

**INCITS/L2/11- 067**

**Date: February 9, 2011**

**Title: Comments accompanying the U.S. positive vote on PDAM 1 of ISO/IEC 10646 (SC2 N4169)**

**Source: INCITS/L2**

**Action: Forward to INCITS**

The U.S. National Body is voting Yes with comments on the following SC2 ballot: SC N4169: ISO/IEC 10646/PDAM1, Information Technology -- Universal Coded Character Set (UCS) -- Amendment 1: Palmyrene, Old North Arabian, Sindhi, Mro, Bassa Vah, and other characters.

## **Technical Comments**

### **T.1. Sindhi**

The U.S. requests the name of the “Sindhi” block, located at 112B0-112FF, be changed to “Khudawadi”, and all character names in the block be changed, replacing the chart and nameslist on the ballot with the chart and nameslist shown in Annex A of this document. For a full description of the changes, see the revised proposal N3979.

Rationale: The name “Sindhi” is a broad term, typically referring to a class of scripts that are based on Landa. The name “Khudawadi” is well-attested in primary and secondary literature specifically for this script, and will prevent confusion. Feedback from the user community supports the change of name to “Khudawadi,” as relayed in N3597. Today, the term “Sindhi script” is commonly used for the Arabic-based script used for writing the Sindhi language; the Arabic-based script is unrelated to the script being balloted.

### **T.2. Coptic Numbers**

The U.S. requests the Coptic Numbers block (102E0-102FF) be changed to “Coptic Epact Numbers,” and all character names likewise reflect this change as reflected L2/11-062.

Rationale: “Coptic Numbers” is too general a designation, since it implies these proposed characters are the usual Coptic numbers. Instead, the proposed characters are imported (“epact”), and a change of name to “Coptic Epact Numbers” will make this distinction clear, as discussed in N3958.

### **T.3. Miscellaneous Symbols and Pictographs**

The U.S. requests the removal of 1F53E RIGHT-FACING ARMENIAN ETERNITY SIGN and 15F3F LEFT-FACING ARMENIAN ETERNITY SIGN from the Miscellaneous Symbols and Pictographs block and move the current LEFT-FACING ARMENIAN ETERNITY SIGN to 058E, with a name change to ARMENIAN ETERNITY SIGN.

Rationale: The Armenian standards ArmSCII-7, ArmSCII-8, and ArmSCII-8A contain only one character, which is represented by a left-facing glyph for the eternity sign. Adding two characters, where the national standards only show one, would create mapping problems.

#### **T.4. Mro**

The U.S. requests the removal of 16A6E MRO DANDA and 16A6F MRO DOUBLE DANDA, unless clarification of their status and more evidence of use can be provided.

Rationale: The proposal (N3589) provides no examples of a single danda. The status of the Mro double danda as either a unitary character or a sequence of characters is unclear, given the use of a full stop in the orthography as well.

#### **T.5. Bassa Vah**

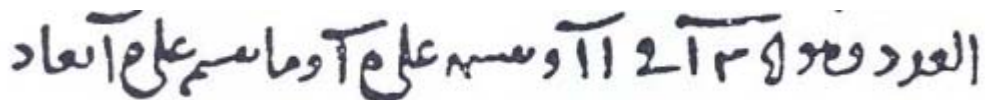
The U.S. requests the removal of 16AF5 BASSA VAH COMMA.

Rationale: Comments from the user community (L2/11-041) have made clear the character, which only appears in one Bassa Vah document, is a typographic error. It should be removed from the coding chart for Bassa Vah.

#### **T.6. Arabic**

The U.S. requests 0605 ARABIC COPTIC NUMBER MARK be renamed ARABIC NUMBER MARK ABOVE.

Rationale: This mark is used for Arabic, as is shown in the image below. If the Coptic epact numbers are given the Script property value “common,” the ARABIC NUMBER MARK ABOVE could be used equally well with Coptic epact numbers. However, having both “Arabic” and “Coptic” in the character name is confusing, as it includes two scripts, contrary to 10646 naming guidelines.

The image shows a line of handwritten Arabic text. The text is written in a cursive style. The numbers 1 through 9 and 0 are written in Arabic script. Above each of these numbers is a small, dark, horizontal mark, which is the 'ARABIC NUMBER MARK ABOVE' (0605). The text appears to be a list of numbers: 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0.

Source: J. Lennart Berggren, Episodes in the Mathematics of Medieval Islam, Springer-Verlag, New York, 1986, p. 37.

## Annex A

## Annex A

	112B	112C	112D	112E	112F
0	𑖀 112B0	𑖁 112C0	𑖂 112D0	𑖃 112E0	𑖄 112F0
1	𑖅 112B1	𑖆 112C1	𑖇 112D1	𑖈 112E1	𑖉 112F1
2	𑖊 112B2	𑖋 112C2	𑖌 112D2	𑖍 112E2	𑖎 112F2
3	𑖏 112B3	𑖐 112C3	𑖑 112D3	𑖒 112E3	𑖓 112F3
4	𑖔 112B4	𑖕 112C4	𑖖 112D4	𑖗 112E4	𑖘 112F4
5	𑖙 112B5	𑖚 112C5	𑖛 112D5	𑖜 112E5	𑖝 112F5
6	𑖞 112B6	𑖟 112C6	𑖠 112D6	𑖡 112E6	𑖢 112F6
7	𑖣 112B7	𑖤 112C7	𑖥 112D7	𑖦 112E7	𑖧 112F7
8	𑖨 112B8	𑖩 112C8	𑖪 112D8	𑖫 112E8	𑖬 112F8
9	𑖭 112B9	𑖮 112C9	𑖯 112D9	𑖰 112E9	𑖱 112F9
A	𑖲 112BA	𑖳 112CA	𑖴 112DA	𑖵 112EA	
B	𑖶 112BB	𑖷 112CB	𑖸 112DB		
C	𑖹 112BC	𑖺 112CC	𑖻 112DC		
D	𑖼 112BD	𑖽 112CD	𑖾 112DD		
E	𑖿 112BE	𑗀 112CE	𑗁 112DE		
F	𑗂 112BF	𑗃 112CF	𑗄 112DF		

Figure 1: Proposed code chart for Khudwadi.

## Annex A

**Independent vowels**

112B0	𑍀	KHUDAWADI LETTER A
112B1	𑍁	KHUDAWADI LETTER AA
112B2	𑍂	KHUDAWADI LETTER I
112B3	𑍃	KHUDAWADI LETTER II
112B4	𑍄	KHUDAWADI LETTER U
112B5	𑍅	KHUDAWADI LETTER UU
112B6	𑍆	KHUDAWADI LETTER E
112B7	𑍇	KHUDAWADI LETTER AI
112B8	𑍈	KHUDAWADI LETTER O
112B9	𑍉	KHUDAWADI LETTER AU

**Digits**

112F0	𑍊	KHUDAWADI DIGIT ZERO
112F1	𑍋	KHUDAWADI DIGIT ONE
112F2	𑍌	KHUDAWADI DIGIT TWO
112F3	𑍍	KHUDAWADI DIGIT THREE
112F4	𑍎	KHUDAWADI DIGIT FOUR
112F5	𑍏	KHUDAWADI DIGIT FIVE
112F6	𑍐	KHUDAWADI DIGIT SIX
112F7	𑍑	KHUDAWADI DIGIT SEVEN
112F8	𑍒	KHUDAWADI DIGIT EIGHT
112F9	𑍓	KHUDAWADI DIGIT NINE

**Consonants**

112BA	𑍔	KHUDAWADI LETTER KA
112BB	𑍕	KHUDAWADI LETTER KHA
112BC	𑍖	KHUDAWADI LETTER GA
112BD	𑍗	KHUDAWADI LETTER GGA
112BE	𑍘	KHUDAWADI LETTER GHHA
112BF	𑍙	KHUDAWADI LETTER NGHA
112C0	𑍚	KHUDAWADI LETTER CA
112C1	𑍛	KHUDAWADI LETTER CHA
112C2	𑍜	KHUDAWADI LETTER JA
112C3	𑍝	KHUDAWADI LETTER JJA
112C4	𑍞	KHUDAWADI LETTER JHA
112C5	𑍟	KHUDAWADI LETTER NYA
112C6	𑍠	KHUDAWADI LETTER TTA
112C7	𑍡	KHUDAWADI LETTER TTHA
112C8	𑍢	KHUDAWADI LETTER DDA
112C9	𑍣	KHUDAWADI LETTER DDDA
112CA	𑍤	KHUDAWADI LETTER RRA
112CB	𑍥	KHUDAWADI LETTER DDHA
112CC	𑍦	KHUDAWADI LETTER NNA
112CD	𑍧	KHUDAWADI LETTER TA
112CE	𑍨	KHUDAWADI LETTER THA
112CF	𑍩	KHUDAWADI LETTER DA
112D0	𑍪	KHUDAWADI LETTER DHA
112D1	𑍫	KHUDAWADI LETTER NA
112D2	𑍬	KHUDAWADI LETTER PA
112D3	𑍭	KHUDAWADI LETTER PHA
112D4	𑍮	KHUDAWADI LETTER BA
112D5	𑍯	KHUDAWADI LETTER BBA
112D6	𑍰	KHUDAWADI LETTER BHA
112D7	𑍱	KHUDAWADI LETTER MA
112D8	𑍲	KHUDAWADI LETTER YA
112D9	𑍳	KHUDAWADI LETTER RA
112DA	𑍴	KHUDAWADI LETTER LA
112DB	𑍵	KHUDAWADI LETTER VA
112DC	𑍶	KHUDAWADI LETTER SHA
112DD	𑍷	KHUDAWADI LETTER SA
112DE	𑍸	KHUDAWADI LETTER HA

**Various signs**

112DF	𑍹	KHUDAWADI SIGN ANUSVARA
-------	---	-------------------------

**Dependent vowel signs**

112E0	𑍺	KHUDAWADI VOWEL SIGN AA
112E1	𑍻	KHUDAWADI VOWEL SIGN I
112E2	𑍼	KHUDAWADI VOWEL SIGN II
112E3	𑍽	KHUDAWADI VOWEL SIGN U
112E4	𑍾	KHUDAWADI VOWEL SIGN UU
112E5	𑍿	KHUDAWADI VOWEL SIGN E
112E6	𑎀	KHUDAWADI VOWEL SIGN AI
112E7	𑎁	KHUDAWADI VOWEL SIGN O
112E8	𑎂	KHUDAWADI VOWEL SIGN AU

**Various signs**

112E9	𑎃	KHUDAWADI SIGN NUKTA
112EA	𑎄	KHUDAWADI SIGN VIRAMA

Figure 2: Proposed names list for Khudawadi.