

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

**ISO/IEC JTC 1/SC 2 N4261  
ISO/IEC JTC 1/SC 2/WG 2 N4354  
Date: 2012-10-26**

<b>Source:</b> WG 2 meeting 60, Shangri-La Hotel, Chiang Mai, Thailand; 2012-10-22/26
<b>Title:</b> Resolutions of WG 2 meeting 60
<b>Action:</b> For approval by SC 2 and for information to WG 2
<b>Status:</b> Adopted at meeting 60 of WG 2
<b>Distribution:</b> ISO/IEC JTC 1/SC 2 and WG 2

Experts from Canada, China, Finland, Ireland, IRG, Japan, JTC1/SC35 (Liaison), 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).

*(Reset) Character count 110181 in 3rd edition  
Addition of 1768 in DAM 1 to 3rd edition  
Addition of 900 in PDAM 2 to 3rd edition  
Character count 112849 (total at end of Amd. 2 to 3rd edition)*

**RESOLUTION M60.01 (Disposition of ballot comments of DAM1):**

**Unanimous**

WG2 accepts the disposition of DAM 1 ballot comments in document [N4346](#). The following significant changes are noted:

Change in names:

- AB53 from LATIN SMALL LETTER STRETCHED X to LATIN SMALL LETTER CHI
- AB54 from LATIN SMALL LETTER STRETCHED X WITH LOW RIGHT RING to LATIN SMALL LETTER CHI WITH LOW RIGHT RING, and
- AB55 from LATIN SMALL LETTER STRETCHED X WITH LOW LEFT SERIF to LATIN SMALL LETTER CHI WITH LOW LEFT SERIF

Addition:

- 20BA TURKISH LIRA SIGN with its glyph from document [N4273](#).

WG2 also accepts changing of glyphs to match the names for four characters 2BCC to 2BCF as noted in document [N4363](#).

The final code positions, glyphs and names are in the charts in document [N4381](#).

*count: 1768+1 = 1769 additions in Amendment 1*

**RESOLUTION M60.02 (Progression of Amendment 1):**

**Unanimous**

WG2 instructs its project editor to prepare and to forward the final text of Amendment 1 to the 3<sup>rd</sup> Edition, which will include the changes arising from resolution **M60.01** above, along with the final disposition of comments (document [N4346](#)) to the SC2 secretariat for processing as an FDAM ballot.

*count: 1769 additions in Amendment 1*

**RESOLUTION M60.03 (Disposition and progression of PDAM 2):**

**Unanimous**

WG2 notes the disposition of ballot comments on PDAM 2 ([SC2 N4228](#)) in document [N4306](#) and the subsequent text of PDAM 2.2 ([SC2 N4239](#)), that were generated between WG2 meetings 59 and 60. There were 14 character deletions, and 276 character additions, to the 900 in PDAM2, several glyph changes, name changes and reallocation of code positions, as detailed on pages 1 to 8 in document [N4306](#), resulting in a net of **1162** characters in PDAM 2.2.

*count: 1162 additions in Amendment 2*

**RESOLUTION M60.04 (Standardized variants for compatibility ideographs)**

**Acceptance: Canada, China, Finland, Ireland, Sri Lanka, UK and USA  
Abstention: Japan**

WG2 accepts to add the **1002** standardized variants for compatibility ideographs, from document [4246-A](#).

**RESOLUTION M60.05 (Disposition of ballot comments of PDAM2.2):**

**Acceptance: Canada, China, Finland, Japan, Sri Lanka and USA  
Abstention: UK and Ireland**

WG2 accepts the disposition of PDAM 2.2 ballot comments in document [N4377](#). The following significant changes are noted:

a. Old Hungarian block:

Based on the Old Hungarian ad hoc report in document [N4374](#),

- Replace 'Old Hungarian' in the names of the block and all the characters in the block with 'Hungarian',
- Add annotations to names to address potential multiple names, and,
- Shift down the 5 characters 10CF9..10CFD to 10CFA..10CFE.

b. Pahawh Hmong block:

- Split the Pahawh Hmong characters in the range 16B7E..16B8F, and rearrange them in the two ranges 16B7D..16B86 and 16B88..16B8F, and,
  - Add 16B87 PAHAHW HMONG CLAN SIGN PHAB (with its glyph from Irish ballot comment T.3).
- c. Mende and Mende Numbers blocks:  
Based on the Mende Numbers ad hoc report in document [N4375](#),
- Move the Mende digits from 1E8D1..1E8D9 in Mende Numbers block to 1E8C7..1E8CF in Mende block,
  - Delete the Mende Numbers block 1E8D0..1E8EF,
  - Extend Mende block by 1 column to end at 1E8DF, and,
  - Add 7 combining Mende number bases at 1E8D0..1E8D6.
- d. Changed the character names for:
- 20BB from MARK SIGN to NORDIC MARK SIGN,
  - 1F6CD from TWO SHOPPING BAGS to SHOPPING BAGS,
  - 1F3CD from MOTORCYCLE to RACING MOTORCYCLE,
  - 1F3DE from PARK to NATIONAL PARK,
  - 1F6E4 from RAILWAY to RAILWAYS TRACK, and,
  - 1F6CC from BED to SLEEPING ACCOMMODATION.
- e. Moved with name change:
- 1F3CF RACE CAR to 1F3CE RACING CAR.
- f. Moved without name change:
- 1F6D0 BELLHOP BELL to 1F6CE,
  - 1F6EE SATELLITE to 1F6F0,
  - 1F6F2 ONCOMING FIRE ENGINE to 1F6F1,
  - 1F6F4 DIESEL LOCOMOTIVE to 1F6F2,
  - 1F6E7 SMALL AIRPLANE to 1F6E9, and,
  - 1F6E9 NORTHEAST-POINTING AIRPLANE to 1F6EA.
- g. Added following **10** characters (see final charts for glyphs):
- 1F6E6 UP-POINTING MILITARY AIRPLANE,
  - 1F6E7 UP-POINTING AIRPLANE,
  - 1F6E8 UP-POINTING SMALL AIRPLANE,
  - 1F6F3 PASSENGER SHIP,
  - 1F3D6 BEACH WITH UMBRELLA,
  - 1F3D5 CAMPING,
  - 1F6CF BED,
  - 1F3D4 SNOW CAPPED MOUNTAIN,
  - 1F6EB AIRPLANE DEPARTING, and,
  - 1F6EC AIRPLANE ARRIVING.
- h. Deleted the following **3** characters:
- A78F LATIN LETTER MIDDLE DOT in Latin Extended-D block (moved it into the text of next committee stage ballot),
  - 2B74 LEFT RIGHT TRIANGLE-HEADED ARROW TO BAR, and,
  - 2B75 UP DOWN TRIANGLE-HEADED ARROW TO BAR
- i. Several glyphs are changed arising out of disposition of the ballot comments above.  
The final code positions, glyphs and names are in the charts in document [N4380](#).

*count: 1162+15 = 1177 additions in Amendment 2*

#### **RESOLUTION M60.06 (Progression of Amendment 2):**

**Unanimous**

WG2 instructs its project editor to prepare and to forward the final text of Amendment 2 to the 3<sup>rd</sup> Edition, which will include the changes arising from resolutions **M60.04** and **M60.05** above, along with the final disposition of comments (document [N4377](#)) to the SC2 secretariat for processing as a DAM ballot.

*count: 1177 additions in Amendment 2*

#### **RESOLUTION M60.07 (CJK Unified Ideographs Extension E)**

**Unanimous**

WG2 accepts to create a new block named CJK Unified Ideographs Extension E in the range 2B820 to 2CEAF and populate it with **5768** characters in code positions 2B820 to 2CEA7, with their glyphs and source references as shown in the attachments to document [N4358](#).

*count: 5768 additions in next Edition*

#### **RESOLUTION M60.08 (Anatolian Hieroglyphs)**

**Unanimous**

WG2 accepts to create a new block named Anatolian Hieroglyphs in the range 14400 to 1467F, and populate it with **583** characters in code positions 14400 to 14646, with their names and glyphs as shown in document [N4282](#).

*count: 5768+583=6351 additions in next Edition*

**RESOLUTION M60.09 (Ahom script)****Unanimous**

WG2 accepts to create a new block named Ahom in the range 11700 to 1173F, and populate it with **57** characters in code positions 11700 to 11719, 1171D to 1172B, and 11730 to 1173F, with their names and glyphs as shown in document [N4321](#).

*count: 6351+57=6408 additions in next Edition***RESOLUTION M60.10 (Multani script)****Unanimous**

WG2 accepts to create a new block named Multani in the range 11280 to 112AF, and populate it with **38** characters in code positions 11280 to 11286, 11288, 1128A to 1128D, 1128F to 1129D, and 1129F to 112A9, with their names and glyphs as shown in document [N4159](#).

*count: 6408+38=6446 additions in next Edition***RESOLUTION M60.11 (Early Dynastic Cuneiform script)****Unanimous**

WG2 accepts to create a new block named Early Dynastic Cuneiform in the range 12480 to 1254F, and populate it with **197** characters in code positions 12480 to 12544, with their names and glyphs as shown in document [N4278](#).

*count: 6446+197=6643 additions in next Edition***RESOLUTION M60.12 (Hatran script)****Unanimous**

WG2 accepts to create a new block named Hatran in the range 108E0 to 108FF, and populate it with **30** characters in code positions 108E0 to 108F5, and 108F8 to 108FF, with their names and glyphs as shown in document [N4324](#).

*count: 6643+30=6673 additions in next Edition***RESOLUTION M60.13 (Sutton SignWriting script)****Unanimous**

WG2 accepts to create a new block named Sutton SignWriting in the range 1D800 to 1DAAF, and populate it with **672** characters in code positions 1D800 to 1DA8B, 1DA9B to 1DA9F, and 1DAA1 to 1DAAF, with their names and glyphs as shown in document [N4342](#).

*count: 6673+672=7345 additions in next Edition***RESOLUTION M60.14 (East-Slavic Musical symbols)****Unanimous**

WG2 accepts to add **11** characters to the Musical Symbols block, with their names, glyphs and code points from document [N4362](#).

*count: 7345+11=7356 additions in next Edition***RESOLUTION M60.15 (Additions to Sharada script)****Unanimous**

WG2 accepts to add the following **9** characters to the Sharada block:

- a. 3 characters for writing Kashmiri:  
111CA SHARADA SIGN NUKTA,  
111CB SHARADA VOWEL MODIFIER MARK, and,  
111CC SHARADA EXTRA SHORT VOWEL MARK,  
with their glyphs from document [N4265](#).
- b. 111DB SHARADA HEADSTROKE, with its glyph from document [N4337](#),
- c. 111DC SHARADA SIGN SIDDHAM, with its glyph from document [N4331](#),
- d. 111C9 SHARADA SANDHI MARK, with its glyph from document [N4330](#),
- e. 111CE SHARADA CONTINUATION SIGN, with its glyph from document [N4329](#), and,
- f. 111DD SHARADA SECTION MARK-1, and,  
111DE SHARADA SECTION MARK-2,  
with their glyphs from document [N4338](#).

*count: 7356+9=7365 additions in next Edition***RESOLUTION M60.16 (Meroitic numbers)****Unanimous**

WG2 accepts to add **64** characters to the Meroitic Cursive block, at code positions 109BC, 109BD, 109C0 to 109CF, and 109D2 to 109FF, with their names and glyphs as shown in document [N4276](#).

*count: 7365+64=7429 additions in next Edition***RESOLUTION M60.17 (Miscellaneous character additions)****Unanimous**

WG2 accepts to add the following:

- A8FC DEVANAGARI SIGN SIDDHAM, to the Devanagari Extended block, with its glyph from document [N4260](#);
- 0D5F MALAYALAM LETTER ARCHAIC II, to the Malayalam block, with its glyph from document [N4312](#);
- A7B2 LATIN CAPITAL LETTER J WITH CROSSED-TAIL, to the Latin Extended-D block, with its glyph from document [N4332](#);

- The following 5 characters with their glyphs from document N4297, to the Latin Extended-D block,
  - A7B4 LATIN CAPITAL LETTER BETA,
  - A7B5 LATIN SMALL LETTER BETA,
  - A7B6 LATIN CAPITAL LETTER OMEGA,
  - A7B7 LATIN SMALL LETTER OMEGA, and,
  - A7B3 LATIN CAPITAL LETTER CHI;
- A78F LATIN LETTER MIDDLE DOT, to the Latin Extended-D block  
(*moved out from Amendment 2* text to the next committee stage ballot)

*count: 7429+9=7438 additions in next Edition*

**RESOLUTION M60.18 (Project subdivision):**

**Unanimous**

WG2 instructs its convener and project editor to create a project subdivision proposal document (will be document N4382) for creation of ISO/IEC 10646 4<sup>th</sup> edition, incorporating the texts of Amendments 1 and 2 to the 3<sup>rd</sup> edition, and further changes accepted in resolutions M60.07 to M60.17 above, and textual changes as noted in document N4379.

WG2 notes that the subdivision proposal includes provisions for including additional characters or new scripts during the ballot resolution phase towards agile processing of the committee draft and speeding up the work of WG2 between face to face meetings.

The target starting dates are: CD 2012-12, DIS 2013-08 and FDIS 2014-03.

**RESOLUTION M60.19 (CD of 4<sup>th</sup> edition):**

**Unanimous**

WG2 instructs its project editor to create the text for the CD of the 4<sup>th</sup> edition of ISO/IEC 10646, in accordance with the project subdivision document per resolution M60.18 above, and send it to SC2 secretariat for a CD ballot. The consolidated charts will be in document N4383.

*count: 7438 additions in 4<sup>th</sup> Edition*

**RESOLUTION M60.20 (Nushu):**

**Unanimous**

WG2 invites China to produce a revised proposal, working with other interested parties, taking into consideration the recommendations in the Nushu ad hoc report in document N4376.

**RESOLUTION M60.21 (Roadmap snapshot):**

**Unanimous**

WG2 instructs its convener to post the updated snapshot of the roadmaps (in document N4320) to the WG2 web site and communicate the same to SC2 secretariat.

**RESOLUTION M60.22 (Future meetings):**

**Unanimous**

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

WG2 meetings:

Meeting 61 – 2013-06-10/14, Vilnius, Lithuania (invitation is in document N4359)

Meeting 62 – 2014-02-24/28, West Coast, USA (location to be confirmed)

Meeting 63 – 2014-09, Sri Lanka (tentative); (with China as backup) (co-located with SC2)

IRG meetings:

IRG Meeting 40, HKSAR, 2013-05-20/24, and,

IRG Meeting 41, Japan, 2013-11-18/22 (tentative) (China is backup).

**RESOLUTION M60.23 (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 M60.24 (Appreciation to Host):**

**By Acclamation**

WG2 thanks the national body of Thailand (TIS), Payap University Linguistics Institute and its staff Ms. Wipanee Chuamsakul and Ms. Phawinee Pintong, and Mr. Martin Hosken, for hosting the meeting, and providing excellent meeting facilities.

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*(Reset) Character count 110181 in 3rd edition  
Addition of 1769 in DAM 1 to 3<sup>rd</sup> edition  
Addition of 1177 in PDAM 2 to 3<sup>rd</sup> edition  
Addition of 7438 in CD of 4<sup>th</sup> edition  
Character count 120565 (total at end of CD of 4<sup>th</sup> edition)*

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**Attendance List****JTC1/SC2/WG2 Meeting 60, Chiang Mai, Thailand, 2012-10-22/26**

The following 23 attendees representing 8 national bodies, and 3 liaison organizations were present at different times during the meeting.

<b>Name</b>	<b>Representing</b>	<b>Affiliation</b>
Phawinee PINTONG	.Host	Linguistic Institute, Payap University
Wipanee CHUAMSAKUL	.Host	Linguistic Institute, Payap University
LU Qin	.IRG Rapporteur	Hong Kong Polytechnic University
Yoshiki MIKAMI	.SC2 Chair	Nagaoka University of Technology
Toshiko KIMURA	.SC2 Secretary	IPSJ/ITSCJ
Bear S. TSENG	.TCA – Liaison	Academia Sinica
Lin-Mei WEI	.TCA – Liaison	Chinese Foundation for Digitization Technology
Alain LABONTÉ	Canada; Editor 14651; SC35 - Liaison	Independent
V. S. (Uma) UMAMAHESWARAN	Canada; Recording Secretary	IBM Canada Limited
CHEN Zhuang	China	Chinese Electronics Standardization Institute
ZHANG Yan	China	Tsing Hua University, Beijing
ZHAO Liming	China	Tsing Hua University, Beijing
Tero AALTO	Finland	CSC-IT Center for Science
Erich FICKLE	Invited Expert	Payap University, Chiang Mai, Thailand
Tim EVES	Invited Expert	SIL International, Thailand
Michael EVERSON	Ireland; Contributing Editor	Evertype
Tetsuji ORITA	Japan	IBM Japan Limited
Harsha WIJAYAWARDHANA	Sri Lanka	Sri Lanka Information & Comm Technology Agency
Martin HOSKEN	UK; Host (Thailand)	SIL International, Thailand
Ken WHISTLER	USA; Contributing Editor	SAP America, Inc.
Michel SUIGNARD	USA; Project Editor; Acting Meeting Convener	Independent
Deborah ANDERSON	USA; SEI, UC Berkeley – Liaison	Dept. of Linguistics, Univ., of California, Berkeley
Peter CONSTABLE	USA; Unicode Consortium – Liaison	Microsoft Corporation