribution: ISO/IEC JTC 1/SC 2 and WG 2

Experts from Canada, China, Ireland, Japan, Korea (Republic of), SEI - UC Berkeley (Liaison), TCA (Liaison), the Unicode Consortium (Liaison) and USA were present when the following resolutions were adopted (see attached attendance list).

Character count 107517 (till end of Amd. 7)
Addition of 1864 in FPDAM8
Character count 109381 in CD of 2nd edition (till end of FPDAM8)
Total count: 109381 (before meeting M56)
Addition of 323 for WD of future.

RESOLUTION M56.01 (Emoji ad hoc report):

Unanimous

WG2 accepts the recommendations in the ad hoc report in document N3829 dealing with various ballot comments on FPDAM8 and supporting documents related to Emoji symbols. The recommendations include:

- Addition of 1 new character 1F610 NEUTRAL FACE
- Changes to several glyphs, changes to character names and reordering of the characters inside the Emoticons block (the results are consolidated in document N3826)
- Changes to mappings to Emoji sources (to be incorporated in the revised EmojiSrc.txt - document N3835), and
- Accepting the following 13 Emoticon symbols for encoding in a future version of the standard:
 - 1F600 GRINNING FACE
 - 1F611 EXPRESSIONLESS FACE
 - 1F615 CONFUSED FACE
 - 1F617 KISSING FACE
 - 1F619 KISSING FACE WITH SMILING EYES
 - 1F61B FACE WITH STUCK-OUT TONGUE
 - 1F61F WORRIED FACE
 - 1F626 FROWNING FACE WITH OPEN MOUTH
 - 1F627 ANGUISHED FACE
 - 1F62C GRIMACING FACE
 - 1F62E FACE WITH OPEN MOUTH
 - 1F62F HUSHED FACE
 - 1F634 SLEEPING FACEwith their glyphs as shown in document N3834.

count:=1864+1 = 1865 in Amd. 8
count: 323+13=336 for future

RESOLUTION M56.02 (Character deletions in Amd. 8):

Unanimous

WG2 notes moving the following three characters from Amendment 8 to the collection of characters accepted for a future amendment:

- A78F LATIN LETTER MIDDLE DOT
- 1BFA BATAK SYMBOL BINDU GODANG
- 1BFB BATAK SYMBOL BINDU PINARJOLMA

count: 1865-3 = 1862 in Amd. 8
count: 336+3=339 for future.

RESOLUTION M56.03 (Progression of Amendment 8):

Unanimous

WG2 notes and accepts various name changes, glyph changes, annotation changes and changes to code positions of characters resulting from the disposition of FPDAM8 ballot comments, which incorporates results of resolutions M56.01 and M56.02 above. WG2 instructs its project editor to forward the final text of Amendment 8, along with the final disposition of comments document N3828 to the SC2 secretariat for an FDAM ballot. The final set of charts and names list are in document N3838. The unchanged target starting date is FDAM 2010-06.

count: addition of 1862 in Amd. 8

RESOLUTION M56.04 (CJK Charts for FCD of 2nd Edition):

Unanimous

WG2 decides to revert back to the single column format for CJK Unified Ideographs of Extension B for the 2nd edition. WG2 further instructs its editor and the IRG to review, verify and finalize the multiple-column charts for CJK Unified Ideographs in blocks other than Extension B.

RESOLUTION M56.05 (Revised text for examples Annex S.1.5):

Unanimous

IRG is instructed to review and propose updates to the revision to the examples proposed by the editor in document N3794. If an agreed upon text is made available to the editor prior to the start of the FDIS ballot, it will be included in the FDIS ballot.

RESOLUTION M56.06 (Disposition of Comments on FCD of 2nd Edition):

Unanimous

WG2 accepts the final disposition of ballot comments in document N3827, reflecting resolution M56.04 above. WG2 also accepts the following corrections proposed by the editor:

- update the publication date in reference for HKSCS to 2008 (page 39 of FCD text)
- Add the missing TC-4A76 reference to 94C4, including corresponding chart update
- Keep the CC-Data Element as a normative term in clause 4.5, but replace it with 'code unit sequence' in the remainder of the text of the standard. The term 'code unit sequence' will also be inserted in clause 4.5.

RESOLUTION M56.07 (Progression of 2nd Edition):

Unanimous

WG2 instructs its editor to forward updated final text and charts (after the IRG has verified the CJK charts), incorporating the results of resolutions M56.03 to M56.06 above, and the final disposition of ballot comments in document N3827, to SC2 secretariat for an FDIS ballot. The revised target starting date for FDIS is 2010-09.

count: 109379 in 2nd edition.

RESOLUTION M56.08 (Miscellaneous character additions):

Unanimous

WG2 accepts the following additions and corrections for future encoding in the standard:

- a. 0604 ARABIC SIGN SAMVAT
with its glyph shown in section 4 of document N3734.
- b. Six punctuation characters:
2E32 TURNED COMMA
2E35 TURNED SEMICOLON
2E36 DAGGER WITH LEFT GUARD
2E37 DAGGER WITH RIGHT GUARD
2E38 TURNED DAGGER
2E39 TOP HALF SECTION SIGN
with their glyphs and annotations from page 1 of document N3740.
- c. Two mathematical symbols:
27CB MATHEMATICAL RISING DIAGONAL
27CD MATHEMATICAL FALLING DIAGONAL
with their glyphs and annotations from pages 9 and 10 of document N3763.

- d. Nine Cyrillic characters for Slavonic:
 A674 COMBINING CYRILLIC LETTER UKRAINIAN IE
 A675 COMBINING CYRILLIC LETTER I
 A676 COMBINING CYRILLIC LETTER YI
 A677 COMBINING CYRILLIC LETTER U
 A678 COMBINING CYRILLIC LETTER HARD SIGN
 A679 COMBINING CYRILLIC LETTER YERU
 A67A COMBINING CYRILLIC LETTER SOFT SIGN
 A67B COMBINING CYRILLIC LETTER OMEGA
 A69F COMBINING CYRILLIC LETTER IOTIFIED E
 with their glyphs and annotations from section 2 in document N3748.
- e. 0AF0 GUJARATI ABBREVIATION SIGN,
 with its glyph as shown on line 1 page 1 of document N3764.
- f. Four Typikon symbols:
 1F540 CIRCLED CROSS POMMY
 1F541 CROSS POMMY WITH HALF-CIRCLE BELOW
 1F542 CROSS POMMY
 1F543 NOTCHED LEFT SEMICIRCLE WITH THREE DOTS
 with their glyphs from left column in Table 1 of document N3772.
- g. 058F ARMENIAN DRAM SIGN:
 with its glyph as shown in document N3834.
- h. Two dashes required for Chicago manual of Style
 2E3A TWO-EM DASH
 2E3B THREE-EM DASH
 with their glyphs and annotations based on document N3770.
- i. Seven Georgian and Nuskhuri letters
 10C7 GEORGIAN CAPITAL LETTER YN
 10CD GEORGIAN CAPITAL LETTER AEN
 10FD GEORGIAN LETTER AEN
 10FE GEORGIAN LETTER HARD SIGN
 10FF GEORGIAN LETTER LABIAL SIGN
 2D27 GEORGIAN SMALL LETTER YN
 2D2D GEORGIAN SMALL LETTER AEN
 with their glyphs and annotations shown on page 1 in document N3775.
- j. Four Arabic combining marks
 08F0 ARABIC OPEN FATHATAN
 08F1 ARABIC OPEN DAMMATAN
 08F2 ARABIC OPEN KASRATAN
 08F3 ARABIC SMALL HIGH WAW
 in a new block named Arabic Extended-A with the range 08A0 to 08FF
 with their glyphs as shown in document N3791.
- k. Correct the names for three Sundanese Supplement characters, based on document N3836:
 1CC4 change KA to LEU in the name
 1CC5 change BA to KA in the name, and
 1CC7 change LEU to BA in the name.
- l. Two new compatibility ideograph characters, as requested in Korean comment T32.3 on FCD ballot, and in Appendix 3 of document N3747:
 FA2E with its glyph shown on page 10, corresponding to K0-522B
 FA2F with its glyph shown on page 09, corresponding to K0-6766

count: 339 + 39 = 378 for future.

RESOLUTION M56.09 (Takri script):

WG2 accepts to create a new block named Takri in the range 11680 to 116CF in the SMP, and to populate it with **66** characters in code positions 11680 to 116B7 and 116C0 to 116C9, with their code positions, names and glyphs as shown on pages 10 and 11 of document N3758. This block contains some combining marks.

count: 378 + 66 = 444 for future.

RESOLUTION M56.10 (Miao script):**Unanimous**

WG2 accepts to create a new block named Miao in the range 16F00 to 16F8F in the SMP, and populate it with **128** characters in code positions 16F00 to 16F41 and 16F50 to 16F8D, with their code positions, names and glyphs as shown on pages 6 to 8 of document N3789. This block contains some combining marks.

*count: 444 + 128 = 572 for future.***RESOLUTION M56.11 (Arabic Mathematical Alphabetic Symbols):****Unanimous**

WG2 accepts to create a new block named Arabic Mathematical Alphabetic Symbols in the range 1EE00 to 1EEFF in the SMP, and populate it with **143** characters with their code positions, names and glyphs as shown in the charts in document N3799.

*count: 572 + 143 = 715 for future.***RESOLUTION M56.12 (Subdivision of work):****Unanimous**

WG2 instructs its convener and project editor to create a subdivision proposal (document N3837) for creation of the 3rd edition of ISO/IEC 10646, to incorporate items accepted for future encoding at meeting 55 (resolution M55.28 in document N3704) and characters and scripts accepted in resolutions M56.08 to M56.11 above. The 3rd edition is also to include the multiple column charts for the remaining CJK ideographs. The target starting dates are: CD 2010-06, FCD 2010-12 and FDIS 2011-11.

RESOLUTION M56.13 (Fonts for CJK multiple column charts):**Unanimous**

WG2 instructs the IRG to request the IRG members to send to the project editor the necessary fonts to enable creating the multiple column charts for CJK Ext. B and for CJK compatibility ideographs for consideration to include in the 3rd edition of ISO/IEC 10646.

RESOLUTION M56.14 (Multiple column CJK charts for 3rd edition):**Unanimous**

WG2 instructs its project editor to prepare the CJK multiple column charts for CJK Ext. B and CJK compatibility ideographs using the fonts received from IRG members and send them to the IRG for review, verification and finalization.

RESOLUTION M56.15 (CD for 3rd edition):**Unanimous**

WG2 instructs its project editor to create the text of for the 3rd edition of ISO/IEC 10646, incorporating the characters accepted for encoding per resolution M56.12 above on subdivision of work, and send it to SC2 secretariat for a CD ballot.

*count: 109379 + 715 = 110094 in CD of 3rd edition.***RESOLUTION M56.16 (Liaison response to SC34):****Unanimous**

WG2 instructs its convener to prepare a response to the Liaison letter from ISO/IEC JTC1/SC34 in document N3809, and forward it to SC2 to communicate to SC34. The response will state WG 2's views on the issue that is similar to the response to comment JP.G7 in the disposition of FPDAM8 ballot comment in document N3828.

RESOLUTION M56.17 (Tangut script):**Unanimous**

WG2 accepts the recommendations in the Tangut ad hoc report in document N3833 and invites the authors of the Tangut proposal in document N3797, together with other Tangut experts, to submit a revised proposal taking into account the ad hoc recommendations.

RESOLUTION M56.18 (Jurchen script):**Unanimous**

WG2 invites the authors of the proposal to encode Jurchen script in document N3788 to further revise the document based on feedback in document N3817, discussion at meeting 56, and in consultation with other Jurchen experts.

RESOLUTION M56.19 (Disunification request from China and TCA):**Unanimous**

With reference to the disunification request in document N3787, China and TCA are invited to revise the document clarifying what exactly is requested, have it reviewed by IRG, and submit the revised document to the next WG2 meeting.

RESOLUTION M56.20 (IRG Principles and Procedures):**Unanimous**

WG2 invites experts from national bodies and liaison organizations to review and provide feedback to the IRG rapporteur, on the principles and procedures document of the Ideographic Rapporteur's Group in document N3744 and the associated Ideographic Working Document Series from document N3746 before the June meeting of IRG.

RESOLUTION M56.21 (IVD registration by Japan):**Unanimous**

WG2 invites national bodies and liaison organizations to review and provide feedback to the IVD registrar by 2010-06-25 on the first set of Ideographic Variation Sequences for Hanyo-Denshi ideographic variation collection as per announcement in document N3796.

RESOLUTION M56.22 (Guideline on spelling for English character names):**Unanimous**

WG2 accepts the proposed text for guideline proposed in document N3832 on spelling of English character names in the standard for inclusion in the Principles and Procedures document, and instructs Dr. Umamaheswaran to prepare an updated Principles and Procedures document (N3802) and submit it to the convener to post to the WG2 web site and communicate to SC2 secretariat.

RESOLUTION M56.23 (Roadmap snapshot):**Unanimous**

WG2 instructs its convener to post the updated snapshot of the roadmaps (in document N3807) to the WG2 web site and communicate the same to SC2 secretariat

RESOLUTION M56.24 (Future meetings):**Unanimous**

WG2 endorses the following schedule for future meetings of WG2 and of IRG:

WG2 meetings:

Meeting 57 - 2010-10-04/08, Busan, Korea (Republic of)

Meeting 58 - 2011-06-06/10, Helsinki, Finland (along with SC2 plenary)

Meeting 59 – 1st Quarter, 2012, Mountain View, CA, USA (pending confirmation), Germany (as backup)

IRG meetings:

IRG 35 - 2010-11-08/12, Macao SAR

RESOLUTION M56.25 (Appreciation to DKUUG for web site support):**By Acclamation**

WG2 thanks DKUUG and its staff for its continued support of the web site for WG2 document distribution and the e-mail server.

RESOLUTION M56.26 (Appreciation to Host):**By Acclamation**

WG2 thanks the US national body, ANSI, for hosting the meeting, Adobe Systems Inc. and its staff, in particular Mr. Eric Muller for providing excellent meeting facilities. WG2 thanks the Unicode Consortium, specifically Ms. Magda Danish, for its kind hospitality.

Character count **107517** (till end of Amd. 7)

Addition of **1862** in FDAM8

Character count **109379** in FDIS of 2nd edition (till end of FDAM8)

Addition of **715** in CD 3rd edition

Character count **110094** (total in 3rd edition)

Attendance List

The following **34** attendees representing **6** national bodies, **3** liaison organizations, including **3** invited experts were present at different times during the meeting. There were **6** additional experts who participated remotely.

Name	Representing	Affiliation
Mike KSAR	.Convener, USA	Independent
Erich FICKLE	.Invited Expert, China	Independent
Tom BISHOP	.Invited Expert, liaison SEI	Wenlin Institute, Inc.
Van ANDERSON	.Invited Expert, liaison SEI	Independent
LU Qin	.IRG Rapporteur	Hong Kong Polytechnic University
Bear S. TSENG	.TCA – Liaison	Academia Sinica
Hsin-Kuang CHEN	.TCA – Liaison	Bureau of Standards, Metrology and Inspection,
Lin-Mei WEI	.TCA – Liaison	Chinese Foundation for Digitization Technology
Suh-Chyin CHUANG	.TCA – Liaison	Bureau of Standards, Metrology and Inspection,
Alain LABONTÉ	Canada; Editor 14651	Independent
V. S. (Uma) UMAMAHESWARAN	Canada; Recording Secretary	IBM Canada Limited
CHEN Zhuang	China	Chinese Electronics Standardization Institute
JING Yongshi	China	North University of Ethnicity, Ning Xia
LI Guoying	China	Beijing Normal University
SUN Bojun	China	Institute of Ethnology and Anthropology, Chinese Academy of Sciences
Michael EVERSON	Ireland; Contributing Editor	Evertime
Masahiro SEKIGUCHI	Japan	Fujitsu Limited
Yoshiki MIKAMI	Japan	Nagaoka University of Technology
KIM Kyongsok	Korea (Republic of)	Busan National University
Craig CUMMINGS	USA	Yahoo! Inc.
Eric MULLER	USA	Adobe Systems Inc.
Katsuhiko MOMOI	USA	Google
Lisa MOORE	USA	IBM Corp.
Mark DAVIS	USA	Google
Markus SCHERER	USA	Google
Peter EDBERG	USA	Apple Computer Inc.
Richard COOK	USA	Univ. of California, Berkeley
Rick McGOWAN	USA	Unicode Consortium
Roosbeh POURNADER	USA	High Tech Passport Ltd.
Yasuo KIDA	USA	Apple Inc.
Ken WHISTLER	USA; Contributing Editor	Sybase Inc.
Michel SUIGNARD	USA; Project Editor	Independent
Deborah ANDERSON	USA; SEI, UC Berkeley – Liaison	Dept. of Linguistics, Univ., of California, Berkeley
Peter CONSTABLE	USA; Unicode Consortium – Liaison	Microsoft Corporation