

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

ISO/IEC JTC 1/SC 2 N _____
ISO/IEC JTC 1/SC 2/WG 2 N 3904
Date: 2010-10-08

Source: WG 2 meeting 57, Busan, Korea (Republic of); 2010-10-04/08 Title: Resolutions of WG 2 meeting 57 Action: For approval by SC 2 and for information to WG 2 Status: Adopted at meeting 57 of WG 2 Distribution: ISO/IEC JTC 1/SC 2 and WG 2
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Experts from Canada, China, Ireland, Japan, Korea (Republic of), SEI - UC Berkeley (Liaison), Sri Lanka, TCA (Liaison), the Unicode Consortium (Liaison), UK, and USA were present when the following resolutions were adopted (see attached attendance list). (Note: Sri Lanka was present only during the adoption of two Sinhala-related resolutions below.)

*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)*

RESOLUTION M57.01 (Headers in CJK main block charts):

Objection: Korea

Acceptance: Canada, China, Ireland, Japan, UK, and USA

WG2 decides to remove the headers C, J, K, V and H in the charts for the CJK Unified Ideographs block (4E00 to 9FCB) in the BMP of the standard, retaining the glyphs in the current sequence for source references (G, T, J, K, V, H), including retaining any blank slots in their current positions. WG2 instructs its project editor to reflect this decision in the charts for FDIS of ISO/IEC 10646 2nd edition prior to issuing the FDIS ballot, and to reflect the same change in the text to be generated for the third edition at the end of this meeting.

RESOLUTION M57.02 (Miscellaneous character additions):

Unanimous

WG2 accepts the following characters for encoding in the standard:

- a. 20B9 INDIAN RUPEE SIGN with its glyph as shown in document N3887, with a cross reference pointing out that it is not the same as the current 20A8 RUPEE SIGN.
- b. 1CF3 VEDIC SIGN ROTATED ARDHA VISARGA
1CF4 VEDIC TONE CANDRA ABOVE
1CF5 VEDIC SIGN JI HVAMULIYA, and,
1CF6 VEDIC SIGN UPADHMANIYA
with their glyphs as shown on page 14 of document N3890.
- c. A7F8 MODIFIER LETTER CAPITAL H WITH STROKE
A7F9 MODIFIER LETTER SMALL LIGATURE OE, and
A7AA LATIN CAPITAL LETTER H WITH HOOK (along with the related annotations from document N3840)
with their glyphs as shown on page 27 of document N3890.
- d. 1F16A RAISED MC SIGN, and
1F16B RAISED MD SIGN
with their glyphs as shown on page 50 of document N3890.
- e. 2CF2 COPTIC CAPITAL LETTER BOHAIRIC KHEI, and
2CF3 COPTIC SMALL LETTER BOHAIRIC KHEI
with their glyphs as shown on page 17 of document N3890.
- f. 2E33 RAISED DOT
2E34 RAISED COMMA
with their glyphs as shown on page 1 of document N3912.
- g. 2D66 TIFINAGH LETTER YE, and
2D67 TIFINAGH LETTER YO
with their glyphs as shown on page 20 of document N3890.
- h. CJK UNIFIED IDEOGRAPH-9FCC (corresponding to Adobe-Japan1-6 CID+20156), with its source reference UTC-00867, and with its glyph as shown in document N3885.

The IRG convener is to take note of this addition and remove it from the IRG's collection for future extension.

- i. 0EDE LAO LETTER KHMU GO, and
0EDF LAO LETTER KHMU NYO
with their glyphs as shown on page 2 of document N3893.
- j. A792 LATIN CAPITAL LETTER C WITH BAR, and
A793 LATIN SMALL LETTER C WITH BAR
with their glyphs as shown in document N3896.

count: 715+21 = 736 additions in 3rd ed

RESOLUTION M57.03 (Request from SC35):

Unanimous

In response to the liaison request in document N3897 from JTC 1/ SC35, WG2 accepts the recommendations in the ad hoc report in document N3943, for several glyph improvements, annotations to several keyboard symbols, and the following two named UCS sequence identifiers to the standard, using the syntax for USIs in the standard:

<21F3, 20E2> KEYBOARD SYMBOL SCROLLING, and
<2139, 20E2> KEYBOARD SYMBOL HELP

WG2 further accepts the liaison response in document N3948, and instructs its convener to forward it to ISO/IEC JTC1/SC35 via the SC2 secretariat.

RESOLUTION M57.04 (Miscellaneous name changes):

Objection: USA

Acceptance: Canada, China, Ireland, Japan, Korea (Republic of), UK, and USA

WG2 accepts the following character name change in the standard:

A78F - from LATIN LETTER MIDDLE DOT to LATIN LETTER GLOTTAL DOT

RESOLUTION M57.05 (Miscellaneous name changes):

Unanimous

WG2 accepts the following character name changes in the standard:

1F540 - from CIRCLED CROSS POMMY to CIRCLED CROSS POMMEE
1F541 - from CROSS POMMY WITH HALF-CIRCLE BELOW to CROSS POMMEE WITH HALF-CIRCLE BELOW
1F542 - from CROSS POMMY to CROSS POMMEE

RESOLUTION M57.06 (Formal name alias):

Unanimous

WG2 accepts to add the formal name alias "WEIERSTRASS ELLIPTIC FUNCTION" to 2118 SCRIPT CAPITAL P.

RESOLUTION M57.07 (CJK Ext. B glyphs from 2nd edition):

Unanimous

WG2 accepts to add the glyphs from the chart for CJK Extension B in the 2nd edition, as a set of additional glyphs to be included in the chart for CJK Extension B in the 3rd edition. These glyphs are to be identified with a pseudo-source reference in the form of UCS11-2xxxx, where 2xxxx is a code point in the SIP in the 2nd edition.

RESOLUTION M57.08 (Annex S):

Unanimous

WG2 accepts replacing Annex S in the 3rd edition with a revised version of Annex S from the 2nd edition.

RESOLUTION M57.09 (Named USIs for Sinhala):

Unanimous

WG2 accepts to add the following three named UCS sequence identifiers to the standard, using the syntax of USIs in the standard:

<0DCA, 200D, 0DBA> SINHALA CONSONANT SIGN YANSAYA
<0DCA, 200D, 0DBB> SINHALA CONSONANT SIGN RAKAARAANSAYA, and
<0DBB, 0DCA, 200D> SINHALA CONSONANT SIGN REPAYA

RESOLUTION M57.10 (Arabic additions):

Unanimous

WG2 accepts to add **35** characters in code positions 08A0, 08A2 to 08AC, 08E4 to 08EF, and 08F4 to 08FE, in the Arabic Extended-A block, with their names, code positions and glyphs as shown on page 2 in document N[3882](#), in support of several African and Asian languages.

count: 736+35 = 771 additions in 3rd ed

RESOLUTION M57.11 (Miao script):

Unanimous

With reference to document N[3877](#) WG2 accepts the following changes to the encoding of Miao script:

- a. Add one column to the Miao block so that it extends from 16F00 to 16F9F
- b. Insert the following **5** additional Miao characters, rearranging the characters in the block::

U+16F0C MIAO LETTER YI TTA

- used in Hei Yi

U+16F12 MIAO LETTER YI NNA

- used in Hei Yi

U+16F31 MIAO LETTER YI DZHA

- used in Hei Yi

U+16F56 MIAO VOWEL SIGN AHH

- used in Gan Yi

U+16F5B MIAO VOWEL SIGN WO

- used in Hei Yi

- c. the following name changes:

16F51 from MIAO LETTER ASPIRATION to MIAO SIGN ASPIRATION

16F52 from MIAO LETTER REFORMED VOICING to MIAO SIGN REFORMED VOICING,

16F53 from MIAO LETTER REFORMED ASPIRATION to MIAO SIGN REFORMED ASPIRATION

16F7D from MIAO LETTER TONE RIGHT to (moved) 16F8F MIAO TONE RIGHT

16F7E from MIAO LETTER TONE TOP RIGHT to (moved) 16F90 MIAO TONE TOP RIGHT

16F7F from MIAO LETTER TONE ABOVE to (moved) 16F91 MIAO TONE ABOVE, and

16F80 from MIAO LETTER TONE BELOW to (moved) 16F92 MIAO TONE BELOW

See the final chart for the Miao block is as shown in document N[3945](#).

count: 771+5 = 776 additions in 3rd ed

RESOLUTION M57.12 (Progression of 3rd edition):

Unanimous

- WG2 accepts the final disposition of CD ballot comments for the 3rd edition of ISO/IEC 10646 in document N[3936](#).
- WG2 instructs its project editor to forward the final text of the 3rd edition, which will include the changes arising from resolutions M57.01 to M57.11, along with the final disposition of comments to the SC2 secretariat for an FCD ballot. The consolidated charts containing changes to glyphs, changes to names, and additions are in document N[3945](#).
- WG2 further instructs the IRG to review the G and T source references for CJK Unified Ideographs in extension C, in addition to assisting the project editor with its continuing review of the extension B charts.

The target revised starting dates are FCD 2010-12 and FDIS 2011-09.

count: addition of 776 in 3rd edition

Total of 109379 + 776 = 110155 in 3rd edition

RESOLUTION M57.13 (Armenian additions):

Unanimous

WG2 accepts to encode:

1F53E RIGHT-FACING ARMENIAN ETERNITY SIGN, and

1F53F LEFT-FACING ARMENIAN ETERNITY SIGN

with their glyphs as shown in document N[3924](#).

count:= 2 for next Amd.

RESOLUTION M57.14 (Sinhala numerals):**Unanimous**

With reference to document N[3888](#), WG2 accepts to:

- Encode **10** Sinhala numerals in code positions 0DE6 to 0DEF in the Sinhala block
- Create a new block in the range 111E0 to 111FF named Sinhala Archaic Numbers and populate it with **20** Sinhala archaic numerals in code positions 111E1 to 111F4, with the names and glyphs as shown on page 4 of document N[3891](#).

*count: 2 + 30 = 32 for next Amd.***RESOLUTION M57.15 (Bassa Vah script):****Unanimous**

WG2 accepts to create a new block named Bassa Vah in the range 16AD0 to 16AFF, and populate it with **37** characters, some of which are combining, in code positions 16AD0 to 16AED and 16AF0 to 16AF6, with their names and glyphs as shown on page 4 in document N[3941](#).

*count: 32 + 37 = 69 for next Amd.***RESOLUTION M57.16 (Coptic numbers):****Unanimous**

With reference to document N[3843](#), WG2 accepts to:

- Encode 0605 ARABIC COPTIC NUMBER MARK (name and code position changed) in the Arabic block
- Create a new block in the range 102E0 to 102FF named Coptic Numbers and populate it with **28** characters, one of which is a combining mark, in code positions 102E0 to 102FB, with the final names and glyphs as shown on pages 2 and 7 of document N[3946](#).

*count: 69 + 29 = 98 for next Amd.***RESOLUTION M57.17 (Sindhi script):****Unanimous**

With reference to document N[3871](#), WG2 accepts to create a new block named Sindhi in the range 112B0 to 112FF, and populate it with **69** characters, some of which are combining, in code positions 112B0 to 112EA and 112F0 to 112F9, with their names and glyphs as shown on page 12 in document N[3946](#).

*count: 98 + 69 = 167 for next Amd.***RESOLUTION M57.18 (Palmyrene script):****Unanimous**

WG2 accepts to create a new block named Palmyrene in the range 10860 to 1087F, and populate it with **32** characters in code positions 10860 to 1087F, with their names and glyphs as shown on page 4 in document N[3867](#).

*count: 167 + 32 = 199 for next Amd.***RESOLUTION M57.19 (Old North Arabian script):****Unanimous**

WG2 accepts to create a new block named Old North Arabian in the range 10A80 to 10A9F, and populate it with **32** characters in code positions 10A80 to 10A9F, with their names and glyphs as shown on pages 6 and 7 in document N[3937](#).

*count: 199 + 32 = 231 for next Amd.***RESOLUTION M57.20 (Myanmar additions for Shan Pali):****Unanimous**

WG2 accepts to create a new block named Myanmar Extended-B in the range A9E0 to A9FF, and populate it with **7** characters in code positions A9E0 to A9E6, with their names and glyphs as shown on pages 6 and 7 in document N[3906](#).

*count: 231 + 7 = 238 for next Amd.***RESOLUTION M57.21 (Mro script):****Unanimous**

WG2 accepts to create a new block named Mro in the range 16A40- 16A6F, and populate it with **43** characters in code positions 16A40 to 16A5E, 16A60 to 16A69, 16A6E and 16A6F, with their names and glyphs as shown on page 6 in document N[3589](#).

*count: 238 + 43 = 281 for next Amd.***RESOLUTION M57.22 (Subdivision of work):****Unanimous**

WG2 instructs its convener and project editor to create a subdivision proposal (document N[3947](#)) for creation of Amendment 1 to ISO/IEC 10646 3rd edition, to incorporate characters and scripts accepted for encoding in resolutions M57.13 to M57.21 above. The target starting dates are: PDAM 2010-12, DAM 2011-07 and FDAM 2012-05.

RESOLUTION M57.23 (PDAM 1 to 3rd edition):**Unanimous**

WG2 instructs its project editor to create the text of for Amendment 1 to the 3rd edition of ISO/IEC 10646, incorporating the characters accepted for encoding per resolution M57.22 above on subdivision of work, and send it to SC2 secretariat for a PDAM ballot. The consolidated charts are in document N3946.

*count: 281 additions in Amd.1 to 3rd edition
count: 110155 + 281 = total of 110436 at the end of Amd 1*

RESOLUTION M57.24 (Roadmap snapshot):**Unanimous**

WG2 instructs its convener to post the updated snapshot of the roadmaps (in document N3929) to the WG2 web site and communicate the same to SC2 secretariat.

RESOLUTION M57.25 (Annex I of P&P):**Unanimous**

WG2 accepts the text for replacing section I.2 Guideline for "to be disunified" errors, in document N3859 from the IRG, and instructs its ad hoc on Principles and Procedures to update Annex I in the P&P document (as document N3902) for adoption at WG2 meeting 58.

RESOLUTION M57.26 (Uighur, Kazakh and Kirgiz):**Unanimous**

With reference to requests from China in documents N3889 and N3919, WG2 endorses the ad hoc report in document N3938, and invites China to revise their proposal taking into considerations the feedback.

RESOLUTION M57.27 (Khitan):**Unanimous**

With reference to documents N3918 and N3925 on Khitan, WG2 endorses the ad hoc report in document N3942, and invites China to submit a revised proposal addressing the feedback received to date.

RESOLUTION M57.28 (Chinese Chess symbols):**Unanimous**

With reference to document N3910 on Chinese Chess Symbols, WG2 invites China to submit a revised proposal addressing the feedback received during meeting M57 and any further national body feedback received prior to WG2 meeting M58.

RESOLUTION M57.29 (Future meetings):**Unanimous**

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

WG2 meetings:

- Meeting 58 - 2011-06-06/10, Helsinki, Finland (along with SC2 plenary)
- Meeting 59 - 1st Quarter 2012, USA (pending confirmation), Germany (as backup)
- Meeting 60 - 4th Quarter 2012, Germany (pending confirmation); Thailand (as backup)
- Meeting 61 - 2nd Quarter 2013, Looking for host

IRG meetings:

- IRG Meeting 36, Chong Qing, China; 2011-04-11/15
- IRG Meeting 37, Mountain View, CA, USA; 2011-11-07/11

RESOLUTION M57.30 (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 M57.31 (Appreciation to Host):**By Acclamation**

WG2 thanks the national body of Korea (Republic of), Korean Agency for Technology and Standards (KATS), and its staff, in particular Professor KIM Kyongsok, Ms. KIM Eunsook, Ms. LEE Yoojin and Ms. KONG Soon Duck, for hosting the meeting, and providing excellent meeting facilities, and to the Busan Convention & Visitors Bureau and Hancom Inc. for their kind hospitality.

Character count 109379 in FDIS of 2nd edition

Addition of 776 in FCD 3rd edition

Character count 110155 (total in 3rd edition)

Addition of 281 in PDAM1 to 3rd edition

Character count 110436 (total at end of Amd. 1 to 3rd edition)

Attendance List

The following **25** attendees representing **9** national bodies, and **3** liaison organizations were present at different times during the meeting.

Name	Representing	Affiliation
Mike KSAR	.Convener, USA	Independent
LU Qin	.IRG Rapporteur	Hong Kong Polytechnic University
Bear S. TSENG	.TCA – Liaison	Academia Sinica
Lin-Mei WEI	.TCA – Liaison	Chinese Foundation for Digitization Technology
Alain LABONTÉ	Canada; Editor 14651	Independent
V. S. (Uma) UMAMAHESWARAN	Canada; Recording Secretary	IBM Canada Limited
CHEN Zhuang	China	Chinese Electronics Standardization Institute
HE Lifeng	China	Yunnan Minority Languages Commission
HUANG Shanshan	China	Chinese Electronics Standardization Institute
LI Yang	China	Graduate school of Chinese Academy of Social Sciences
SUN Bojun	China	Institute of Ethnology and Anthropology, Chinese Academy of Sciences
Wushour SILAMU	China	University of Xinjiang
ZHAO Quinglian	China	Yunnan Minority Languages Commission
Tero AALTO	Finland	CSC-IT Center for Science
Michael EVERSON	Ireland; Contributing Editor	Evertime
Masahiro SEKIGUCHI	Japan	Fujitsu Limited
KANG Mi-young	Korea (Republic of)	The National Institute of the Korean Language
KIM Kyongsok	Korea (Republic of)	Busan National University
Suhn-Ja PYO	Korea (Republic of)	Vacusoft Inc.
WangSung YANG	Korea (Republic of)	Hancom
Harsha WIJAYAWARDHANA	Sri Lanka	ICT Agency of Sri Lanka, Sri Lankan Standard Institution
Martin HOSKEN	UK	SIL International
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