Universal Multiple-Octet Coded Character Set
International Organization for Standardization
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Международная организация по стандартизации

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0. Introduction

Tai Le script is one kind of Tai script used to record Tai Nüa language in Dehong Dai and Jingpo Autonomous Prefecture, Yunnan Province, PRC (中华人民共和国云南省德宏傣族景颇族自治州) mainly, which is also used in Myanmar. This script is derived and modified from the old Tai Le script to match the current language after 1954, the final scheme was released in 1963.

Xinping Yi and Dai Autonomous County, Yuxi City, Yunnan Province, PRC (中华人民共和国云南省玉溪市新平彝族傣族自治县) is near Dehong, which is also a place related to Dai People, but the old Tai Le script was not used in Xinping. In 1945, a German missionary developed a script to record the Dai language in Xinping based on Bopomofo with a local teacher. In this writing system, they created at least four new Bopomofo letters. However, Dai language written with Bopomofo script has not been passed down in Xinping. The local government and intellectuals developed a new orthography written with Tai Le script to record the current Dai language in Xinping in 2010, which has been used in various fields in Xinping at present.

Fig. 0 Local government of Gasa Town, Xinping

1. Consonant

The Dai languages in Dehong and Xinping are quite similar, but there are 19 initial consonants in Dehong (Fig. 1.1), and 20 initial consonants in Xinping (Fig. 1.2).

Fig. 1.1 Initial consonants in Dehong

Fig. 1.2 Initial consonants in Xinping

ᥭ (U+196D) is only used as the final consonant in Dehong, which the letter is inherited from old Tai Le script, but it can be used as the initial consonant in Xinping, that matches the corresponding usage in old Tai Le basically. In the Chinese context, "声母" (shēngmǔ) means the initial consonant, not all the consonant; and some consonants could be used as the final consonants, but it is a part of "韵母" (yùnmǔ). Therefore, it is unreasonable to treat ᥭ (U+196D) as the vowel.

We also consider adding the alternate name of ᥭ (U+196D) as NYA for Xinping.

2. Vowel

In the orthographies of Dehong and Xinping, ᥨ (<U+1968,U+195D>) is treated as a simple vowel and its value is a real simple vowel ([o]), so it is better to treat the sequence as a name sequence that will be easy for processing. I suggest using OOU as the sequence name.

Fig. 2.1 Simple vowel in Dehong

Fig. 2.2 Simple vowel in Xinping

On the other hand, all the vowels must be used after one consonant in two orthographies. As

Table 2 shows, when we need to record the simple vowel in one syllable without any consonant, the first letter should be ꗟ (U+195F).

The basic structure for Tai Le syllables is `CV[C][T]`. It is better to treat them as the dependent vowels.

Table 2 Example words

Tai Le word	IPA	Chinese	English
ꗟ ̱c	u^{35}	在	in, at, …
ꗟ ̱ ꑘꐚ	i^{33} xun^{11}	蚊子	mosquito

This is similar to U+19B0 through U+19C0 for New Tai Lue script.

```
19B0..19C0   ; Vowel_Dependent # Lo  [17] NEW TAI LUE VOWEL SIGN
VOWEL SHORTENER..NEW TAI LUE VOWEL SIGN IY
```

3. Tones

There are both six tones for two orthographies, but the first tone didn't need any mark. In Dehong orthography, there are two methods to record the tones, but there are only one in Xinping orthography.

Fig. 3.1 Tone in Dehong

Fig. 3.2 Tone in Xinping

Table 16-11 in Core Specification has shown the tone marks in the old Dehong orthography, but it didn't show the code points. It is better to show the corresponding code points in the code chart.

Table 3 Tone marks for new and old Dehong orthographies

SN	Tone Letter	C/P	Tone Mark	C/P	Dehong Value	Xinping Value
2	ꓭ	U+1970	̈	U+0308	55	53
3	℮	U+1971	̌	U+030C	11	11
4	ꓭ	U+1972	̀	U+0300	31	31
5	ꓭ	U+1973	̇	U+0307	53	55
6	꒷	U+1974	́	U+0301	35	35

4. Updates

Based on the above comments, we need to do the following updates for `NamesList.txt`, `IndicSyllabicCategory.txt`, `NameAliases.txt` and `NameSequences.txt`.

4.1. Updates for `NamesList.txt`

(Corresponds to Sections 1 & 3.)

```
@@  1950   Tai Le 197F
@+     Note the similarly named but distinct New Tai Lue script
encoded at 1980-19DF.
@      Consonants
1950   TAI LE LETTER KA
1951   TAI LE LETTER XA
1952   TAI LE LETTER NGA
1953   TAI LE LETTER TSA
1954   TAI LE LETTER SA
1955   TAI LE LETTER YA
1956   TAI LE LETTER TA
1957   TAI LE LETTER THA
1958   TAI LE LETTER LA
1959   TAI LE LETTER PA
195A   TAI LE LETTER PHA
195B   TAI LE LETTER MA
195C   TAI LE LETTER FA
195D   TAI LE LETTER VA
195E   TAI LE LETTER HA
195F   TAI LE LETTER QA
1960   TAI LE LETTER KHA
1961   TAI LE LETTER TSHA
1962   TAI LE LETTER NA
@      Vowels
1963   TAI LE LETTER A
1964   TAI LE LETTER I
1965   TAI LE LETTER EE
1966   TAI LE LETTER EH
1967   TAI LE LETTER U
1968   TAI LE LETTER OO
1969   TAI LE LETTER O
196A   TAI LE LETTER UE
196B   TAI LE LETTER E
196C   TAI LE LETTER AUE
@      Consonant
196D   TAI LE LETTER AI
     % TAI LE LETTER NYA
     * only indicates as the final consonant in Dehong orthography
```

```
@        Tone letters
1970    TAI LE LETTER TONE-2
    x (combining diaeresis - 0308)
1971    TAI LE LETTER TONE-3
    x (combining caron - 030C)
1972    TAI LE LETTER TONE-4
    x (combining grave accent - 0300)
1973    TAI LE LETTER TONE-5
    x (combining dot above - 0307)
1974    TAI LE LETTER TONE-6
    x (combining acute accent - 0301)
```

4.2. Updates for `IndicSyllabicCategory.txt`
(Corresponds to Section 2.)

```
1963..196D    ; Vowel # Lo  [11] TAI LE LETTER A..TAI LE LETTER AI
1963..196C    ; Vowel_Dependent # Lo  [10] TAI LE LETTER A..TAI LE
LETTER AUE


1950..1962    ; Consonant # Lo  [19] TAI LE LETTER KA..TAI LE
LETTER NA
196D          ; Consonant # Lo      TAI LE LETTER AI
```

4.3. Addition for `NameAliases.txt`
(Corresponds to Section 1.)

```
196D;TAI LE LETTER NYA;alternate
```

4.4. Addition for `NameSequences.txt`
(Corresponds to Section 2.)

```
TAI LE LETTER OOU;1968 195D
```

5. Unencoded Bopomofo letters for Xinping Dai language
Based on my current knowledge, there are still at least four unencoded Bopomofo letters for Xinping Dai language, but I have not found the sufficient evidence to support the encoding works. I just list them here. If any other experts have more sufficient evidence, please contact me for the further encoding works in future.

Table 5 Unencode Bopomofo letters for Xinping

Ⱶ	𐤤	𐄂	Ↄ
[h]	[ʌ]	[ə]/[ɯ]	[ɔ]

6. Bibliography
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7. Acknowledgement

(End of Document)