## ISO/IEC JTC 1/SC 2 Coded Character Sets
Secretariat: Japan (JISC)

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Secretariat ISO/IEC JTC 1/SC 2 - IPSJ/ITSCJ *(Information Processing Society of Japan/Information Technology Standards Commission of Japan) Room 308-3, Kikai-Shinko-Kaikan Bldg., 3-5-8, Shiba-Koen, Minato-ku, Tokyo 105-0011 Japan *Standard Organization Accredited by JISC Telephone: +81-3-3431-2808; Facsimile: +81-3-3431-6493; E-mail: kimura@itscj.ipsj.or.jp
### Summary of Voting on
ISO/IEC JTC 1/SC 2 N 3761:
ISO/IEC 10646: 2003/PDAM 2, Information technology -- Universal Multiple-Octet Coded Character Set (UCS) --
AMENDMENT 2: N’Ko, Phags-Pa, Phoenician and Cuneiform

Q1: PDAM

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</table>

Total (31) | 6 | 5 | 7 | 13 |

*: Approve with comments
#: Acceptance of the reasons and appropriate changes in the text will change the vote to approval.
Canada votes DISAPPROVE based on the following comments and if our comments are satisfactorily resolved our vote will change to APPROVE.

Canada has some comments to make on this Amendment regarding N'ko script:

1a) The English Block name contains an apostrophe while the character names do not. I believe the English names may not contain an apostrophe (I don't know why though), this is not true of the French names, to ensure coherence between Letter and Block names in the English version, the script should be called Nko in English (N'ko in French).

1b) Canada also requests that – to make it clear in the standard – that a paragraph / clause explaining the naming rules for Block Names be added. The naming rules should be identical to the rules for naming of characters except for allowing Upper and Lower case letters in the block names. This would also exclude the Apostrophe in the Block Name.

2) The explanations provided in Markham by the proposer (from Ireland) to explain the inclusion of the following characters ("they are used in historical documents to show the evolution of the script") is not wholly convincing:

   07E8 NKO LETTER OLD JA
   07E9 NKO LETTER OLD CHA
   07EA NKO LETTER OLD RA

   It is quite easy to find books on the history of Latin, Greek or let's say the Phoenician script, which will show old and new forms of the same characters. Hence, Canada does not understand why these characters are not treated as historical glyph variants. Except in treatise dealing with the history of the script, I believe these old forms are not used simultaneously with the new ones. These characters are just historical glyph variants of characters that are otherwise provided for in the proposal. Encoding such would be akin to encoding various historical forms of Latin letters such as Uncia or Fraktur, which is clearly not desirable. Canada is asking for their removal.

3) Some of the proposed nko combining marks have identical shape and canonical combining class to already encoded marks (07EB, 07ED, 07EE,...) - these combining marks would look and behave in the same way as already encoded combining characters. During the discussion in Markham, it was answered that these characters have a different origin from the common and generic combining marks (which may combine with any other base character) and may sometimes adopt different shapes. But this may also be true of umlauts or accents across languages: they don't always adopt the same shape (an umlaut may be represented inside the letter or an e above the letter).

   http://www.peter-doerling.de/Lese/Sutterlin0.htm
Canada finds the justification in document N2765 pretty poor. The statement about directionality issues is totally bogus. As for font-binding issues, they seem out of scope in a character-encoding standard. In Latin script, a simple acute accent can range from almost vertical (in Polish for example) to almost flat and will of course be set at a different height depending on the base. The usual font-level solution is to use ligatures, which allow all the desirable variability and would seem to be able to do so also for Nko.

Vote: Disapprove With Comments
China votes down the ISO/JTC 1/SC 2 N 3761, but will vote for it in next round of ballot if the following comments on Phags-pa script are accepted.

General:

Few agreements were achieved in WG2N2829 (Consensus on the encoding of the Phags-pa script in the PDAM code chart, Markham, Canada, 2004). It’s true that names of A862 and A863 are reflected in the PDAM2, but more questions raised in WG2N2829 need further discussion by interested parties. China requests that her comments be fully reflected in next round of ballot on the bases of her comments being fully discussed by interested parties.

Technical details:

1. Two vowel letters OE and UE and four consonant letters expressing initial consonants of “审，影，匣，非” in Chinese language should be at least added to the list of nominal characters.
2. A series of variants of letters should be added.
3. If information processing is taken into consideration, a syllable delimiter, a joiner and its variant are needed.
4. Khubilai Khan font should be used.
5. Three variant selectors are needed.
6. Inputting rules for single variant presentation forms should be specified.

For further details, read China-Mongolia joint proposal WG2Nxxxx please.
German Comment on SC02 N 3761

Vote: Conditional Disapproval
DIN will change its vote to approval if the comments are taken into account.

Comment:
Remove the Phoenician block

Reason:
Encoding Phoenician is redundant, and needlessly proliferates Canaanite diacritics. It is in stark contrast to both the Unicode/ISO 10646 script unification model and the character/glyph model.

We are convinced that the script used in writing Phoenician, Old Hebrew, Old Aramaic, Moabite, and Ammonite is one and the same script. The problem is if we encode all of Hebrew and Aramaic with one Unicode block, the Hebrew block, and then introduce a Phoenician block, it will become quite impossible to draw well-defined lines. Will we also encode Elephantine letters, the Mesha stele, the Dead Sea scrolls in Phoenician, but Rabbinic and Modern Hebrew in Hebrew? The Phoenician block needlessly complicates text processing and goes against current practice where all these scripts are unified in one encoding, in either (a misnamed) Hebrew encoding or in Roman transliteration.

The German vote of disapproval and the proposal to remove the Phoenician block from ISO/IEC 10646/PDAM 2 is based on expertise obtained from the University of Tubingen. See also document SC2/WG2 N2097.

(2004-11-23)
Irish comments on PDAM-2 for ISO/IEC 10646:2004

Reference: SC2 N3761
Closes: 2004-11-23
Date: 2004-11-20

Ireland disapproves the draft with the technical and editorial comments given below. Acceptance of these comments and appropriate changes to the text will change our vote to approval. In addition, it should be noted that Ireland confirms its strong support for the Phags-pa and the Phoenician character sets as they appear in the ballot, and we do not favour their alteration or deletion.

Technical comments

T1. Hebrew Characters. With reference to ISO/IEC JTC1/SC2/WG2 N2840 “Proposal to add HEBREW POINT HOLAM HASER FOR VAV to the BMP of the UCS”, Ireland requests the addition of HEBREW POINT HOLAM HASER FOR VAV at position U+05BA, which would entail moving HEBREW POINT QAMATS QATAN (under ballot in FPDAM-1) to position U+05C7.

T2. Kannada Characters. With reference to ISO/IEC JTC1/SC2/WG2 N2860 “Proposal to add six characters for Kannada to the BMP of the UCS”, Ireland requests the addition of the characters KANNADA VOWEL SIGN VOCALIC L at position U+0CE2, KANNADA VOWEL SIGN VOCALIC LL at position U+0CE3, KANNADA DANDA at position U+0CE4, KANNADA DOUBLE DANDA at position U+0CE5, KANNADA SIGN JIHVAMULIYA at position U+0CF1, and KANNADA SIGN UPADHMANIYA at position U+0CF2.


Editorial comments

E1. Title. Change “Phags-Pa” to “Phags-pa” in the title of the Amendment.

E2. Page 8 - Row 09: Phoenician. We would like clarification: is this “Row 09” or is it “Row 109”?

E3. Page 10 - Row 20: Cuneiform. The glyphs at U+12031 and U+12050 should be reduced to fit into their boxes. In addition, we would like clarification: is this “Row 20” or is it “Row 120”?

E4. Page 12 - Rows 20-21: Cuneiform. We would like clarification: is this “Rows 20-21” or is it “Rows 120-121”?

E5. Page 14 - Rows 21-22: Cuneiform. We would like clarification: is this “Rows 21-22” or is it “Rows 121-122”?

E6. Page 16 - Row 22: Cuneiform. The glyph at U+1221D should be reduced to fit into its box. In addition, we would like clarification: is this “Row 22” or is it “Row 122”?

E7. Page 18 - Rows 22-23: Cuneiform. We would like clarification: is this “Rows 22-23” or is it “Rows 122-123”? 

E8. Page 20 - Row 23: Cuneiform. We would like clarification: is this “Row 23” or is it “Row 123”?

E9. Page 22 - Row 20: Cuneiform. The characters at U+12407, U+1241D, U+12427, U+12428, U+12429, U+1242A, U+1242B, U+1242E, and U+12431 should be reduced to fit into their boxes. In addition, we would like clarification: is this “Row 24” or is it “Row 124”? 
(Collection and block names for N’Ko script)

In updates to "Page 1349, Annex A.1", change
128 N’KO 07C0-07FF
to
128 NKo 07C0-07FF

In updates to "Page 1351, annex A.1", change
N’Ko 128
to
NKo 128

In updates to "Page 1352, Annex A.2.1", change
N’KO 07C0-07FF
to
NKO 07C0-07FF

Rationale:

Current draft uses APOSTROPHE in the middle of collection name and block name for N’Ko script. APOSTROPHE is new to UCS collection/block names.

Unlike character names, we have no guidelines for collection/block names, but introduction of a new punctuation character in such names break some existing practices. For example, XML Schema specification (developed by W3C) has a notion of character class, used in its regular expression syntax, to explicitly restrict allowed character repertoire in some context. One of the methods to specify a character class is the use of a block name, called "block escape", and the current syntax doesn't allow APOSTROPHE.
Title: Comments accompanying the US positive vote on the PDAM2 to ISO/IEC 10646:2003
Source: INCITS/L2
Action: Forward to INCITS

The US National body is voting Yes on the PDAM2 to ISO/IEC 10646:2003.

**Technical Comments:**

**T.1 N’KO script**
The N’KO script should be renamed NKO (removing the apostrophe) to be consistent with de facto block name naming convention. This also aligns the block name with the character names used within the block.

**T.2 Seventeen Planes restriction**
To improve the synchronization between the Unicode Standard and ISO/IEC 10646 and to make UTF-16 and UCS-4 equivalent in repertoire representation, the U.S. is asking to make all code positions in plane 11 (hexadecimal notation) and above permanently reserved, by doing the following changes:

- Remove the note part of Figure 1 (page 6) and the 2nd note part of Figure 2 (page 7)
- Make the 2nd note in Clause 7 (General requirements for the UCS) normative. It becomes requirement ‘b.’, pushing the following requirements to ‘c.’ and ‘d.’.
- Replace the text in sub-clause 9.2 (Other Planes reserved for future standardization) by the following:
  
  *Planes 11 to FF in Group 00 and all planes in any other groups (i.e. Planes 00 to FF in Groups 01 to 7F) are permanently reserved.*

  *Code positions in these planes do not have a mapping to the UTF-16 form (see Annex C).*

- Replace ‘character’ by ‘code position’ in annex D (UCS Transformation Format 8 (UTF-8)) when the UCS range description goes beyond plane 10.

**T.3 Hebrew script**
The US is in favor of adding the following Hebrew character as proposed by document WG2 N2840.
05BA HEBREW POINT HOLAM HASER FOR VAV
This is related to US comment 10646:2003 FPDAM1 T.11 requesting the move of the currently proposed Qamats Qatan from 05BA to 05C7.

**T.4 Mathematical characters**
a) The US is in favor of adding the following Mathematical character as proposed by document L2/04-329 (WG2 document number TBD) with modified code positions to take into account characters proposed in the FPDam1:

Missellaneous Technical:

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<td>23E0</td>
<td>TOP TORTOISE SHELL BRACKET</td>
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b) The US is in favor of adding the following Mathematical character as proposed by document L2/04-410 (WG2 document number TBD):

Combining Diacritical Marks for Symbols:

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</tr>
<tr>
<td>20ED</td>
<td>COMBINING LEFTWARDS HARPOON WITH BARB DOWNWARDS</td>
</tr>
</tbody>
</table>
Miscellaneous Technical:
23E1 ELECTRICAL INTERSECTION
23E2 WHITE TRAPEZIUM
23E3 BENZENE RING WITH CIRCLE
23E4 STRAIGHTNESS
23E5 FLATNESS
23E6 AC CURRENT

Miscellaneous Symbols:
26B2 NEUTER

Miscellaneous Mathematical Symbols-A
27C7 OR WITH DOT INSIDE
27C8 REVERSE SOLIDUS PRECEDING SUBSET
27C9 SUPERSET PRECEDING SOLIDUS

Miscellaneous Symbols and Arrows:
2B14 SQUARE WITH UPPER RIGHT DIAGONAL HALF BLACK
2B15 SQUARE WITH LOWER LEFT DIAGONAL HALF BLACK
2B16 DIAMOND WITH LEFT HALF BLACK
2B17 DIAMOND WITH RIGHT HALF BLACK
2B18 DIAMOND WITH TOP HALF BLACK
2B19 DIAMOND WITH BOTTOM HALF BLACK
2B20 WHITE PENTAGON
2B21 WHITE HEXAGON
2B22 BLACK HEXAGON
2B23 HORIZONTAL BLACK HEXAGON

Mathematical Alphanumeric Symbols:
1D7CA MATHEMATICAL BOLD CAPITAL DIGAMMA
1D7CB MATHEMATICAL BOLD SMALL DIGAMMA

T.5 Letterlike Symbols
The US is in favor of adding the following Letterlike symbol as proposed by document L2/04-394 (WG2 document number TBD):
214D A/S AKTIESELSKAB

T.6 Latin characters
a) The US is in favor of adding the following Latin characters in the Latin Extended-B block as proposed by document WG2 N2847:
0242 LATIN CAPITAL LETTER B WITH STROKE
0243 LATIN CAPITAL LETTER U BAR
0244 LATIN CAPITAL LETTER TURNED V
0245 LATIN CAPITAL LETTER E WITH STROKE
0246 LATIN SMALL LETTER E WITH STROKE
0247 LATIN CAPITAL LETTER J WITH STROKE
0248 LATIN SMALL LETTER J WITH STROKE
0249 LATIN CAPITAL LETTER SMALL Q WITH HOOK TAIL
024A LATIN SMALL LETTER Q WITH HOOK TAIL
024B LATIN CAPITAL LETTER R WITH STROKE
024C LATIN SMALL LETTER R WITH STROKE
024D LATIN CAPITAL LETTER Y WITH STROKE
024E LATIN SMALL LETTER Y WITH STROKE
024F LATIN SMALL LETTER V WITH CURL
This would make the Latin Extended-B collection fixed.
b) The US is in favor of creating a new Latin Extended-C block and corresponding collection at the range 2C60-2C7F and insert the following characters as proposed by document L2/04-372 (WG2 document number TBD):

- 2C60 LATIN CAPITAL LETTER L WITH DOUBLE BAR
- 2C61 LATIN SMALL LETTER L WITH DOUBLE BAR
- 2C62 LATIN CAPITAL LETTER L WITH MIDDLE TILDE
- 2C63 LATIN CAPITAL LETTER P WITH STROKE
- 2C64 LATIN CAPITAL LETTER R WITH TAIL

**T.7 Combining Diacritical Marks Supplement**

The US is in favor of adding the following Contour tone marks in the Combining Diacritical Marks Supplement block as proposed by document WG2 N2847:

- 1DC4 COMBINING MACRON-ACUTE
- 1DC5 COMBINING GRAVE-MACRON
- 1DC6 COMBINING MACRON-GRAVE
- 1DC7 COMBINING ACUTE-MACRON
- 1DC8 COMBINING GRAVE-ACUTE-GRAVE
- 1DC9 COMBINING ACUTE-GRAVE-ACUTE
- 1DCA COMBINING LATIN SMALL LETTER R BELOW

**T.8 Counting Rod Numerals**

The US is in favor of creating a new Counting Rod Numerals block and corresponding collection at the range 1D360-1D37F as proposed by document WG2 N2816:

- 1D360 COUNTING ROD UNIT DIGIT ONE
- 1D361 COUNTING ROD UNIT DIGIT TWO
- 1D362 COUNTING ROD UNIT DIGIT THREE
- 1D363 COUNTING ROD UNIT DIGIT FOUR
- 1D364 COUNTING ROD UNIT DIGIT FIVE
- 1D365 COUNTING ROD UNIT DIGIT SIX
- 1D366 COUNTING ROD UNIT DIGIT SEVEN
- 1D367 COUNTING ROD UNIT DIGIT EIGHT
- 1D368 COUNTING ROD UNIT DIGIT NINE
- 1D369 COUNTING ROD TENS DIGIT ONE
- 1D36A COUNTING ROD TENS DIGIT TWO
- 1D36B COUNTING ROD TENS DIGIT THREE
- 1D36C COUNTING ROD TENS DIGIT FOUR
- 1D36D COUNTING ROD TENS DIGIT FIVE
- 1D36E COUNTING ROD TENS DIGIT SIX
- 1D36F COUNTING ROD TENS DIGIT SEVEN
- 1D370 COUNTING ROD TENS DIGIT EIGHT
- 1D371 COUNTING ROD TENS DIGIT NINE

**T.9 Modifier Tone Letters**

The US is in favor of adding the following characters in the Modifier Tone Letters block as proposed by document L2/04-349 (WG2 document number TBD):

- A717 MODIFIER LETTER DOT VERTICAL BAR
- A718 MODIFIER LETTER DOT SLASH
- A719 MODIFIER LETTER DOT HORIZONTAL BAR
- A71A MODIFIER LETTER LOWER RIGHT CORNER ANGLE

**T.10 Phags-Pa**

The US wants to reaffirm its support for the Phags-Pa as currently documented in PDAM2 and would not welcome significant modification without consensus of all of interested parties.

**Editorial Comments:**

**E.1 Annex R, Names of Hangul syllables**

The information in the linked file (HangulSy.txt) and the tables R.1 to R.4 is redundant. Because the linked file is more complete, the U.S. is asking for the removal of the tables.

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End of US comments