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

## Doc Type: Working Group Document

Title: Proposal for addition of Vai characters to the UCS
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Status: Individual Contribution
Action: For consideration by JTC1/SC2/WG2 and UTC
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Request. This document asks for the addition of four nasal vowels and ten digits to the Vai character repertoire. Vai is a new script still under ballot, and the proposal here augments the character set which was proposed in N 2948 R . If this proposal is adopted, the following 14 characters would exist:

| 管 | A501 | vai Syllable een |
| :---: | :---: | :---: |
| : | A525 | vai SYLLABLE in |
| ' | A572 | VAI SYLLABLE OON |
| Y | A596 | vai Syllable un |
| - | A620 | VAI DIgit Zero |
| \| | A621 | vai digit one |
| i | A622 | VAI DIGIT TWO |
| \% | A623 | vai digit three |
| 4 | A624 | VAI DIGIT FOUR |
| 5 | A625 | VAI digit five |
| ち | A626 | VAI DIGIT SIX |
| $\delta$ | A627 | VAI digit Seven |
| 8 | A628 | VAI DIGIT EIGHT |
| 9 | A629 | vai digit nine |

with the following properties:

```
A501;VAI SYLLABLE EEN;LO;0;L;;;;;N;;;;;
A525;VAI SYLLABLE IN;LO;0;L;;;;;N;;;;;
A572;VAI SYLLABLE OON;LO;0;L;;;;;N;;;;;
A596;VAI SYLLABLE UN;LO;0;L;;;;;N;;;;;
A620;VAI DIGIT ZERO;Nd;0;L;;0;0;0;N;;;;;
A621;VAI DIGIT ONE;Nd;0;L;;1;1;1;N;;;;;
A622;VAI DIGIT TWO;Nd;0;L;;2;2;2;N;;;;;
A623;VAI DIGIT THREE;Nd;0;L;;3;3;3;N;;;;;
A624;VAI DIGIT FOUR;Nd;0;L;;4;4;4;N;;;;;
A625;VAI DIGIT FIVE;Nd;0;L;;5;5;5;N;;;;;
A626;VAI DIGIT SIX;Nd;0;L;;6;6;6;N;;;;;
A627;VAI DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;;
A628;VAI DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;;
A629;VAI DIGIT NINE;Nd;0;L;;9;9;9;N;;;;;
```

Digits. These were originally attested in S. Jangaba M. Johnson's Traditional History, Customary Laws, Mores, Folkways, and Legends of the Vai Tribe. (Monrovia: Department of the Interior):


In N2948R, it was suggested that because the Vai digits were not popular and have since been replaced by European digits, their encoding was not urgent. Africanist Konrad Tuchscherer (Department of History, St. John's University, New York) responded to this, saying:

The Vai numerals are attested to in sources earlier than Johnson. True, they were unpopular and I have no evidence to suggest that they were ever in widespread use. If you are encoding logograms that are only known from a single source, like the Book of Rora, then maybe these numerals should be encoded too.

Konrad is currently in the Cameroon working on Bamum, and is unable to provide further examples at present, but there seems to be little reason to dismiss Johnson's evidence as insufficient, and no reason not to finish the encoding of this facet of the Vai script at this time, while it is under ballot.

Nasal vowels. The addition of these four characters will complete the set of initial vowels, enabling the representation of foreign vowel sounds, such as in the representation of personal names. The requirement to fill out the set of initial vowels can be seen in this note from Vai expert Tombekai Sherman, who subsequently became a co-author of this proposal:

The sounds do not naturally exist in Vai. The local people will for now find it difficult to pronounce them. But to be able to correctly represent foreign sounds in the language, these gaps should be filled.

Some of the neighbouring languages in West Africa do have a greater repertoire of initial nasalized vowels than Vai does. Loma (also spoken in Liberia) has all six ẽ ĩ ã õ ũ $\tilde{\mathfrak{\varepsilon}}$; Kpelle (the largest language group in Liberia) and Mende (spoken in Liberia and Sierra Leone) have five: ẽ ĩã ũ $\tilde{\varepsilon}$.

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