Title:	Comments accompanying the US positive vote on the PDAM1 to ISO/IEC 10646:2003
Source:	INCITS/L2
Action:	Forward to INCITS

The US National body is voting Yes on the PDAM1 to ISO/IEC 10646:2003.

Technical Comments:

T.1 Latin Extended-B
Move the newly proposed U+0238 LATIN SMALL LETTER TH WITH STRIKETHROUGH to U+1D7A. Rationale: it is more appropriate to encode it with other phonetic extensions

T.2 Ideographic Character
The US is supporting the glyph change requested by document IRG N1026 for the character U+21E45 from 器 to 器. It should be noted that the 'new' glyph would be identical to the one shown by ISO/IEC 10646-2:2001 before its first amendment was applied to it. There is no change to the CJK source reference as a result of this glyph change.

T.3 Annex E Mirrored characters in bidirectional context
With the successive amendments it is obvious that the character list in E.1 Mathematical symbols (renamed 'Mathematical symbols and paired characters' by this amendment) has not been kept up to date. The best source should be the Unicode file BidiMirroring-4.0.0.txt, source: http://www.unicode.org/Public/4.0-Update/BidiMirroring-4.0.0.txt maintained by the Unicode Consortium. With the normative reference made by ISO/IEC 10646 to UAX#9 (Unicode Bidi Algorithm), it is important to keep these name lists synchronized. Annex E needs to be revised to be consistent with the file mentioned above.

T.4 HKSCS-2001
According to http://www.info.gov.hk/digital21/eng/hkscs/download/big5-iso.txt there are a large number of HKSCS-2001 characters still encoded in the Private Use Area (PUA). The following table shows the currently used PUA codes, the glyphs and proposed code allocation (as of now). The proposed code shows as a 4-5 digit hex code (already encoded as single character), a UCS Sequence Identifier or a 'C-xxxx' sequence indicating planned allocation for CJK Extension C. When no proposed code exists, a question mark is displayed.
Given the facts that PUA usage is far from optimal for widely used repertoire and that the CJK Extension C is not yet mature, the US is in favor of accelerating the encoding of these characters by adding them in this amendment using the following categorization:
- A new block containing Unified CJK Basic Stroke types
- Additional symbols (Miscellaneous Technical block)
- CJK Unified Ideographs

(The shaded area in the glyph cells shows the character bounding box)

HKSCS Code	PUA Code	Glyph	Proposed Code	Comment
8840	F303	⼃	C-0001	xx00 Unified CJK Basic Stroke
8841	F304	⼁	C-0518	xx01 Unified CJK Basic Stroke
8842	F305	⼅	C-0519	xx02 Unified CJK Basic Stroke
8843	F306	⼂	C-0520	xx03 Unified CJK Basic Stroke
8844	F307	∟	?	xx04 Unified CJK Basic Stroke
8846	F309	⼄	C-0400	xx05 Unified CJK Basic Stroke
8849	F30C	⼆	?	xx06 Unified CJK Basic Stroke HC87A already maps to similarly shaped U+200CC
884A	F30D	⼇	C-0402	xx07 Unified CJK Basic Stroke
884D	F310	⼈	C-0399	xx08 Unified CJK Basic Stroke
884F	F312	⼉	C-0403	xx09 Unified CJK Basic Stroke
8850	F313	⼊	C-0404	xx0A Unified CJK Basic Stroke
8851	F314	⼋	C-0405	xx0B Unified CJK Basic Stroke
8852	F315	⼌	C-0406	xx0C Unified CJK Basic Stroke
8854	F317	⼍	C-0407	xx0D Unified CJK Basic Stroke
8855	F318	⼎	C-0408	xx0E Unified CJK Basic Stroke
8862	F325	Ê̄	<00CA,0304>	Already encoded as composite sequence
8864	F327	Ê̌	<00CA,030C>	Already encoded as composite sequence
88A3	F344	ê̄	<00EA,0304>	Already encoded as composite sequence
88A5	F346	ê̌	<00EA,030C>	Already encoded as composite sequence
88A9	F34A	⎓	?	23DA Miscellaneous Technical
88AA	F34B	⏛	?	23DB Miscellaneous Technical
8C43	F57A	熿	C-13160	9FA6 CJK Unified Ideographs
8C6D	F5A4	曙	C-10543	9FA7 CJK Unified Ideographs
8C74	F5AB	匯	C-3169	9FA8 CJK Unified Ideographs
8CB7	F5CC	蘄	C-18342	9FA9 CJK Unified Ideographs
8CB9	F5CE	赳	C-19996	9FAA CJK Unified Ideographs
8CBB	F5D0	幹	C-20303	9FAB CJK Unified Ideographs
8CC0	F5D5	鋼	C-21171	9FAC CJK Unified Ideographs

8CD7	F5EC	騨	C-22927	9FAD CJK Unified Ideographs
8CD8	F5ED	驪	C-22952	9FAE CJK Unified Ideographs
8CDA	F5EF	鍼	C-21016	9FAF CJK Unified Ideographs
C879	F7E5	ヽ	C-0211	xx0F Unified CJK Basic Stroke
C87E	F7EA	䒑	4491	Already encoded as CJK Unified Ideograph (grass radical) looks like a mapping oversight
C8A1	F7EB	龰	C-3309	4DB6 CJK Unified Ideographs
C8A3	F7ED	図	C-5373	4DB7 CJK Unified Ideographs

 It should be noted that a similar situation exits for GB18030 where many characters are also encoded in the PUA area, it could be beneficial to address both issues (HKSCS and GB18030) at the same time. For reference the following table shows these PUA characters:

GB18030 Code	PUA Code	Glyph	Proposed Code	Comment
A6D9	E78D	'	?	
A6DA	E78E	°	?	Vertical variant of U+3002 。
A6DB	E78F	ヽ	?	Vertical variant of U+3001 、
A6DC	E790	：	?	
A6DD	E791	；	?	
A6DE	E792	！	?	
A6DF	E793	？	?	
A6EC	E794	⌐	?	Vertical variant of U+3016 〖
A6ED	E795	⌐	?	Vertical variant of U+3017 〗
A6F3	E796	⋮	?	Vertical ellipsis, but can't use U+22EE as it does not decompose in <vertical>U+2026
A8BC	E7C7	ḿ	1E3F	
FE51	E816	大	20087	
FE52	E817	亇	20089	
FE53	E818	丁	200CC	
FE59	E81E	乛	?	
FE61	E826	手	?	
FE66	E82B	圭	?	
FE67	E82C	壵	?	Exists as proposed C-0537
FE6C	E831	夫	215D7	

FE6D	E832	𡉤	?		
FE76	E83B	𢦏	2298F		
FE7E	E843	关	20509		
FE90	E854	卓	2099D		
FE91	E855	燚	241FE		
FEA0	E864	𤫊	?	Similar to U+470C 䜌 but as high half component could be added as a CJK Compatibility Ideograph	

T.5 Phonetic symbols

a) The proposed character at position 1D79 should be renamed as follows ('small' inserted):

1D79 LATIN SMALL LETTER INSULAR G

b) To complete the phonetic symbols repertoire the US is requesting the addition of the following characters:

PHONETIC EXTENSION (existing block)
1D7B LATIN SMALL CAPITAL LETTER I WITH STROKE
1D7C LATIN SMALL LETTER IOTA WITH STROKE
1D7D LATIN SMALL LETTER P WITH STROKE
1D7E LATIN SMALL CAPITAL LETTER U WITH STROKE
1D7F LATIN SMALL LETTER UPSILON WITH STROKE

New block extending the Phonetic symbols (block name to be determined)
1D80 LATIN SMALL LETTER B WITH PALATAL HOOK
1D81 LATIN SMALL LETTER D WITH PALATAL HOOK
1D82 LATIN SMALL LETTER F WITH PALATAL HOOK
1D83 LATIN SMALL LETTER G WITH PALATAL HOOK
1D84 LATIN SMALL LETTER K WITH PALATAL HOOK
1D85 LATIN SMALL LETTER L WITH PALATAL HOOK
1D86 LATIN SMALL LETTER M WITH PALATAL HOOK
1D87 LATIN SMALL LETTER N WITH PALATAL HOOK
1D88 LATIN SMALL LETTER P WITH PALATAL HOOK
1D89 LATIN SMALL LETTER R WITH PALATAL HOOK
1D8A LATIN SMALL LETTER S WITH PALATAL HOOK
1D8B LATIN SMALL LETTER ESH WITH PALATAL HOOK
1D8C LATIN SMALL LETTER V WITH PALATAL HOOK
1D8D LATIN SMALL LETTER X WITH PALATAL HOOK
1D8E LATIN SMALL LETTER Z WITH PALATAL HOOK
1D8F LATIN SMALL LETTER A WITH RETROFLEX HOOK

1D90 LATIN SMALL LETTER ALPHA WITH RETROFLEX HOOK
1D91 LATIN SMALL LETTER D WITH HOOK AND TAIL
1D92 LATIN SMALL LETTER E WITH RETROFLEX HOOK
1D93 LATIN SMALL LETTER OPEN E WITH RETROFLEX HOOK
1D94 LATIN SMALL LETTER REVERSED OPEN E WITH RETROFLEX HOOK
1D95 LATIN SMALL LETTER SCHWA WITH RETROFLEX HOOK
1D96 LATIN SMALL LETTER I WITH RETROFLEX HOOK
1D97 LATIN SMALL LETTER OPEN O WITH RETROFLEX HOOK
1D98 LATIN SMALL LETTER ESH WITH RETROFLEX HOOK
1D99 LATIN SMALL LETTER U WITH RETROFLEX HOOK
1D9A LATIN SMALL LETTER EZH WITH RETROFLEX HOOK
1D9B MODIFIER LETTER SMALL TURNED ALPHA
1D9C MODIFIER LETTER SMALL C
1D9D MODIFIER LETTER SMALL C WITH CURL
1D9E MODIFIER LETTER SMALL ETH
1D9F MODIFIER LETTER SMALL REVERSED OPEN E

1DA0 MODIFIER LETTER SMALL F
1DA1 MODIFIER LETTER SMALL DOTLESS J WITH STROKE
1DA2 MODIFIER LETTER SMALL SCRIPT G

1DA3 MODIFIER LETTER SMALL TURNED H
1DA4 MODIFIER LETTER SMALL I WITH STROKE
1DA5 MODIFIER LETTER SMALL IOTA
1DA6 MODIFIER LETTER SMALL CAPITAL I
1DA7 MODIFIER LETTER SMALL CAPITAL I WITH STROKE
1DA8 MODIFIER LETTER SMALL J WITH CROSSED-TAIL
1DA9 MODIFIER LETTER SMALL L WITH RETROFLEX HOOK
1DAA MODIFIER LETTER SMALL L WITH PALATAL HOOK
1DAB MODIFIER LETTER SMALL CAPITAL L
1DAC MODIFIER LETTER SMALL M WITH HOOK
1DAD MODIFIER LETTER SMALL TURNED M WITH LONG LEG
1DAE MODIFIER LETTER SMALL N WITH LEFT HOOK
1DAF MODIFIER LETTER SMALL N WITH RETROFLEX HOOK

1DB0 MODIFIER LETTER SMALL CAPITAL N
1DB1 MODIFIER LETTER SMALL BARRED O
1DB2 MODIFIER LETTER SMALL PHI
1DB3 MODIFIER LETTER SMALL S WITH HOOK
1DB4 MODIFIER LETTER SMALL ESH
1DB5 MODIFIER LETTER SMALL T WITH PALATAL HOOK
1DB6 MODIFIER LETTER SMALL U BAR
1DB7 MODIFIER LETTER SMALL UPSILON
1DB8 MODIFIER LETTER SMALL CAPITAL U
1DB9 MODIFIER LETTER SMALL V WITH HOOK
1DBA MODIFIER LETTER SMALL TURNED V
1DBB MODIFIER LETTER SMALL Z
1DBC MODIFIER LETTER SMALL Z WITH RETROFLEX HOOK
1DBD MODIFIER LETTER SMALL Z WITH CURL
1DBE MODIFIER LETTER SMALL EZH
1DBF MODIFIER LETTER SMALL THETA

1DC2 COMBINING SNAKE BELOW

LATIN EXTENDED-B (existing block)
0238 LATIN SMALL LETTER DB DIGRAPH
0239 LATIN SMALL LETTER QP DIGRAPH
023A LATIN SMALL LETTER C WITH STROKE

The complete character proposal is WG2 N2740.

T.6 Annex L Character naming guidelines
To correct the discrepancy between the introduction of the Phags-Pa character names and the naming guidelines, the US is asking the following changes to Annex L, Rule 4.
- First paragraph add 'medial' before the term 'HYPHEN-MINUS',
- In paragraph starting with 'The following six character', replace 'six' by two,
- Remove the first 4 entries, preserving the two Hangul entries.

T.7 Coptic
a) The following characters should be removed unless further evidence is found.
2C99 COPTIC CAPITAL LETTER AKHMIMIC KHEI and
2C9A COPTIC CAPITAL LETTER RO WITH STROKE
Rationale: Because 2C99 is not a Bohairic character, and because 2C9A is a non-alphabetic character, neither one occurs in upper-case (capital) form.

b) The character 2CBD COPTIC SYMBOL KHRISTOS should be renamed COPTIC SYMBOL STAUROS.
Rationale: The illustration for this character is not a symbol for *khristos* "Christ", as the character name would seem to indicate, but rather for *stauros* "cross".

T.8 Glagolitic
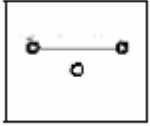The following character names need to be revised as follows.

2C0C GLAGOLITIC CAPITAL LETTER DJERVI
2C23 GLAGOLITIC CAPITAL LETTER YU

2C2D GLAGOLITIC CAPITAL LETTER TROKUSTASTI A
2C3C GLAGOLITIC SMALL LETTER DJERVI
2C5D GLAGOLITIC SMALL LETTER TROKUSTASTI A

T.9 Ancient Greek Numbers

The proposed block has no codepoint for 'zero' among the Greek symbols. This symbol occurs notably whenever a sexagesimal notation is used in astronomical texts to record degrees, minutes and seconds, or hours minutes and seconds, suggested new glyph at location 1018A:

1018A GREEK ZERO SIGN

The US is in support of adding that character as proposed by the document WG2 N 2708

T.10 Miscellaneous Mathematical

a) The proposed character at position 2692 should be renamed as follows:

2692 HAMMER AND PICK

b) In support of WG2 N2680, the US is asking for the addition of the following mathematical symbols with glyphs as described in the document:

27C3 OPEN SUPERSET
27C4 OPEN SUBSET
27C5 LEFT S-SHAPED BAG DELIMITER
27C6 RIGHT S-SHAPED BAG DELIMITER

Note: the two first names differ from the proposal by having 'OPEN" instead of 'BOUNDED'.

T.11 New Arabic characters

The US is requesting the encoding the following 5 Arabic characters as supported by document WG2 N2723 (UTC/L2 L04-25) in the following blocks:

ARABIC
065D ARABIC REVERSED DAMMA
065E ARABIC FATHA WITH TWO DOTS

ARABIC SUPPLEMENT
076B ARABIC LETTER REH WITH TWO DOTS VERTICALLY ABOVE
076C ARABIC LETTER REH WITH HAMZA ABOVE
076D ARABIC LETTER SEEN WITH TWO DOTS VERTICALLY ABOVE

T.12 Tamil

The US is requesting the encoding the following Tamil character as supported by document WG2 N2741 (UTC/L2 L04-73) in the Tamil block:

0BE6 TAMIL DIGIT ZERO

T.13 Alternate Format Characters

With respect to the issues raised in document WG2 N2648, author V.S. Umamaheswaran, the US suggests the addition of a formal definition for Alternate Format Characters in clause 4 and would support a clarification concerning these characters as described in clause 20.3 and Annex F. The US would welcome such clarification in this PDAM text.

T.14 JIS-x-213 source reference
JIS-x-213 has been revised with new CJK source references; this should be added to the appropriate CJK source files.

T.15 Tai Lue
The US requests WG2 to make sure the ordering of the Tai Lue block respects a traditional order.

Editorial Comments:

E.1 Chart page 8, Table 9 Row 3
Glyph production error in cell U+031A (not a new character). A part of the glyph shows as a rectangle instead as of an angle.

End of US comments