ISO/IEC JTC1/SC2/WG2
Coded Character Set
Secretariat: Japan (JISC)

Doc. Type: Disposition of comments

Title: **Disposition of comments on PDAM1 to ISO/IEC 10646 5ᵗʰ edition**

Source: **Michel Suignard (project editor)**
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Comments were received from the following members: China, Ireland, Japan, Mongolia, UK, and USA. The following document is the disposition of those comments. The disposition is organized per country.

> Note – With some minor exceptions, the full content of the ballot comments has been included in this document to facilitate the reading. The dispositions are inserted in between these comments and are marked in **Underlined Bold Serif text,** *with explanatory text in italicized serif*.

This disposition makes very little change to the repertoire, removing one character: U+13430 (moving up the remaining proposed code points one position starting at U+13430 and changing the block name and size), thirteen name changes (12 astrological signs, and U+2E4B). The visual appearance of four glyphs: (U+11A9D, U+13431, U+13432, and U+1D378) is updated.

Finally, Hentaigana will be added to the Amendment, along with other characters for a new PDAM ballot (1.2).
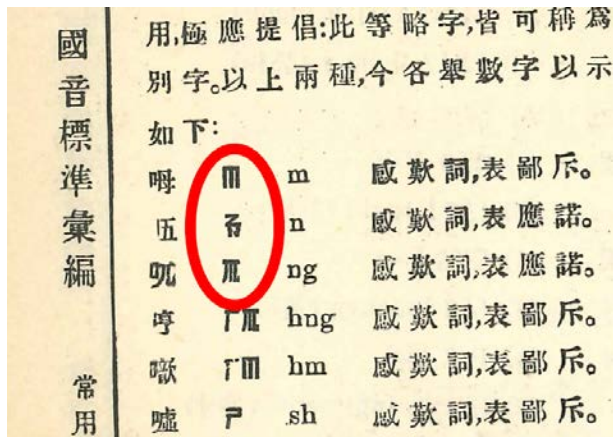
China: Negative

China votes NO to JTC1/SC2N4472 "ISO/IEC 10646: 2016 PDAM1" with comments on BOPOMOFO symbols.

Technical comments:

T1. Bopomofo letter U+312F LETTER nn

About Bopomofo letter NN U+312F ㄯ， the glyph needs to discussed, the different sources show different glyphs.

Accepted in principle

Following additional feedback provided in WG2 N47656, the glyph will be modified to connect the vertical bar to the rest of the character.

T1. Bopomofo letter U+312E LETTER O WITH DOT ABOVE

About Bopomofo letter e U+312E ， It's a combining character (O with dot above).

The detailed information will be submitted to SC2/WG2 later.

Withdrawn

Based on these dispositions, China changed its vote to positive

Ireland: Negative

Ireland disapproves the draft with the editorial comments given below. Acceptance of these comments and appropriate changes to the text will change our vote to approval.

Technical comments:

T1. Page 47, Row 1343: Egyptian Hieroglyphs Extended-A

In order to facilitate further study of "ligature" requirements and implementation for Egyptian Hieroglyphs, Ireland requests that the character at 13430 be removed, that the characters at 13431..13432 be moved up to 13430..13431. Ireland also recommends that column 13430 be re-named to a new block "Egyptian formatting characters". Even if a new block is creation, Ireland requests that the non-format characters for Egyptian Hieroglyphs Extended-A block begin at 13440. Ireland requests that the following glyphs be used for 13430..13431:

Accepted in principle

See also comment T3 from UK and TE3 from US.

The UK and US were also asking to remove the proposed 13430 EGYPTIAN HIEROGLYPH LIGATURE JOINER. Concerning the block name, to be consistent with other blocks with similar code points a name like Egyptian Hieroglyphs Format Controls' makes more sense. The 'Egyptian' adjective is too broad, and format controls is used for Shorthand as 'Shorthand Format Controls'. Therefore, calling the block 'Egyptian Hieroglyphs Format Controls' makes more sense. Changing the two glyphs is acceptable, pending a font contribution from Ireland. The two remaining characters will be moved up to 13430..13431.

T2. Page 54, Row 1F10: Enclosed Alphanumeric Supplement

Ireland requests that the name of 1F12F COPYLEFT SIGN be changed to REVERSED COPYRIGHT SIGN. "Copyleft" is a pun in English which is not necessarily translatable into other languages, and a description of the glyph is a more appropriate character name. An annotation can be added referring to the "copyleft sign".

Not accepted

The proposed name is widely accepted in English, see for example https://en.wikipedia.org/wiki/Copyleft (accessed 2016-09-21).

Editorial comments:

E1. Page 13, Row 2B0: Miscellaneous Symbols and Arrows.

Ireland requests that the winding errors in the balloting glyphs here be corrected.

Accepted

The editor has received a new font that should fix the issue.

E1. Page 51, Row 13D6: Counting Rod Numerals.

Ireland requests that the glyph for 1D378 be corrected to fix the winding error and to have five rather than six strokes.

Accepted

See also comment T6 from UK and TE1 from US.

The editor has received a new font that should fix the issue.

Based on these dispositions, Ireland changed its vote to positive

Japan: Negative

Technical comments:

T1. Hentaigana
Japanese Hentaigana characters should be added in this Amendment 1, as described in the recommendation M64.08 from WG2 meeting 64 (ISO/IEC JTC 1/SC 2/WG 2 N4701) mentioning "Japanese Hentaigana characters is a candidate for inclusion in Amendment 1."

After the proposal was submitted at WG2 meeting 64, its revision was completed to reflect the comments raised during the meeting. Revised proposal is registered as ISO/IEC JTC 1/SC 2 N 4476.

Proposed change by Japan
Add Japanese Hentaigana characters.

Accepted in principle
The documents related to Hentaigana went through several discussions rounds with other organization such as the Unicode Technical Committee until May 2016 and the proposal was last updated late June 22nd 2016, too late for inclusion in Amendment 1. (It was desirable to allow a full ballot cycle before meeting 65). Amendment 1 will go for a new round of balloting as Pdam 1.2, and Hentaigana will be included in that ballot.

Based on these dispositions, Japan changed its vote to positive

Mongolia: Positive with comments

(some comments mentioned as general or editorial were reclassified as technical)

Technical comments:

T1. Page 38, 41 Zanabazar Square and Soyombo
According to our study there might be more Soyombo and Square script characters found in the source of literary works.

Proposed change by Mongolia
Therefore, please insert more extension place in the encoding tables of the scripts.

Accepted in principle
There are still unallocated code points in both blocks (8 in Zanabazar Square and 15 in Soyombo). When these code points become allocated, or if it makes more sense to create extended blocks, it is a regular mechanism in ISO/IEC 10646 to create new extended blocks to fit new characters. However, this is only done when there is some concrete evidence that encoding space new characters will be needed. Finally, current blocks sizes are fixed and can no longer be incremented.

T2. Page 38, 41 Zanabazar Square and Soyombo
There are old Mongolian 1-10 digit numbers found in the old Soyombo and Square script sources and sutras.

Proposed change by Mongolia
Should be add old Mongolian 1-10 digit numbers in the encode table of Soyombo and square scripts.

Noted
These digits will need to be attested. The document L2/15-337 used for the current Zanabazar Square encoding says in section 4.13 page 18: "Digits are not attested. The available sources do not indicate the use of digits or number forms in the script.". Same for L2/15-004 for Soyombo, section 4.11 page 18: "The available sources do not indicate the use of digits or number forms in the script".
This explains why there are no digits in the blocks. A case needs to be made for their encoding with a supporting document.
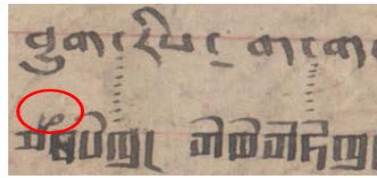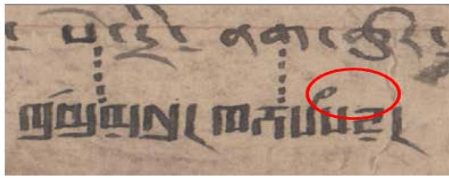
T3. Page 38, 38 Zanabazar Square
No glyphs for Mongolian "AI, UI, OU, OI" diphthongs in horizontal square script / Navchin ongi- (Leaf bindu+ hook , zartig) /.
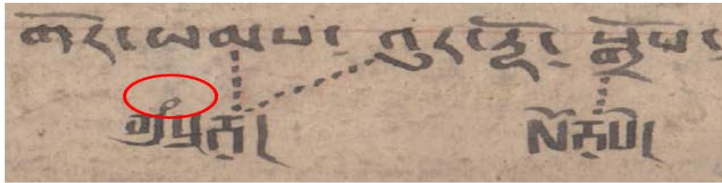
Proposed change by Mongolia
To add glyphs for Mongolian "AI, UI, OU, OI" diphthongs in the encode table of square script / Navchin ongi- (Leaf bindu+ hook , zartig) / please see page 3. [inserted here]

To add new glyphs for Mongolian "AI, UI, OU, OI" diphthongs in horizontal square script / Navchin ongi- (Leaf bindu+ hook , zartig) ?/
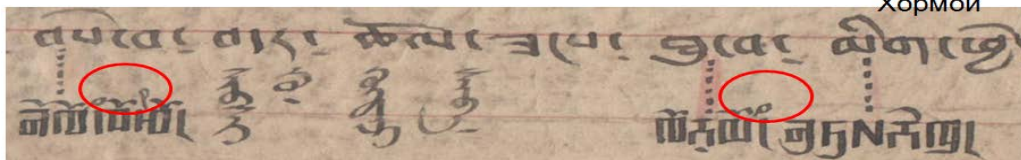

AI - Har baivan /Хар байван/

AI – Zai tabihu /Зай (цай)табиху /

UI – Guibur /Гүйбүр/

OU- Nohoi hoshou /Нохой хошоу/

OI – Hormoi/ Хормой

<u>Not accepted</u>

These diphthongs can be represented by sequences of proposed characters as explained in L2/15-215 at http://www.unicode.org/L2/L2015/15337-zanabazar-square.pdf , page 5 section 4.4.1 Diphthongs, shown here:

4.4.1 Diphthongs

The ○ VOWEL SIGN AI and ○ VOWEL SIGN AU represent the diphthongs *ai* and *au*, respectively. They also function as secondary vowel signs for *i* and *u* for producing additional diphthongs for Mongolian (see figures 43–45). These diphthongs are represented using combinations of signs:

āi   〔 <ᤖ LETTER A, ○ VOWEL LENGTH MARK, ○ VOWEL SIGN AI>

ii   〔 <ᤖ LETTER A, ○ VOWEL SIGN I, ○ VOWEL SIGN AI>

iu   〔 <ᤖ LETTER A, ○ VOWEL SIGN I, ○ VOWEL SIGN AU>

iii   〔 <ᤖ LETTER A, ○ VOWEL SIGN UE, ○ VOWEL SIGN AI>

ui   〔 <ᤖ LETTER A, ○ VOWEL SIGN U, ○ VOWEL SIGN AI>

ūi   〔 <ᤖ LETTER A, ○ VOWEL SIGN U, ○ VOWEL LENGTH MARK, ○ VOWEL SIGN AI>

ei   〔 <ᤖ LETTER A, ○ VOWEL SIGN E, ○ VOWEL SIGN AI>

ēi   〔 <ᤖ LETTER A, ○ VOWEL SIGN E, ○ VOWEL LENGTH MARK, ○ VOWEL SIGN AI>

eū   〔 <ᤖ LETTER A, ○ VOWEL SIGN E, ○ VOWEL SIGN UE, ○ VOWEL LENGTH MARK>

oi   〔 <ᤖ LETTER A, ○ VOWEL SIGN O, ○ VOWEL SIGN AI>

ōi   〔 <ᤖ LETTER A, ○ VOWEL SIGN O, ○ VOWEL LENGTH MARK, ○ VOWEL SIGN AI>

ou   〔 <ᤖ LETTER A, ○ VOWEL SIGN O, ○ VOWEL SIGN AU>

Therefore, there is no need to encode them separately.

Page 6

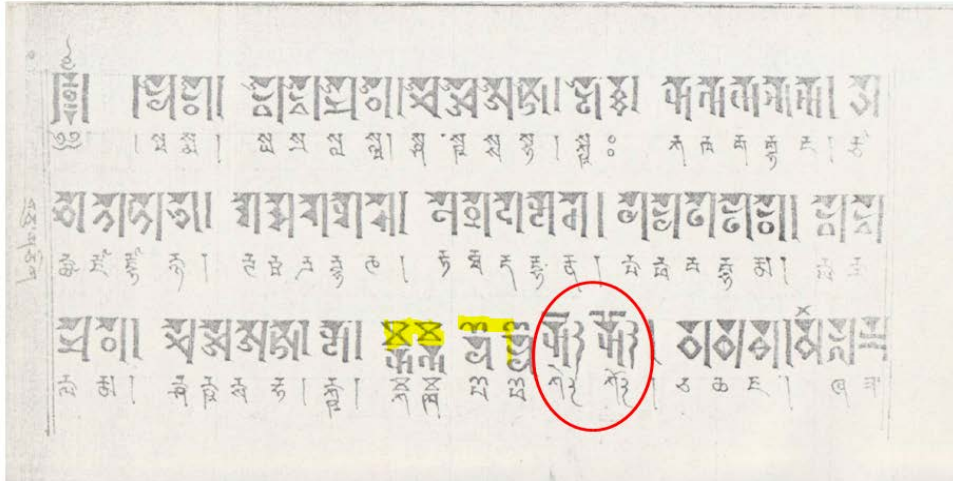**T4. Page 41, 41 Soyombo, code point U+11A9D SOYOMBO MARK PLUTA**
The glyph, proportion and trait of 11A9D Soyombo mark pluta are wrong.

Proposed change by Mongolia
To change the glyph, proportion and trait of 11A9D Soyombo mark pluta, according to attached source on page 4 of this doc. [inserted here]

The cluster letters in Soyombo script / 1.Damaru rtags can, 2.Glang chen myos bum, 3.long elongated mark pluta

- 11r

Accepted in principle
The document proposing the encoding of that character: L2/16-016 at
http://www.unicode.org/L2/L2016/16016-soyombo-pluta.pdf shows the same picture page 4. Therefore, it is a matter of preference and can be accommodated, pending the reception of an updated glyph by the editor.

T5. Page 38 Zanabazar Square, new characters
We agree the modification of 11A45 ZANABAZAR SQUARE INITIAL DOUBLE-LINED HEAD MARK, 11A46 ZANABAZAR SQUARE CLOSING DOUBLE-LINED HEAD MARK, 11A47 ZANABAZAR SQUARE SUBJOINER in the ISO/IEC 10646:2016/ Amd 1 (E) project.

Noted
These code points were new in Amendment 1, not modified.

T6. Page 38 Zanabazar Square, additional changes
We observe that the proposals for correcting character names, transliterations and encoding order of particular Square scripts (11A2D, 11A2F, page 38) we suggested during the meeting in Tokyo, 15-16 Oct 2015 not considered in this project. Therefore, please consider the correction of character names, transliterations and encoding order of particular Square scripts in next time.

Noted
The report for that adhoc meeting L2/15-249R indicated that:
- The ad hoc did not have consensus to recommend a change of name for the Zanabazar Square script.
- The ad hoc did not have consensus to recommend any changes related to characters □ (11A20) ⊞ (11A2E) and ⑥ (11A2D); there were differences of opinion on the preferred names for these characters and on whether an additional character should be added in this set.

It is not that the suggested changes by Mongolia were not considered; there just did not reach consensus. Mongolia needs to make a case for any changes in the current block. Note that any changes in names and allocation of 11A2D and 11A2F would need to be made in the context of the DIS ballot of the 5th edition of 10646 where these characters are included, not in this amendment.

T6. Page 41 Soyombo, additional changes

The author of this project found no resolution how to combine a vowel syllable for vertical writing of Soyombo scripts. This issue should be studied carefully in the encoding project of Soyombo script.

Another comment we have is cases of vertical writing order of Soyombo script for writing transcript of Sanskrit tantras are used in the manuscripts should be studied with awareness. Otherwise, we afraid that the result of the encoding project of Soyombo script will bring lack of practice

<u>Noted</u>

These observations should be moved to a new separate contribution. If new characters need to be encoded, they need to be submitted in an encoding proposal following the usual practice for this working group.

UK: Positive with comments

Technical/Editorial comment (T or E prefix)

E1. Sub-clause 33, Bopomofo
The subheading for 312D..312F is "Miscellaneous addition", but there are three additions.

Proposed change by UK:
Change the subheading for 312D..312F to "Miscellaneous additions".

Accepted

E2. Sub-clause 33, Bopomofo
The note for 312F is a copy of that for 312E. It would be useful to include a note explaining the use of 312F, so the note should be replaced by a note concerning 312F.

Proposed change by UK:
Change the note for 312F Bopomofo Letter Nn to "syllabic nasal".

Accepted

T3. Sub-clause 33, Egyptian Hieroglyphs Extended-A
The mechanism for representing hieroglyphic quadrats in plain text is still subject to discussion among Egyptologists. There seems to be agreement to encode the horizontal and vertical joiner characters, but as yet there is no consensus on whether the ligature joiner should be encoded or not.

Proposed change by UK:
Remove 13430 EGYPTIAN HIEROGLYPH LIGATURE JOINER.

Accepted
See also comment T1 from Ireland and TE3 from US.

T4. Sub-clause 33, Tangut
The radical glyphs for 187F0 and 187F1 are displayed as Han ideographs.

Proposed change by UK:
Change the radical glyphs for 187F0 and 187F1 to show the correct Tangut radicals (U+18933 and U+1899E respectively).

Accepted
This is now fixed (chart production tool issue now fixed)

T5. Sub-clause 33, Tangut
An updated version of TangutSrc.txt is missing.

Proposed change by UK:
Update TangutSrc.txt to include the five added Tangut ideographs, 187ED..187F1.

Accepted
New text will be added in the amendment to point to the file along with the file itself.

T6. Sub-clause 33, Counting Rod Numerals
The glyph for 1D378 TALLY MARK FIVE is written incorrectly, with an extra vertical stroke.

Proposed change by UK:
Correct the glyph for 1D378 TALLY MARK FIVE to have four vertical strokes only.

Accepted
See also comments E2 from Ireland and TE1 from US.
A new font has already been provided to the editor.

E7. Sub-clause 33, Counting Rod Numerals

It would be useful to indicate that 1D376 IDEOGRAPHIC TALLY MARK FIVE is based on the CJK ideograph 6B63 正.

Proposed change by UK:

Add a cross-reference to 6B63 正 for 1D376 IDEOGRAPHIC TALLY MARK FIVE.

<u>Accepted</u>

E8. Sub-clause 33, Supplemental Symbols and Pictographs

The name for 1F95F DUMPLING is potentially misleading as "dumpling" in English can refer to a broad range of different food items, but this character refers specifically to the type of semicircular dumpling found in East Asian cuisine. To clarify what sort of dumpling this is, it would be helpful to add some appropriate aliases.

Proposed change by UK:

For 1F95F DUMPLING add the informative aliases potsticker, jiaozi, gyoza, momo.

<u>Accepted in principle</u>

Pending editorial review.

USA: Positive with comments

Technical comments:

TE.1. Counting Rod Numerals
The representative glyph for U+1D378 TALLY MARK FIVE has five vertical strokes, but it should have only four. The glyph also has a winding error.

Proposed change by US:
Remove the extra line and fix the winding error in the glyph.

Accepted
See also comments E2 from Ireland and T6 from UK.

TE.2. Supplemental Punctuation
The name for U+2E4B TRIPPLE DAGGER is misspelled ("TRIPPLE").

Proposed change by US:
Correct the spelling of U+2E4B to TRIPLE DAGGER.

Accepted

TE.3. Egyptian Hieroglyphs Extended-A
Based on expert feedback, we request the removal of U+13430 EGYPTIAN HIEROGLYPH LIGATURE JOINER.

Proposed change by US:
Remove U+13430.

Accepted

Editor review on some names

Following further review on characters added to this amendment, the editor found some discrepancy for the names proposed for the new characters in the block 2B00-2BFF Miscellaneous Symbols and Arrows between various documents produced by the UTC when preparing this amendment. It would probably be advisable to use the new names. Both sets are shown below.

Amendment 1 names:

@   Astrological symbols for Pluto
2BD4   ASTROLOGICAL PLUTO FORM TWO
2BD5   ASTROLOGICAL PLUTO FORM THREE
2BD6   ASTROLOGICAL PLUTO FORM FOUR
2BD7   ASTROLOGICAL PLUTO FORM FIVE

@   Uranian astrological symbols
2BE0   ASTROLOGICAL PLANET CUPIDO
2BE1   ASTROLOGICAL PLANET HADES
2BE2   ASTROLOGICAL PLANET ZEUS
2BE3   ASTROLOGICAL PLANET KRONOS
2BE4   ASTROLOGICAL PLANET APOLLON
2BE5   ASTROLOGICAL PLANET ADMETOS
2BE6   ASTROLOGICAL PLANET VULCANUS
2BE7   ASTROLOGICAL PLANET POSEIDON

New names:

@   Astrological symbols for Pluto
2BD4   PLUTO FORM TWO
2BD5   PLUTO FORM THREE
2BD6   PLUTO FORM FOUR
2BD7   PLUTO FORM FIVE

@   Uranian astrological symbols
2BE0   CUPIDO
2BE1   HADES
2BE2   ZEUS
2BE3   KRONOS
2BE4   APOLLON
2BE5   ADMETOS
2BE6   VULCANUS
2BE7   POSEIDON

 ---end