

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

**Doc Type:** Working Group Document  
**Title:** Changing Indic Syllabic Category of Limbu Kehmphreng  
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**Executive Summary.** This proposal, if accepted, will result in the Indic syllabic category of U+193A ( ெ SIGN KHEMPRENG) changing from Vowel\_Dependent to Tone\_Mark.

**Introduction.** The proposal document L2/03-255 describes “KEMPHRENG is used to emphasize a prolonged vowel”. As such, its function is as a vowel modifier (lengthener). KEMPHRENG currently has an Indic syllabic category of Vowel\_Dependent.

**Issue.** Treating kehmphreng as Vowel\_Dependent is problematic in that what is a vowel modifier is treated as a vowel and interacts with vowels as another vowel. This causes it to interact visually with other vowels and to ensure correct rendering, odd sequencing needs to take place. Following its function, the natural order for a vowel modifier is that it be typed after a vowel. With its current classification, the order works fine for non-spacing above vowels, but becomes problematic with spacing vowels like U+1923 ( ெ EE) or worse U+1925 ( ெ OO). The current categorisation forces the kehmphreng to be stored before spacing vowels but after non-spacing vowels.

An added benefit of recategorising KEMPHRENG is that it is then stored following a lower vowel, more naturally, than preceding it.

There is no absolute theoretical reason that KEMPHRENG has to move. Combining orders can be defined to be pretty much any order. But as has been realised over the years, the choice of order is significant in terms of cost of implementation. Fonts and keyboards can in theory, handle the currently necessary reordering. But there should be no need for this, particularly with regard to keyboarding. By recategorising KEMPHRENG to what it is, a vowel modifier, all reordering issues in the keyboard are dealt with and the reordering in relation to spacing vowels in a font is no worse than storing KEMPHRENG before a split vowel. The concern of users is that if nothing is done, keyboard vendors are unlikely to implement the necessary reordering.

**Opportunity.** The proposed change is minor and cleans up a miss-assignment from the original proposal. The use of Limbu script for the Limbu language is relatively rare. For the most part, language speakers use Devanagari. As a result there is very little, if any, text in Limbu script and the only known text in the language has been converted from Devanagari source. This provides an opportunity to make the necessary changes to make Limbu ready for implementation when Limbu script readers embrace technology.

**Action.** The proposal is to change the Indic syllabic category of U+193A ( ெ SIGN KHEMPRENG) from Vowel\_Dependent to something that will result in a USE category of VM. There are a few options, but none adequately represent a vowel modifier (which is what KEMPRENG is). The most obvious to the author is Tone\_Mark, but any category that results in a USE category of VM would be sufficient.