

Title:	Comments accompanying the US positive vote on the PDAM1 to ISO/IEC 10646-1:2000
Source:	NCITS/L2
Action:	Forward to NCITS

The US is voting YES on the PDAM1 to ISO/IEC 10646-1:2000 with the following comments:

Technical Comments:

T.1 Item 1. Mathematical and other characters

Khmer block

The US National body requests the removal of 17DD KHMER SIGN LAAK as duplicate of 17D8 KHMER SIGN BEYYAL.

The Khmer character proposed for encoding at U+17DD is, to the best of our knowledge, merely a glyph variant of the already encoded character, U+17D8. Feedback from a Khmer-encoding expert indicates this. See also the exhibit, in Khmer, which shows not 2 but 3 glyphic alternates of this same sign, including the glyph proposed for encoding at U+17DD. The U.S. therefore requests that U+17DD KHMER SIGN LAAK be removed from the PDAM, pending provision of any information to indicate that there is some functional distinction involved and that U+17DD is not merely a glyphic variant of the already encoded U+17D8.

T.2 Item 1. Mathematical and other characters

Letterlike Symbols block

The US requests that the name of proposed character name at the position 2140 should be changed from DOUBLE-STRUCK CAPITAL SIGMA to DOUBLE-STRUCK N-ARY SUMMATION.

The context (Letterlike Symbols block) would suggest a 'letter' nature, while it is in fact a mathematical operator. The new name will make clear that it is an operator. Nevertheless the US doesn't want to move the character as it would impact without benefit early math implementation and some nearby symbols may have operator aspects.

T.3 Item 1. Mathematical and other characters

Miscellaneous symbols block

The US asks for a glyph change for the code position 2672 UNIVERSAL RECYCLING SYMBOL. The glyph should be reversed from black to a white glyph with black outline. The glyph is shown on page 6 of the document WG2 N2310.

In addition, the US requests for the sake of completeness of the recycling symbol repertoire to add the following characters at the corresponding code positions:

U+267A RECYCLING SYMBOL FOR GENERIC MATERIALS

U+267B BLACK UNIVERSAL RECYCLING SYMBOL

U+267C RECYCLED PAPER

U+267D PARTIALLY RECYCLED PAPER

The glyph for these symbols is described in page 6 of the document WG2 N2310.

Finally the US is asking to retain the reference names, glyphs and annotation for the characters from 2673 to 2679. It has been suggested to add shorthand notation to the glyph. This could create localization issue and can be better addressed by adding textual annotation to these characters.

T.4 Item 1. Mathematical and other characters

Miscellaneous Mathematical Symbols block, Supplemental Mathematical Operators

The US requests that the character names of the mathematical symbols in the amendment should be changed to consistently use 'BLACK' instead of 'FILLED, and 'WHITE' should be added to characters to character names that are complementary characters to those with 'BLACK' in their names.

The first part applies to the following code positions: 291D, 291E, 291F, 2920, 29D1, 29D2, 29D3, 29D4, 29D5, 29D7, 29EA, 29EB, 29ED, 29EF, 29F1, 29F3 and 2A28.

The second part applies to the following code position: 29EC WHITE CIRCLE WITH DOWN ARROW.

T.5 Item 1. Mathematical and other characters

CJK Compatibility Ideographs block

The U.S. requests the removal of four radicals proposed for encoding in the CJK Compatibility Ideographs block:

U+FA4A CJK COMPATIBILITY CHARACTER-FA4A (duplicate of U+2EA4)

U+FA5E CJK COMPATIBILITY CHARACTER-FA5E (duplicate of U+2EC0)

U+FA5F CJK COMPATIBILITY CHARACTER-FA5F (duplicate of U+2EBF)

U+FA67 CJK COMPATIBILITY CHARACTER-FA67 (duplicate of U+2ECC)

The four characters in question are variant glyphs of radicals, encoded in the new Japanese standard, JIS X 0213. They cannot be unified with the radicals included among the unified CJK characters, since they are explicitly intended as particular glyphs, rather than as unified forms. So they must be considered compatibility characters. However, since appropriate characters already exist among the U+2EXX CJK Radicals Supplement block in 10646, and since those characters are not otherwise mapped to JIS X 0213 characters, the appropriate answer is simply to map the four JIS X 0213 characters to the CJK radicals already encoded in the standard, rather than to encode yet *another* duplicate set of radicals among the CJK compatibility characters, merely to have a transcoding for these four characters.

T.6 Item 15. Characters reserved for internal processing uses

The new last paragraph states that certain code positions are reserved. However the annotations for those positions in the Tables of characters state:

"(This position is permanently reserved)"

The reader can reasonably ask what is the difference between "reserved" and "permanently reserved".

Perhaps the new paragraph should also say "permanently reserved", with a Note to explain the context of permanence, i.e. that "permanently" means no change if the standard is amended in future.

T.7 Item 15. Code tables and name lists

Miscellaneous Mathematical Symbols block

In Table 79 - Row 29 the name at 2933 has a superfluous "TO THE" in it.

T.8 Item 15. Code tables and name lists

Miscellaneous Mathematical Symbols block

In Table 80 - Row 29 the character names at positions 29A8- 29AB also include terms "TO THE" which are superfluous, and inconsistent with the names in the next four positions, 29AC-29AF.

T.9 Item 15. Code tables and name lists

Miscellaneous Mathematical Symbols block

In Table 82 - Row 2A the glyphs for positions 2ADC and 2ADD seem to have been swapped. The glyph at 2ADC has an extra diagonal stroke compared with 2ADD, which implies a negative, yet the name at 2ADD is the negative NONFORKING.

Editorial Comments:

E.1 Item 1. Mathematical and other characters

The range FA30-FA68 in the last line of the note should have read FA30-FA5F. The rest FA60-FA6B (not FA68) is covered by a new table.

Concerning new tables, the instruction to the editor are erroneous, the new characters are not replacing existing entries as these are new tables.

Amend the first entry of the list to table 144 – Row 5 (not 04)

Amend the last entry of the list to table 154 – Row FA (not AF)

E.2 Item 2. Reference to Part 2

The part '2: *Supplementary Planes*' is replacing an existing text in Part 1, not just an insertion. The replaced text is the following: '*Part 2: Secondary Multilingual Plane for scripts and symbols, Supplementary Plane for CJK ideographs, Special Purpose Plane*'.

E.3 Item 3. Restriction of code position

The instruction about Note 2 needs to be rewritten differently. The collection 500 exists in the 2nd edition (unlike 57 and 58 which were only specified in the first edition). So the change to note 2 should be as following:

Add the following sentence to Note 2: "The collection numbered 500 was specified in the First and Second Editions of this standard but has now been deleted."

E.4 Item 5. UCS Sequence Identifiers

The new clause 6.6 is unclear as stated; the following wording is suggested:

"ISO/IEC 10646 defines an identifier for any sequence of characters taken from the standard. Such an identifier is known as a UCS Sequence Identifier (USI). For a sequence of n characters it has the following form:

<UID1, UID2, UID3, .. UIDn>

where UID1, UID2, UID3, etc. represent the short identifiers of the corresponding characters, in the same order as those characters appear in the sequence."

E.5 Item 6. Characters reserved for internal processing uses

The 'r' is missing in the title

E.6 Item 7. Alternate format characters

Add a reference to Annex F, otherwise the reader will not know what an Alternate Format Character is.

E.7 Item 9. Annex A.1

Remove the '*' at the end of the 10646 collection. It is not a fixed collection.

Add collection '93' to the entry Cyrillic. (not 92).

E.8 Item 15. Code tables and name lists

In Table 144 (aka 12) - Row 05, the title should be Cyrillic Supplementary [not Supplement].

In Table 146 - Row FD, the glyphs in column FDC are all wrong. They have been taken from 0640-0647 in 2nd Edition.

Other comment

In the interest of furthering the synchronization between ISO/IEC 10646 and Unicode, the US National Body welcomes the addition as expeditiously as possible of those characters that have been approved by the UTC for addition to the Unicode Standard.

Exhibit: Khmer text for comment T.1

- ១៦- រ៉ាត់ តាប ឬ ឃ្លាប () ឬ ()
- ១៧- រដ្ឋសញ្ញា ឬ គូសមួយ (-) សរសេរស្មើនឹងព្យញ្ជនៈ
- ១៨- មធ្យមសញ្ញា ពងត្រី ឬ ចំណុច (...)
- ១៩- បេឃ្យាល ឬ លីៈ (។ មេ។) ឬ (។ ល។) ឬ (- ល-)
- ២០- យុគលពិន្ទុ (:)
- ២១- វិរាម (̄) ដាក់លើព្យញ្ជនៈប្រកប ឧ. សកិ
- ២២- វង់ក្រចកជ្រុង ឬ តង្កៀប (())
- ២៣- វង់ក្រចក (())
- ២៤- សហសញ្ញា ឬ យតិភង្គ (-) សំរាប់បញ្ជាក់ពាក្យផ្សំជាមួយគ្នា ឧ. ប្រា-
(ក្នុងពាក្យប្រាកដ)
- ២៥- វិទ្យារបើក វិទ្យារបិទ (“ ”)
- ២៦- អន្តរៈបើក អន្តរៈបិទ (« »)
- ២៧- គំនូសទ្រេតមួយ (/) ឧ. ១ ពោន/១ ហិកតា(ឧ. ១ ត./១ ហ.)
- ២៨- គំនូសទ្រេតពីរ (//)
- ២៩- គំនូសស្របខ្វែង (#)
- ៣០- ភាគរយ (%)
- ៣១- ដំរី (៊)

គ. ២- សញ្ញាវណ្ណយុត្តិផ្សេងទៀតដែលមានប្រើជាលក្ខណៈអន្តរជាតិ និង ក្នុងមុខវិជ្ជាបច្ចេកទេសផ្សេង
ទៀតមាន (.) (,) (:) (:)? ! = < > ÷ , រ, រ, « », →, ←, ↔, ⇒,
≈, ≅, *.....។

សេចក្តីបញ្ជាក់ :

អ្នកឯកទេសអាចពិនិត្យលទ្ធភាពបញ្ចូលសញ្ញាអន្តរជាតិដែលមានប្រើក្នុងបច្ចេកវិទ្យា ដើម្បីឆ្លើយនឹង
តម្រូវការប្រើប្រាស់ចាំបាច់ទាំងឡាយ ។

- ២- ការរៀបសញ្ញាអក្សរខ្មែរតាមលំដាប់ :
 - ក- សញ្ញាព្យញ្ជនៈយកតាមលំដាប់ដូចបានសរសេរនៅផ្នែកទី១ ខាងលើ ក.១ ។ ឯសញ្ញាជើងព្យញ្ជនៈ
យកតាមលំដាប់ផ្នែកទី២ ក.២ ។
 - ក្នុងការសរសេរភាសាខ្មែរ គេសង្កេតឃើញមានប្រើពាក្យដែលផ្សំដោយ :
 - សញ្ញាព្យញ្ជនៈ និង សញ្ញាជើងព្យញ្ជនៈមួយជាន់ ឧ. ស្តក
 - សញ្ញាព្យញ្ជនៈ ត្រួតជាមួយសញ្ញាជើងព្យញ្ជនៈពីរជាន់ ឧ. ចន្រ្ទ