Universal Multiple-Octet Coded Character Set International Organization for Standardization Organisation Internationale de Normalisation Международная организация по стандартизации

**Doc Type: Working Group Document** 

Title: Proposal to encode modern Bamum in the BMP of the UCS

Source: Bamum Scripts and Archives Project in the Palace of Bamum Kings,

& the UC Berkeley Script Encoding Initiative (Universal Scripts Project)

Authors: Michael Everson, Charles Riley, Konrad Tuchscherer

**Status: Liaison Contribution** 

Action: For consideration by JTC1/SC2/WG2 and UTC

Replaces: N3209R2 Date: 2008-10-12

Document N3209R2 (L2/07-024R) "Preliminary proposal for encoding the Bamum script in the BMP of the UCS" by Michael Everson and Charles Riley presented a proposal to encode the modern Bamum script of Cameroon. Both WG2 and the UTC approved the repertoire for ballotting in PDAM 5. Although none of the JTC1/SC2 National Bodies objected to the content of the script, the Bamum Scripts and Archives Project in the Palace of Bamum Kings, Foumban, Cameroun, requested additional time to study the repertoire and character names. That review has been completed, and we now request that modern Bamum be returned to the ballotting process.

The preliminary descriptive text and accompanying illustrations from N3209R2 are currently being reviewed and when that review is complete the text will be merged into a revised version of the present document, as N3522R. The material in the present document, however, is technically correct and we consider the character repertoire and names to be mature for encoding, and we request that WG2 and the UTC consider it in that light.

- **1. Structure.** The Bamum script is a left-to-right script containing 80 base characters, two combining diacritics, and six punctuation marks. One of the diacritics, the KOQNDON (from *ko?ndon*), is regularly applied to all of the 80 base characters to extend the syllabic repertoire. The other, the TUKWENTIS, is known to be used with only 13 base characters. There is a certain amount of glyph variation in Bamum; the representative glyphs in the code chart are typical of modern usage.
- **2.** Character names. The transcription used in the character names follows the IPA forms given in Dugast and Jeffreys 1950. The following conventions are used:

Dugast	a	b	d	3	e	Э	f	Y	g	i	k	1	m	n	ŋ	Э
English	a	b	d	e	ee	ae	f	gh	g	i	k	l	m	n	ng	0
French	a	b	d	è	é	e	f	gh	g	i	k	l	m	n	ng	0
Dugast	p	r	S	ſ	t	u	ii	Ш	V	W	x	V	7	7	5	
	-			J			-	-	•	**	21	J		3	•	
English	p			•								•		_		

Although the modern script is a syllabary, the term LETTER has been used in the character names rather than SYLLABLE, because this term (and its French equivalent LETTRE) is current in Cameroun.

- **3. Digits.** The last ten base characters in the syllabary are digits, which are also used as letters. Historically, the last of these was used for 10, but when decimal mathematics were introduced its use was modified to 0.
- **4. Punctuation.** Five sentence punctuation marks are used, which correspond to, and were probably inspired by, European punctuation. The FULL STOP I- or jak indicates a "point" and corresponds to <.>; the COLON I-I- or  $beshtik\ jak$  indicates "two points" and corresponds to <:>; the COMMA  $\tau$  or kipti corresponds to <,>; the SEMICOLON  $\tau I$  or  $kipti\ jak$  indicates a "point comma" and corresponds to <;>; and the QUESTION MARK  $\psi$  or wili indicates a point and corresponds to <?>.
- **5. Ordering.** Code-chart order is the correct sorting order. Characters with diacritics are differentiated at the second level:

```
\delta a \ll \hat{\delta} a? < V ka \ll \hat{V} ka? < \bar{\delta} u \ll \hat{\bar{\delta}} wu? < \mathcal{P} ku \ll \hat{\mathcal{P}} ku? < \dot{b} e \ll \hat{b} e?
                                                                                                                                      \emptyset i << \widehat{\emptyset} i? < \P la << \widehat{\P} la? < 1 pa << \widehat{1} pa? < 0 rii << \widehat{0} ri? < 1 rie << \widehat{1} z <
                                                  \forall n \exists m \ll \hat{\forall} v \ni m \ll \text{L} m \ll \hat{\textbf{L}} n \ll \text{Su} u \ll \hat{\forall} su ? \ll \text{V} m u \ll \hat{\forall} m u ? \text{w} w . 
                 \Box: fii << \widehat{\Box}: fi? << \overline{\dot{\tau}}: si? << \overline{\dot{\tau}}: s < 9 \text{ fux} << \widehat{9} \text{ yux} < \widehat{\tau}: sux << \widehat{\hat{\tau}}: sui? << \widehat{\tau}: sui? << \widehat
                                                                                                                            3^{\circ} kye <<3^{\circ} kye? < \stackrel{\cdot}{\vdash} ket <<3^{\circ} nu><3^{\circ} nu><3^{\circ} nu? <
                                                                            \P n_3 u = \langle \P y u = n \rangle = \langle \P y = n \rangle = \langle 
                                                                                                                                        F = ya << \widehat{F} = ya? < \sqrt{n} = \sqrt{n} 
1 \, fe << \widehat{1} \, fe ? < \widehat{3} \, ru << \widehat{3} \, ru ? < \widehat{1} \, lu ? < \widehat{1} \, lu ? < \widehat{1} \, mi ? < \widehat{1} 
                                                                                                                            M fu \ll \hat{M} fu^2 \ll \bar{M} f \ll 1 fom \ll 1 mvop \ll 1 wa \ll 1 ma \ll 1 na \ll 1 na
                                                                           \circ li << \widehat{\circ} li? << \overline{\circ} l < ? \circ pi << \widehat{?} pin < ? lo? << \widehat{?} lo? < \lor ko << \widehat{\lor} ko? << \overline{\lor} k <
                                                                                            \gamma ti << \hat{\gamma} tu << \hat{\gamma} t < f ki << \hat{f} ki << \hat{\tau} mo << \hat{\tau} mon << \bar{\tau} m < \gamma mbaa << \hat{\tau} 
                    1 \text{ tet} << \hat{1} \text{ tet} <> \hat{1} \text{ tet} << \hat{1} \text{ ten} <<
```

## 6. Unicode Character Properties.

```
A6A0; BAMUM LETTER A;Lo;0;L;;;;N;;;;;
A6A1; BAMUM LETTER KA;Lo;0;L;;;;N;;;;;
A6A2; BAMUM LETTER U;Lo;0;L;;;;N;;;;
A6A3; BAMUM LETTER KU;Lo;0;L;;;;N;;;;
A6A4; BAMUM LETTER EE;Lo;0;L;;;;N;;;;;
A6A5; BAMUM LETTER REE;Lo;0;L;;;;N;;;;;
A6A7; BAMUM LETTER O;Lo;0;L;;;;N;;;;
```

```
A6A8; BAMUM LETTER NYI; Lo; 0; L;;;;; N;;;;;
A6A9; BAMUM LETTER I; Lo; 0; L;;;;; N;;;;
A6AA; BAMUM LETTER LA; Lo; 0; L;;;;; N;;;;;
A6AB; BAMUM LETTER PA; Lo; 0; L;;;;; N;;;;;
A6AC; BAMUM LETTER RII; Lo; 0; L;;;;; N;;;;
A6AD; BAMUM LETTER RIEE; Lo; 0; L;;;;; N;;;;
A6AE; BAMUM LETTER LEEEE; Lo; 0; L;;;;; N;;;;
A6AF; BAMUM LETTER MEEEE; Lo; 0; L;;;;; N;;;;
A6B0; BAMUM LETTER TAA; Lo; 0; L;;;;; N;;;;
A6B1; BAMUM LETTER NDAA; Lo; 0; L;;;;; N;;;;
A6B2; BAMUM LETTER NJAEM; Lo; 0; L;;;;; N;;;;;
A6B3; BAMUM LETTER M; Lo; 0; L;;;;; N;;;;;
A6B4; BAMUM LETTER SUU; Lo; 0; L;;;;; N;;;;
A6B5; BAMUM LETTER MU; Lo; 0; L;;;;; N;;;;
A6B6; BAMUM LETTER SHII; Lo; 0; L;;;;; N;;;;
A6B7; BAMUM LETTER SI; Lo; 0; L;;;;; N;;;;
A6B8; BAMUM LETTER SHEUX; Lo; 0; L;;;;; N;;;;;
A6B9; BAMUM LETTER SEUX; Lo; 0; L;;;;; N;;;;;
A6BA; BAMUM LETTER KYEE; Lo; 0; L;;;;; N;;;;;
A6BB; BAMUM LETTER KET; Lo; 0; L;;;;; N;;;;;
A6BC; BAMUM LETTER NUAE; Lo; 0; L;;;;; N;;;;;
A6BD; BAMUM LETTER NU; Lo; 0; L;;;;; N;;;;
A6BE; BAMUM LETTER NJUAE; Lo; 0; L;;;;; N;;;;;
A6BF; BAMUM LETTER YOQ; Lo; 0; L;;;;; N;;;;
A6C0; BAMUM LETTER SHU; Lo; 0; L;;;;; N;;;;
A6C1; BAMUM LETTER YUQ; Lo; 0; L;;;;; N;;;;;
A6C2; BAMUM LETTER YA; Lo; 0; L;;;;; N;;;;;
A6C3; BAMUM LETTER NSHA; Lo; 0; L;;;;; N;;;;;
A6C4; BAMUM LETTER KEUX; Lo; 0; L;;;;; N;;;;;
A6C5; BAMUM LETTER PEUX; Lo; 0; L;;;;; N;;;;
A6C6; BAMUM LETTER NJEE; Lo; 0; L;;;;; N;;;;
A6C7; BAMUM LETTER NTEE; Lo; 0; L;;;;; N;;;;;
A6C8; BAMUM LETTER PUE; Lo; 0; L;;;;; N;;;;
A6C9; BAMUM LETTER WUE; Lo; 0; L;;;;; N;;;;;
A6CA; BAMUM LETTER PEE; Lo; 0; L;;;;; N;;;;
A6CB; BAMUM LETTER FEE; Lo; 0; L;;;;; N;;;;;
A6CC; BAMUM LETTER RU; Lo; 0; L;;;;; N;;;;
A6CD; BAMUM LETTER LU; Lo; 0; L;;;;; N;;;;
A6CE; BAMUM LETTER MI; Lo; 0; L;;;;; N;;;;;
A6CF; BAMUM LETTER NI; Lo; 0; L;;;;; N;;;;;
A6D0; BAMUM LETTER REUX; Lo; 0; L;;;;; N;;;;;
A6D1; BAMUM LETTER RAE; Lo; 0; L;;;;; N;;;;
A6D2; BAMUM LETTER KEN; Lo; 0; L;;;;; N;;;;;
A6D3; BAMUM LETTER NGKWAEN; Lo; 0; L;;;;; N;;;;;
A6D4; BAMUM LETTER NGGA; Lo; 0; L;;;;; N;;;;;
A6D5; BAMUM LETTER NGA; Lo; 0; L;;;;; N;;;;
A6D6; BAMUM LETTER SHO; Lo; 0; L;;;;; N;;;;
A6D7; BAMUM LETTER PUAE; Lo; 0; L;;;;; N;;;;
A6D8; BAMUM LETTER FU; Lo; 0; L;;;;; N;;;;
A6D9; BAMUM LETTER FOM; Lo; 0; L;;;;; N;;;;
A6DA; BAMUM LETTER WA; Lo; 0; L;;;;; N;;;;
A6DB; BAMUM LETTER NA; Lo; 0; L;;;;; N;;;;;
A6DC; BAMUM LETTER LI; Lo; 0; L;;;;; N;;;;;
A6DD; BAMUM LETTER PI;Lo;0;L;;;;;N;;;;;
A6DE; BAMUM LETTER LOQ; Lo; 0; L;;;;; N;;;;
A6DF; BAMUM LETTER KO; Lo; 0; L;;;;; N;;;;
A6E0; BAMUM LETTER MBEN; Lo; 0; L;;;;; N;;;;
A6E1; BAMUM LETTER REN; Lo; 0; L;;;;; N;;;;
A6E2; BAMUM LETTER MEN; Lo; 0; L;;;;; N;;;;
A6E3; BAMUM LETTER MA; Lo; 0; L;;;;; N;;;;;
A6E4; BAMUM LETTER TI; Lo; 0; L;;;;; N;;;;;
A6E5; BAMUM LETTER KI; Lo; 0; L;;;;; N;;;;;
A6E6; BAMUM LETTER MO; N1; 0; L;;;; 1; N;;;;;
A6E7; BAMUM LETTER MBAA; N1; 0; L;;;; 2; N;;;;;
A6E8; BAMUM LETTER TET; N1; 0; L;;;; 3; N;;;;;
A6E9; BAMUM LETTER KPA; N1; 0; L;;;; 4; N;;;;
A6EA; BAMUM LETTER TEN; N1; 0; L;;;; 5; N;;;;;
A6EB; BAMUM LETTER NTUU; N1;0;L;;;;6;N;;;;;
A6EC; BAMUM LETTER SAMBA; N1; 0; L;;;; 7; N;;;;;
A6ED; BAMUM LETTER FAAMAE; N1; 0; L;;;; 8; N;;;;;
```

```
A6EE; BAMUM LETTER KOVUE; N1; 0; L;;;; 9; N;;;;
A6EF; BAMUM LETTER KOGHOM; N1; 0; L;;;; 0; N;;;;
A6F0; BAMUM COMBINING MARK KOQNDON; Mn; 230; NSM;;;; N;;;;
A6F1; BAMUM COMBINING MARK TUKWENTIS; Mn; 230; NSM;;;; N;;;;
A6F2; BAMUM NJAEMLI; Po; 0; ON;;;; N;;;;
A6F3; BAMUM FULL STOP; Po; 0; CS;;;; N;;;;
A6F4; BAMUM COLON; Po; 0; CS;;;; N;;;;
A6F5; BAMUM COMMA; Po; 0; CS;;;; N;;;;
A6F6; BAMUM SEMICOLON; Po; 0; ON;;;; N;;;;
A6F7; BAMUM QUESTION MARK; Po; 0; ON;;;;; N;;;;
```

## 7. Bibliography.

Dugast, J. & M. D. W. Jeffreys. 1950. L'écriture des bamum: sa naissance, son evolution, sa valeur phonétique, son utilisation. Mémoires de l'Institut Français d'Afrique Noire, Centre du Cameroun.

Nchare, Oumarou. [s.d.]. *The Writing of King Njoya: genesis, evolution, use*. Foumban: Palais des Rois Bamoun, Maison de la Culture.

Schmitt, Alfred. 1963. Die Bamum-Schrift. Band I: Text. Wiesbaden: Otto Harrassowitz.

## Acknowledgements

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## A. Administrative

1. Title

Proposal to encode modern Bamum in the BMP of the UCS

2. Requester's name

Bamum Scripts and Archives Project in the Palace of Bamum Kings, & the UC Berkeley Script Encoding Initiative (Universal Scripts Project); authors: Michael Everson, Charles Riley, Konrad Tuchscherer

3. Requester type (Member body/Liaison/Individual contribution)

Liaison contribution.

4. Submission date

2008-10-12

- 5. Requester's reference (if applicable)
- 6. Choose one of the following:
- 6a. This is a complete proposal

No

6b. More information will be provided later

Yes.

## **B.** Technical – General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

Yes.

1b. Proposed name of script

Bamum.

1c. The proposal is for addition of character(s) to an existing block

No.

1d. Name of the existing block

2. Number of characters in proposal

88

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

## Category A.

4a. Is a repertoire including character names provided?

Yes.

4b. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?

Yes

4c. Are the character shapes attached in a legible form suitable for review?

Yes.

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

Jason Glavy via Michael Everson.

5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

## Michael Everson, Fontographer.

7a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

No.

7b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

8. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

Yes.

9. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

See above.

## C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

No.

2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

Yes.

2b. If YES, with whom?

Oumarou Nchare (Director of Cultural Affairs, Bamum King's Palace, Foumban), Aboubakar Njiassé Njoya, Zakari Nkepu, Konrad Tuchscherer.

- 2c. If YES, available relevant documents
- 3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?

## In Cameroon.

4a. The context of use for the proposed characters (type of use; common or rare)

## Used to write the Bamum language.

4b. Reference

5a. Are the proposed characters in current use by the user community?

#### Yes.

5b. If YES, where?

### In Cameroon.

6a. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

## Yes. Positions A680-A6FF are proposed.

6b. If YES, is a rationale provided?

#### Yes.

6c. If YES, reference

## Contemporary use.

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

#### Yes.

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

#### No.

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

### No.

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

## Yes, but only superficially so.

10b. If YES, is a rationale for its inclusion provided?

## Yes.

10c. If YES, reference

# Script-specific diacritics are appropriate for this script due to the origin, typical glyph size, and semantics of the diacritics. We oppose unification with generic circumflex and macron.

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

## Yes.

11b. If YES, is a rationale for such use provided?

## No

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

## Ves

11e. If YES, reference

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?

## No.

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

## No.

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?

	A6A	A6B	A6C	A6D	A6E	
0	5	P	9	C I	7	ं >
1	A6A0	A6B0	A6C0	<b>)</b> .	A6E0	A6F0
2	A6A1 <b>=</b>	A6B1	A6C1	A6D1	A6E1	A6F1
	A6A2	A6B2	A6C2	A6D2	A6E2	A6F2
3	<b>9.</b> A6A3	<b>L</b> A6B3	W A6C3	<b>1</b> A6D3	<b>1</b> A6E3	<b>/•</b> A6F3
4	ن	V÷	þ	<b>/</b> i	))	<i> . .</i>
	A6A4	A6B4	A6C4	A6D4	A6E4	A6F4
5	Ŀ	Y	H.		ľ	7
	A6A5	A6B5	A6C5	A6D5 ■	A6E5	A6F5
6	÷	Acres	A6C6	h	<b>5</b>	<i>TI</i> •
7	A6A6	A6B6	4	A6D6	A6E6 <b>3</b>	A6F6
	A6A7	A6B7	A6C7	A6D7	A6E7	A6F7
8	7	9	ዋ	$ \mathcal{M} $	1	
9	A6A8	A6B8	A6C8	A6D8	A6E8	
	<b>O</b> A6A9	A6B9	<b>Z</b> A6C9	<b>4</b> A6D9	<b>-</b> A6E9	
Α	r:	<b>3</b> .	b	L.	4	
-	A6AA	A6BA	A6CA	A6DA	A6EA	
В	<b>1</b> • A6AB	A6BB	A6CB	A6DB	<b>?</b>	
С	ရ	>	<b>3</b>	ġ	1	
	A6AC	A6BC	A6CC	A6DC	A6EC	
D	A6AD	<b>5</b>	<b>2</b>	<b>9</b> ·	<b>?</b>	
E	‡	41	Λ	7	J	
	A6AE	A6BE	A6CE	A6DE	A6EE	
F	ŕ	9	Ŵ	V	S	
	A6AF	A6BF	A6CF	A6DF	A6EF	

Date: 2008-10-06

UTC: 2007-02-09 N3209 contact: Everson font: UniA6A0Bamum target: Amd5

: Sylia	aDI	<del>U</del> S
A6A0	5	BAMUM LETTER A
A6A1	И	BAMUM LETTER KA
A6A2	ō	BAMUM LETTER U
A6A3	9.	BAMUM LETTER KU
A6A4	j	BAMUM LETTER EE
A6A5	Ŀ	BAMUM LETTER REE
A6A6	÷	BAMUM LETTER TAE
A6A7	Z	BAMUM LETTER O
A6A8	7	BAMUM LETTER NYI
A6A9	Ó	BAMUM LETTER I
A6AA	Ŧ?	BAMUM LETTER LA
A6AB	1	BAMUM LETTER PA
A6AC	Ö	BAMUM LETTER RII
A6AD	Д	BAMUM LETTER RIEE
A6AE	¦	BAMUM LETTER LEEEE
A6AF	ŕ	BAMUM LETTER MEEEE
A6B0	P	BAMUM LETTER TAA
A6B1	F	BAMUM LETTER NDAA
A6B2	Υ	BAMUM LETTER NJAEM
A6B3	Ц	BAMUM LETTER M
A6B4	٧÷	BAMUM LETTER SUU
A6B5	Ÿ	BAMUM LETTER MU
A6B6	   :	BAMUM LETTER SHII
A6B7	が	BAMUM LETTER SI
A6B8		
	9	BAMUM LETTER SHEUX
A6B9	y. J	BAMUM LETTER SEUX
A6BA	9.	BAMUM LETTER KYEE
A6BB	įΓ	BAMUM LETTER KET
A6BC	>	BAMUM LETTER NUAE
A6BD	3	BAMUM LETTER NU
A6BE	4	BAMUM LETTER NJUAE
A6BF	9	BAMUM LETTER YOQ
A6C0	9	BAMUM LETTER SHU
A6C1	7	BAMUM LETTER YUQ
A6C2	=	BAMUM LETTER YA
A6C3	W	BAMUM LETTER NSHA
A6C4	þ	BAMUM LETTER KEUX
A6C5	H.	BAMUM LETTER PEUX
A6C6	4	BAMUM LETTER NJEE
A6C7	<	BAMUM LETTER NTEE
A6C8	ዋ	BAMUM LETTER PUE
A6C9	Z	BAMUM LETTER WUE
A6CA	Ь	BAMUM LETTER PEE
A6CB	1	BAMUM LETTER FEE
A6CC	3	BAMUM LETTER RU
A6CD	2	BAMUM LETTER LU
A6CE	Λ	BAMUM LETTER MI
A6CF	Α̈́	BAMUM LETTER NI
A6D0	c I	BAMUM LETTER REUX
A6D1	).	BAMUM LETTER RAE
A6D2	2	BAMUM LETTER KEN
A6D3	٠ ا	BAMUM LETTER NGKWAEN
	Ж	
A6D4	W D	BAMUM LETTER NGA
A6D5	-	BAMUM LETTER NGA
A6D6	h	BAMUM LETTER SHO
A6D7	Γ4 (Λ	BAMUM LETTER PUAE
A6D8	И	BAMUM LETTER FU

BAMUM LETTER FOM

A6DA L BAMUM LETTER WA Π BAMUM LETTER NA A6DB A6DC Ġ BAMUM LETTER LI A6DD 9 BAMUM LETTER PI A6DE 7 BAMUM LETTER LOQ A6DF V BAMUM LETTER KO A6E0 ₽ BAMUM LETTER MBEN A6E1 BAMUM LETTER REN A6E2 7 BAMUM LETTER MEN A6E3 ካ BAMUM LETTER MA A6E4 ), BAMUM LETTER TI ľ A6E5 BAMUM LETTER KI 3 A6E6 BAMUM LETTER MO also used for digit one 3 A6E7 BAMUM LETTER MBAA also used for digit two A6E8 1 BAMUM LETTER TET tèt also used for digit three A6E9 BAMUM LETTER KPA also used for digit four **3** BAMUM LETTER TEN A6EA tèn also used for digit five **?** BAMUM LETTER NTUU A6EB also used for digit six A6EC 1 BAMUM LETTER SAMBA also used for digit seven BAMUM LETTER FAAMAE A6ED also used for digit eight **I** BAMUM LETTER KOVUU A6EE also used for digit nine **2** BAMUM LETTER KOGHOM A6EF

## **Combining marks**

BAMUM COMBINING MARK KOQNDON BAMUM COMBINING MARK TUKWENTIS

also used for digit zero formerly used for number ten

## **Punctuation**

Date: 2008-10-06

A6F2 ال BAMUM NJAEMLI A6F3 ŀ BAMUM FULL STOP A6F4 *|.|.* BAMUM COLON A6F5 T BAMUM COMMA A6F6 Τŀ BAMUM SEMICOLON BAMUM QUESTION MARK A6F7

A6D9