Universal Multiple-Octet Coded Character Set International Organization for Standardization Organisation Internationale de Normalisation

## A. Administrative

1. Title Proposal to encode the N'Ko script. 2. Requester's name Mamadi Doumbouya, Mamadi Baba Diane. **3. Requester type** Professors of N'Ko, Publishers, and Manden Community Leaders. 4. Submission date 2002-06-07. 5. Requester's reference 6a. Completion This is a complete proposal. **6b.** More information to be provided? No. **B.** Technical – General 1a. New script? Name? Yes. N'Ko (Mandenkan). 1b. Addition of characters to existing block? Name? No. 2. Number of characters 60. **3. Proposed category** Category A. 4. Proposed level of implementation and rationale As a simple right-to- left alphabetic script, N'Ko requires Level 1.? 5a. Character names included in proposal? Yes. 5b. Character names in accordance with guidelines? Yes. (See Below) **5c.** Character shapes reviewable? Yes (See Below) 6a. Who will provide computerized font? Mamadi Doumbouya, Diane Baba Mamadi. (See Contacts Below) **6b. Font currently available?** Yes. **6c.** Font format? TrueType 7a. Are references (to other character sets, dictionaries, descriptive texts, etc.) provided? NO 7b. Are published examples (such as samples from newspapers, magazines, or other sources) of use of proposed characters attached? Yes, (See See Early Writing, Newspaper, Books, below). 8. Does the proposal address other aspects of character data processing?

NO

## **C. Technical – Justification**

1. Contact with the user community?

Yes

2. Information on the user community?

Yes – Manden communities, schools, and universities throughout the world

3a. The context of use for the proposed characters?

Used to write Manden language groups (Manden Kan) in West Africa (In ECOWAS treaty member nations).

**3b. Reference** 

#### 4a. Proposed characters in current use?

Yes.

4b. Where?

Used in West Africa an principally by Manden people in Guinea, Mali, Cote d'Ivoire, Burkina-Faso, Liberia, Sierra Leone, Gambia, Senegal etc...,

5a. Characters should be encoded entirely in BMP

Yes

**5b. Rationale** 

Accordance with the Roadmap.

6. Should characters be kept in a continuous range?

Yes

7a. Can the characters be considered a presentation form of an existing character or character sequence?

No.

7b. Where?

7c. Reference

**8a.** Can any of the characters be considered to be similar (in appearance or function) to an existing character?

No.

8b. Where?

8c. Reference

9a. Combining characters or use of composite sequences included?

Yes.

**9b. List of composite sequences and their corresponding glyph images provided?** See <u>www.fakoli.net/kanjamadi/kogbe-4.htm</u>

**10.** Characters with any special properties such as control function, etc. included? No

Xx0

Xx1 Xx2

Xx3 Xx4

Xx6

Xx5

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### Row xx: NKO

hex	Name	hex	Name
00	NKO DIGIT ZERO	40	NKO LETTER GBA
01	NKO DIGIT ONE	41	NKO LETTER FA
02	NKO DIGIT TWO	42	NKO LETTER KA
03	NKO DIGIT THREE	43	NKO LETTER LA
04	NKO DIGIT FOUR	44	NKO LETTER LA MODIFIED INTO NA
05	NKO DIGIT FIVE	45	NKO LETTER MA
06	NKO DIGIT SIX	46	NKO LETTER NYA
07	NKO DIGIT SEVEN	47	NKO LETTER NA
08	NKO DIGIT EIGHT	48	NKO LETTER HA
09	NKO DIGIT NINE	49	NKO LETTER WA
0A	(This position shall not be used)	4A	NKO LETTER YA
0B	(This position shall not be used)	4B	NKO LETTER YA MODIFIED INTO NYA
0C	(This position shall not be used)	4C	(This position shall not be used)
0D	(This position shall not be used)	4D	(This position shall not be used)
0E	(This position shall not be used)	4E	(This position shall not be used)
0F	(This position shall not be used)	4F	(This position shall not be used)
10	NKO LETTER A	50	NKO COMBINING SHORT MIDDLE TONE
11	NKO LETTER E	51	NKO COMBINING LOW TONE
12	NKO LETTER I	52	NKO COMBINING RISING-FALLING TONE
13	NKO LETTER EE	53	NKO COMBINING LONG DESCENDING MIDDLE TON E
14	NKO LETTER U	54	NKO COMBINING SUSPENDED BRUSK MIDDLE TONE
15	NKO LETTER OO	55	NKO COMBINING LONG LOW TONE
16	NKO LETTER O (showing conjoined form	56	NKO COMBINING LONG RISING-FALLING TONE
17	NKO LEETTER MUET VOWEL	57	NKO COMBINING NASALIZER
18	NKO LETTER NN	58	NKO APPROXIMATION MARK
19	NKO LETTER BA	59	NKO PUNCTUATION QUOTATION MARK
1A	NKO LETTER PA	5A	NKO PUNCTUATION QUOTATION MARK
1B	NKO LETTER TA	5B	NKO NKO HALF O
1C	NKO LETTER DJA	5C	NKO PUNCTUATION COMMA
1D	NKO LETTER TYA	5D	NKO PUNCTUATION EXCLAMATION MARK
1E	NKO LETTER DA	5E	NKO PUNCTUATION RIGHT PARAPHRASE MARK
1F	NKO LETTER RA	5F	NKO PUNCTUATION LEFT PARAPHRASE MARK
20	NKO LETTER RRA	60	NKO PUNCTUATION RIGHT DECORATIVE GUILLEMET
21	NKO LETTER SA	61	NKO PUNCTUATION LEFT DECORATIVE GUILLEMET
22	NKO LETTER GBA	62	NKO PUNCTUATION OLD DJA
23 24 25	NKO LETTER FA	63	NKO PUNCTUATION OLD TYA
24	NKO LETTER KA	64	(This position shall not be used)
25	NKO LETTER LA	65	(This position shall not be used)
26 27	NKO LETTER LA MODIFIED INTO NA	66	(This position shall not be used)
27 28	NKO LETTER MA	67 68	(This position shall not be used)
20 29	NKO LETTER NYA NKO LETTER NA	69	(This position shall not be used)
29 2A		69 6A	(This position shall not be used)
2A 2B	NKO LETTER HA NKO LETTER WA	6B	(This position shall not be used) (This position shall not be used)
2D 2C	NKO LETTER YA	6C	(This position shall not be used)
20 2D	NKO LETTER YA MODIFIED INTO NYA	6D	(This position shall not be used)
2D 2E	NKO LETTER A	6E	(This position shall not be used)
2E 2F	NKO LETTER E	6F	(This position shall not be used)
30	NKO LETTER I	70	(This position shall not be used)
31	NKO LETTER EE		
32	NKO LETTER U		
33	NKO LETTER OO		
34	NKO LETTER O (showing conjoined form)		
35	NKO LEETTER MUET VOWEL		
36	NKO LETTER NN		
36 37	NKO LETTER BA		
38	NKO LETTER PA		
39	NKO LETTER TA		
ЗA	NKO LETTER DJA		
3B	NKO LETTER TYA		
3C	NKO LETTER DA		
3D	NKO LETTER RA		
3E	NKO LETTER RRA		
3F	NKO LETTER SA		
Group	00 P	ane 00 Row	XX

### **E. Proposal**

Manden people live mainly in West Africa, however other people of Manden origin can be found in other parts of the world. They are also known as Bamanan, Dioula, Maninka, Mandingo, etc. the language they speak is known as Mandenkan. The suffix, kan in means language of. A suffix of -ka, would means the people of.

The language is a combination of multiple languages, dialects, and accents. It comprises four main branches, Bambara, Dioula, Mandinko, Maninka, and many sub-groups who speak the various branches of these branches. Some of the branches are different only by the dialect or by simple accents while subgroups can be vastly different in many aspects.

When Mandens from different sub-groups talk to each other, it is common practice for them to switch, consciously or sub-consciously, from one's own dialect to a conventional dialect commonly known as Kangbe (the clear language). N'Ko is Kangbe. This is even true, sometimes, during conversations between the Bamanan of Mali, the Maninka of Guinea, and the Mandinko of Gambia or Senegal. Although the pronunciations of those languages are practically the same it is sometimes necessary to switch to Kangbe (N'Ko) either by the use of a central word or a central phrase. As an example, the word "Name" in Bamanan is "Toko", and in Maninka it is "Toh". In written

communications each will write it as "Tô" ("<sup>Yb</sup>" in N'Ko), and yet may read and pronounce it differently.

Throughout the centuries people of Manden origin are referred to or have referred to themselves as N'Ko speakers. The great Sundiata Kante, emperor of Manden (Mali) referred generally to the delegations from all corners of Manden gathered to sign the treaty of Kurukafuwa as N'Ko speakers. It was natural, therefore, that the great <u>Solomana Kante</u>, inventor of the Manden writing system, will call it N'KO.

#### F. Population

There are various accounts for the number of N'Ko speakers. Depending on the system used for accounting the number varies widely from 18 to 20 millions. The reason for this variation is due to the method of inclusion of various subgroups or the method used to determine those sub-groups. Nevertheless, there exists not only a substantial number of Mandens, but other non-Mandens who speak Mandenkan as a second language. The inclusion of N'Ko will benefit all these people by contributing to their literacy in the region.

## Structure

- N'Ko is written from right to left.
- It is very orderly writing system for those who understand it. That is because it is read as it is written, it is written as it is heard.
- It contains 7 vowels and each of the vowels can be accented in 4 ways : 4 short, 4 long, 4 short nasal, and 4 long nasal or a combination of 16X16. It also contains 19 consonants and 2 abstracts. All can be pronounced in 16 ways by adding accents. The consonant and accent combination is considered extended characters because they are used only to include foreign sounds that are not generally us ed by N'Ko speakers.
- The N' character (<sup>9</sup>) is a neutral character therefore is not considered a vowel or consonant. Nevertheless it can be accented but has no nasal form.
- The system also contains 10 numeric characters  $0 \ 9 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1 \ 1 \ 2 \ 3 \ 4 \ 5 \ 6 \ 7 \ 8 \ 9 \ 0)$  also written from right to left.

# **Ordering and names**

#### **Ordering**

N'Ko collating sequence is divided into five groups as follows: (I) numerals, (II) vowels and the wild character, the N' character, consonants, and consonant modifier (Modifier follow immediately the consonant they modify) (III) accents, (IV) N'Ko signs, (V) punctuations. Although It also includes a group (VI) borowed Latin Characters sometime used in writings. These charcters are not consider part of N'Ko characterset (*See N'Ko Alphabet Grouping Below*).

#### <u>Names</u>

The names of the consonant are constructed by adding the vowel "(A) to them. Thus the

name of the letter " $\mathbf{F}$ " (B) is " $\mathbf{F}$ " or " $\mathbf{F}$ ". Similarly the name of the letter " $\Delta$ " will be " $\mathbf{I}\Delta$ " or " $\mathbf{I}\Delta$ ". The names of the vowels take their sounds as their name.

## **Bibliographie**

http://www.kanjamadi.com/KafaSerede.htm http://home.gwu.edu/~cwme/Nko/publications.htm

## Web Ressources

www.nkoinstitute.com http://kanjamadi.com http://home.gwu.edu/~cwme/Nko/Nkohome.htm

Contacts <u>mamady@nkoinstitute.com</u> <u>diane@kanjamadi.com</u>

#### N'Ko Alphabet Grouping, and Collating Sequence (See Classification)



Sample Glyphs (See Types of N'Ko Glyphs)



## Sample Keyboard





Inventor of the N'Ko System





## N'Ko Newspapers

