First Revised Proposal

Transliteration of Akson[1]-Tham-Isan and Akson-Thai-Noi

1 Scope

The transliteration system presented here describes the orthographic system of the Akson-Tham-Isan and Akson-Thai-Noi scripts using Romanized characters consistent with the provisions of the International Standards Organization.

The Akson-Tham-Isan and Akson-Thai-Noi characters of this standard were developed as modem representations of ancient scripts found in inscriptions and palm leaf religious texts and adapted by the Royal Institute of Thailand[2].

The selection of Romanized characters follows, to the extent possible, the phonemic/phonetic representations used in the transliteration of Standard Thai as described in the International Standard of the ISO 11940, thus enabling consistency of system and economy of codes.

In this system transliteration principles are applied stringently to enable complete unambiguous reversibility in the conversion of characters. Although accurate pronunciation may not always result in the application of this system, because the original Akson-Tham-Isan and Akson-Thai-Noi characters can be regenerated automatically from the Romanized representation, those with knowledge of the languages will be able to correctly pronounce the Romanized graphemes.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 10646:2014(E), Information Technology — Universal Coded Character Set (UCS) — Structure of the Basic Multilingual Plane.

---

[1] "Akson" means "a letter of the alphabet" in Sanskrit.
In ISO 639, Alpha-2 code for Thai is "th" and Alpha-3 code is "tha", so Akson-tham-Isan will be proposed as "ai" and "ati"; and Akson-Thai-Noi as "an" and "atn."
[2] The "Royal Institute of Thailand" underwent a name change to the "Royal Society of Thailand" in accordance with the Royal Society Act, BE 2558 (14 February 2015).

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 characters: Alphabetic letters, digits, special markers, and other markers.

3.2 Akson-Tham-Isan characters: Akson-Tham-Isan alphabetic letters, Akson-Tham-Isan digits, and special markers. See **I. Romanization of Akson-Tham-Isan**

3.3 Akson-Thai-Noi characters: Akson-Thai-Noi alphabetic letters, Akson-Thai-Noi digits, and special markers. See **II. Romaization of Akson-Thai-Noi**

I. Romanization of Akson-Tham-Isan

1. Akson-Tham-Isan Script

Akson-Tham-Isan Script, so named because of its role in recording religious matters, was used in the communities throughout the Isan and Lanchang regions of Thailand for hundreds of years. The script is found in palm leaf documents and stone inscriptions, with evidence dating as far back as 1503 A.D. (2046 B.E.), at the base of the Bhudda image at Wat Prathat Phanom. The script is derived from ancient Mon, which was used in the northern Lanna Kingdom prior to being adapted and spreading to the Isan region. The script is rounded in form, similar to ancient Mon and Lanna ('tua muang' alphabet) scripts, featuring vowels in positions preceding, following, above, and below the accompanying consonants.

Orthographic Features

1.1 Akson-Tham-Isan consonants are of two types, a) full; and b) variant, or reduced.

1.2 There are three types of vowel graphemes, independent forms; dependent forms, and alternate forms. Independent vowel graphemes appear in initial position in words without an initial consonant; dependent vowel graphemes appear with accompanying consonants; alternate form vowels are positioned similarly to dependent graphemes, but have different forms.

1.3 Initial consonants are full form graphemes and are written on the line, while the second component of a consonant cluster or a consonant in final position is a reduced or variant form and is written below the line or at the end of the word.

1.4 Alternate grapheme characters have unique features that differ from the regularly appearing forms mentioned above.

2. Akson-Tham-Isan Characters

2.1 Consonants

Consonant graphemes are of two types, a) full; and b) reduced, or variant.

2.1.1 Full Form Consonant Graphemes

There are 41 'full form' consonant graphemes:

ຕ k	ຂ k̄h	ຄ kh	� kḥh	ຽ ng							
ຕ c	ຈ c̄h	ຎ s	ຊ cḥh	ຍ y̦							
ຕ t	ຕ ṭ̄h *1	ຕ ṭ'h *2	ຕ d	ຕ t'h	ຕ ṇ						
ຕ t	ຕ t̄h	ຕ th	ຕ ṭh	ຕ n							
ຕ b	ຕ p	ຕ p̄h	ຕ f	ຕ ph	ຕ f	ຕ pḥh	ຕ m				
ຕ y	ຕ r	ຕ l	ຕ w	ຕ s̄ *1	ຕ s̄' *2	ຕ s̄'	ຕ s̄	ຕ h	ຕ l	ຕ x	ຕ h

Note that the grapheme ຣ /r/ is not usually seen in ancient scripts, the grapheme ລ /l/ or ຫ /h/ being used instead, except occasionally in transcribing Pali words; *e.g.,* ຫຼວຫໍ /xrh̄¯x̦/ 'priest of Buddha'.

2.1.2 Variant and Reduced Forms of Consonant Graphemes

2.1.2.1 Variant forms of Graphemes

Twenty graphemes exhibit forms different from the full form when they appear in the various positions as described below :

2.1.2.1.1 following the accompanying consonant

    1) ⫿ /-c̄h/ (variant form of ⫿ /c̄h/) *e.g.,* ⫿⫿⫿ /m̄ạc-c̄hā/ 'fish'

    2) ⫿ /-ç h/ (variant form of ⫿ /ç h/) *e.g.,* ⫿⫿⫿⫿ /x̱-ç hchā s̄ -y/ 'pleasant'

    3) ⫿ /-p/ (variant form of ⫿ /p/) *e.g.,* ⫿⫿ /k̄ạb/ 'with'

    4) ⫿ /-y/ (variant form of ⫿ /y/) *e.g.,* ⫿⫿ /d_w-y/ 'also', ⫿⫿ /k̄h-yr/ 'write'

    5) ⫿ /-l/ (variant form of ⫿ /l/) *e.g.,* ⫿⫿⫿ /h-lā-y/ 'many'

    6) ⫿ /-s̄/ (variant form of ⫿ /s̄/) *e.g.,* ⫿⫿ /rā-s̄/ 'royal'

2.1.2.1.2 below the accompanying consonant or vowel

    1) ⫿ /ng/ (variant form of ⫿ /ng/) *e.g.,* ⫿ /nā_ng/ 'woman'

    2) ⫿ /c/ (variant form of ⫿ /c/) *e.g.,* ⫿⫿ /s̄c_c/ 'truth'

    3) ⫿ /_ch/ (variant form of ⫿ /ch/) *e.g.,* ⫿⫿ /w̄ich_chā/ 'knowledge'

    4) ⫿ /n/ (variant form of ⫿ /n/) *e.g.,* ⫿ /n̄ạ_n/ 'that'

    5) ⫿ /_ _n/ (variant form of ⫿ /n/) *e.g.* ⫿ /k̄h-y_ _n/ 'write'

    6) ⫿ /m/ (variant form of ⫿ /m/) *e.g.,* ⫿ /s̄ạ_m/ 'reasonable'

7) ◌̠ /̠m/ (variant form of ౖ /m/) *e.g.,* ᧒ /th-y _ _ m/ 'compare'

8) ◌̰ /̰l/ (variant form of ဝ /l/) *e.g.,* ကᩣ /h_lā_n/ 'nephew, niece, grandchild'

9) ◌̰ /̰x/ (variant form of ၵ /x/) *e.g.,* ᩣ /s̄_xng/ 'two'

10) ◌̰̄ /̰ _x/ (variant form of ၵ /x/) *e.g.,* ᩥ /eh̄¯i_n_ _x/ 'north'

11) ◌̣ /̣_th/ (variant form of ဆ /̣th/) *e.g.,* ᩙ /rṭ_t̄h/ **'state'**

ᩙ /̣_th/ (variant form of ၶ /t̄h/) *e.g.,* ဝ႒ᩣ /wt_t̄ha̅/ 'cloth'

ᩙ /̣_ph/ (variant form of ၺ /ph/) *e.g.,* ᑫ /b_uph_ph/ 'prior'

Note that variant forms of ဆ /̣th/, ၶ /t̄h/ and ၺ /ph/ are the same.

12). ◌̣ /̣_th/ (variant form of ၑ /̣th/) *e.g.,* ᩙ /ph_uth_̣th/ 'Buddha'

2.1.2.1.3 preceding the consonant

◌̩ /r-/ (ro rawong) *e.g.,* ᩙ /r-pha/ 'monk'

2.1.2.1.4 above the consonant

◌̃ /¯ng/ (*mai anglaen*) *e.g.,* ᩙ /k̄h¯ng_x/ 'of'

Note that there are two variant form graphemes for /l/; one appears following the accompanying consonant, ᩠ /–l/, another below the consonant ◌̰ /_l/; and there are also two forms for /ng/, one written below the consonant, ◌̰ /_ng/, the other above the consonant, ◌̃ /¯ng/.

2.1.2.2 Reduced Form Graphemes

Reduced forms of fourteen consonant graphemes have the same shape as the full form, but are smaller and are written below the accompanying consonant when they are part of a cluster. The grapheme " ͦ " (2.1.2.2.12 and 2.1.2.2.13 below) appears in two different levels below the accompanying consonant:

2.1.2.2.1 ဣ /k/ *e.g.,* သၵ္ /šk_k/ 'god Sakka'

2.1.2.2.2. ဒ /k̄h/ *e.g.,* ဒုၵ္ /th_uk_k̄h/ 'suffering'

2.1.2.2.3 ဤ /kh/ *e.g.,* မၵ္ /mkh_kh/ 'way'

2.1.2.2.4 ဇ /s/ *e.g.,* ဝေဝၠ /ews_s/ 'physician'

2.1.2.2.5 ဍ /d/ *e.g.,* မၣ္ဍန /mṇ_dn/ 'ornaments'

2.1.2.2.6 ဏ /t'h/ *e.g.,* ဝဍ္ဌနာ /wd_t'hnā / 'develop'

2.1.2.2.7 ဏ /ṇ/ *e.g.,* ဝၣ္ /wṇ_ṇ/ 'class, cast'

2.1.2.2.8 တ /t/ *e.g.,* ဣတ္တာ /xt_tā/ 'self'

2.1.2.2.9 ထ /th/ *e.g.,* သၳ္ထ /šth_th/ 'sound'

2.1.2.2.10 ဖ /p̄h/ *e.g.,* ဗုဗ္ဖာ /b_ub_p̄hā/ 'flower'

2.1.2.2.11 ဖ /ph/ *e.g.,* ဤၹ္ /khph_ph/ 'inner room'

2.1.2.2.12 ဝ /w/ *e.g.,* ၵွာ /k_wā/ 'more than'

2.1.2.2.13 ဝ /w/ *e.g.,* လွင /ħ_l_ _wng/ 'big'

2.1.2.2.14 ဟ /ħ/ *e.g.,* ၡၣ္ /xuṇ_ħ/ 'hot or warm'

Note that the word လွင /ħ_l_ _wng/ may be written as လွၣ /ħ_lw_ng/

2.2 Vowel Graphemes

Vowel graphemes are of three types, 13 independent, 33 dependent, and five alternate forms.

2.2.1 Independent Vowel Graphemes

Thirteen independent vowel graphemes appear in initial position when there is no initial consonant.

ทฺ	ทฺว	ฌ	ฌ	?	?	?	๏	ฌ	ฌ	ฌ	ฆ	ฆ
xa	**xā**	**xi**	**xī**	**xu**	**xū** *1	**xǖ** *2	**xe**	**xo** *1	**xo̜** *2	**xā**	**v**	**y̜**

2.2.2 Dependent Vowel Graphemes

Thirty three dependent vowel graphemes appear preceding, following, below or above its accompanying consonant grapheme.

ca	cā	c⁻i *1	c⁻i' *2	c⁻ ī *1	c⁻ ī' *2	c⁻ụ *1	c⁻ụ' *2	c⁻ṳ̄ *3
c_u *1	c _ _ u *2	c_ū *1	c_ _ ū *2	ec	ee1c *1	c⁻ee2 *2	c⁻ee3 *3	c⁻ee4 *4
c⁻ee5 *5	c⁻ee6 *6	oc	ecāa	c_x *1	c_ _ x *2	c⁻ạ_w	ec⁻a̱-y	ec⁻Ụ_x
e c⁻Ụ	ec_x	c x̱ā	ị c	ị c	e c⁻ạa			

Note that

c = consonant position.

There are only twenty four unique forms of vowel graphemes:

-ᥡ **a**	-ᦢ **ā**	○ ¯**i** *1	ᥠ ¯**i'** *2	ᥒ ¯ **ī** *1	ᥢ ¯ ¯**ī'** *2	◎ ¯**u̦** *1	ᥤ ¯**u̦'** *2	ᥦ ¯**ū̦** *3
¯ ι̯ _**u** *1	¯ ι̯ _ _ **u** *2	¯ u̯ _**ū** *1	¯ u̯ _ _ **ū** *2	ᥴ- **e**	ᥴᥴ- **ee1** *1	⌒ - ¯**ee2** *2	⌒ - ¯**ee3** *3	ᥨ - ¯**ee4** *4
ᥰ - ¯**ee5** *5	ᥱ- ¯**ee6** *6	ᥲ **o**	ᥳ ¯**xā̦**	ᥞ- **i̯**	ᥟ - **i̯**			

2.2.3 Alternate forms

Five dependent vowel graphemes have alternate forms.

౨ͦ *Pali marker*	used in place of final /ng/ in Pali words; *e.g.,,* ຊຽເຫໍ /xrħ ¯x/ 'accomplished' ຖຸຍໍ /ph_uth¯x̣ _tḥ/ 'to the Buddha' and in place of /x/ when there is no final consonant in the local dialect; *e.g.,* ຂໍ /kh¯x̣ / 'request' ບໍ /b¯x̣ / 'no, not' ຕໍ /ph¯x̣ / 'father'
⌢ *mai kong*	used in place of the reduced form of short /o/; e.g., ຄ໋ /kh¯ạ_n/ 'person', ສ໋ /s̄ ¯ạm/ 'orange, sour' used to transcribe /ua/ when there is no final consonant; *e.g.,* ມ໋ /m¯ạ_w/ 'unclear', ຫ໋ /ħ¯ạ_w/ 'head' used in conjunction with **g** and **k** to form the vowel grapheme �໌ ⌢ ว *e.g.,* ເຄົ໋ว /ekh¯ạā/ 'she/he/they', ເວົ໋ว /ew¯ạā / 'speak'
ˊ *mai sat*	used in place of short /a/ *e.g.,* ຂ໌ /x¯a̱ _n/ 'thing' ຄ໌ /n¯a̱ _n/ 'that' and in place of /k/ in final position; *e.g.,* ລູ໌ /l¯a_ū/ 'child' ຮ໌ /r̄ a̱/ 'love'
-໌ໄ *long /ā/*	used with **ວ** /w/ and other characters if a short /a/ would result in a mispronunciation; *e.g.,* ວว /wā/ may be mistook as ຕ /t/ so it is written as ວໄ
໌ໄ *yo yat nam*	used in place of /x/ when there is a final /y/; *e.g.,* ນໄ /n-xy/ 'little, a small amount'

2.2.4 Special Consonants and Syllables

ẙ ẙ	=	ꨢ
s̄s̄	=	ꨦ
nā	=	ꨣ
xy-	=	ꨩ

2.3 There are ten numeral graphemes:

0	1	2	3	4	5	6	7	8	9
໐	໑	໒	໓	໔	໕	໖	໗	໘	໙

2.4 Combining Graphemes

As mentioned, Akson-Tham-Isan graphemes are of two types, a) full; and b) variant, or reduced. Full forms appear in initial consonant position, in the first position in clusters, and, in some cases, in final position. Variant or reduced graphemes are written preceding, below or above the accompanying consonant grapheme. Vowel graphemes are written preceding, following, above, or below the accompanying consonant, in a manner similar to that of Thai.

To summarize, orthographic rules are as follows:

2.4.1 Consonants

2.4.1.1 Initial consonants are written on the line, with full form graphemes

2.4.1.2 Consonant clusters are formed with reduced or variant graphemes following the initial grapheme and placed in various positions; for example:

If ⟨ /r/ is the second component of a cluster,	it precedes the initial grapheme; *e.g.,* ໂກຂ /r-pha/ 'monk' ໂກຊ /r-kāb/ 'to prostrate oneself'
If ⟨ /ʃ/ /l/ is the second component of a cluster,	it is placed below the initial grapheme; *e.g.,* ເຄຼຈ /ek⁻a̩_ḷ ā / 'a bun, or crown of the head'; or following the accompanying initial grapheme; *e.g.,* ເຄຼຈ /ek⁻a̩-ḷ ā/ 'a bun, or crown of the head'
If ໐ /w/ is the second component of a cluster,	the first variation of the shortened form is used and is placed below the initial grapheme; *e.g.,* ຄຽຈ /k_wā/ 'more than'
If ໐ /w/ is a vowel in a cluster,	the second variation of the shortened form is used, placed below the accompanying initial consonant graphemes; *e.g.,* ຫຼຽຈ /ħ_l _ _wng/ 'royal'

2.4.1.3 Consonants that cluster with a leading consonant grapheme are reduced or variant forms and are placed below the leading consonant grapheme; *e.g.,* ຫຽຈ /ħ _nā/ 'face, front' ໂຫຽ /i̩ħ_w/ 'salutation with palms together in front of the face'

 Note that in some cases initial consonants may be of the shortened or reduced variety; *e.g.,* ໄ /i_n/ 'a kind of dog'

(Source: an inscription at Suwankhuha Cave Temple #2, in Suwankhuha District of Nongbualamphu Province)

2.4.2 Vowels

2.4.2.1 Independent vowels are used in word initial position when there is no initial consonant; *e.g.,*

      ຊຈລຼ   /xāl⁻a̱-y/ 'mourn'

      ຊຊ̣ີຍ   /xir-n⁻ī _thy/ 'body'

�ာ   /xekā/ 'solitary'

ၟၐၟ   /xuth-y/ 'arise'

2.4.2.2 A dependent vowel grapheme is placed in a position around the accompanying consonant;

e.g.,   ၓၠၩ   /b¯a̱_dn¯ī/ 'presently, at present'

ၓၠ   /p̄h¯a_ū/ 'bound, tie'

ၜၐ   /i̱n/ 'in'

3. Arrangement of character sequence

3.1 The conversion is made character by character from left to right.

3.2 A character may be accompanied by an upper level or a lower level/lowermost level variant or reduced form/forms; the sequence of the characters must be as follows:

      a. Type the consonant first; then
      b. Type the upper level character, then
      c. Type the lower level character, and
      d. Type the lowermost level character.

e.g.,   ၟၐၟ /ħ_l __wng/ 'royal'

The order of typing must be as follows:

ၐ   ~   ၀   ၒ

ၟ   /k̄h¯ng_x/ 'of'

The order of typing must be as follows:

ၐ   ၟ   ၓ

4. Typing sequence

4.1 If a Roman character contains one combining diacritical mark, type the character before the mark,

    e.g.,   k̄h The order of typing must be as follows: k ¯ h
             ḵh The order of typing must be as follows: k . h

4.2 If a Roman character contains two combining diacritical marks, type the character first, then the upper mark, and the lower mark respectively.

    e.g.,   ṭ̄ h The order of typing must be as follows: t ¯ . h

Romanization of Akson-Tham-Isan

Special symbols: Refers to the six symbols used to specify character position and differentiate one Roman character that represents the same sound converted from different Akson-Tham-Isan characters:

Position:	p = preceding	(HYPHEN-MINUS	002D)
	f = following	(HYPHEN-MINUS	002D)
	a = above	(MODIFIER LETTER MACRON	02C9)
	b = below	(MODIFIER LETTER LOW MACRON	02CD)

Combining Diacritical Marks:

COMBINING MACRON	0304
COMBINING DOT BELOW	0323
COMBINING MACRON BELOW	0331
COMBINING HORN	031B

Remarks:

1. Code position of Akson-Tham-Isan character in ISO/IEC 10646 will be added later.

2. Some fonts may be modified as appropriate.

No.	Akson-Tham-Isan character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
1	�		k	006B	ISAN CHARACTER KA 1
2	̄ၟ		_k	02CD+006B	ISAN CHARACTER KA 2
3	ၐ		k̄h	006B+0304+0068	ISAN CHARACTER KHA 1
4	̄ၐ		_k̄h	02CD+006B+0304+0068	ISAN CHARACTER KHA 2
5	ၒ		kh	006B+0068	ISAN CHARACTER KHA 3
6	̄ၒ		_kh	02CD+006B+0068	ISAN CHARACTER KHA 4
7	ၽ		ḳh	006B+0323+0068	ISAN CHARACTER KHA 5
8	ၓ		ng	006E+0067	ISAN CHARACTER NGA 1
9	̔		̄ng	02C9+006E+0067	ISAN CHARACTER NGA 2 (mai ang laen)
10	̔		_ng	02CD+006E+0067	ISAN CHARACTER NGA 3
11	ၔ		c	0063	ISAN CHARACTER CA 1
12	̄ၔ		_c	02CD+0063	ISAN CHARACTER CA 2
13	ၕ		c̄h	0063+0304+0068	ISAN CHARACTER CHA 1
14	ၢ		-c̄h	002D+0063+0304+0068	ISAN CHARACTER CHA 2
15	ၗ		s	0073	ISAN CHARACTER SA 1
16	̄ၖ		_ch	02CD+0063+0068	ISAN CHARACTER CHA 3
17	ၘ		ç h	0063+0323+0068	ISAN CHARACTER CHA 4
18	ၢ		-ç h	002D+0063+0323+0068	ISAN CHARACTER CHA 5
19	ၙ		ỵ	0079+0323	ISAN CHARACTER YA 1

No.	Akson-Tham-Isan character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
20	ஐ		ẏ ẏ	0079+0323+0079+0323	ISAN CHARACTER YA YA
21	ಬ		ṭ	0074+0323	ISAN CHARACTER TA 1
22	ಜ		ṭ̄h	0074+0304+0323+0068	ISAN CHARACTER THA 1
23	ஜ		ṭ̄'h	0074+0304+0323+031B+0068	ISAN CHARACTER THA 2
24	⁻		_ṭ̄h	02CD+0074+0304+0323+0068	ISAN CHARACTER THA 3 (also used as reduced forms of tha5 and pha3)
25	၅		d	0064	ISAN CHARACTER DA 1
26	၅̄		_d	02CD+0064	ISAN CHARACTER DA 2
27	ಬ		t'h	0074+031B+0068	ISAN CHARACTER THA 3
28	ಬ̄		_t'h	02CD+0074+031B+0068	ISAN CHARACTER THA 4
29	∞		ṇ	006E+0323	ISAN CHARACTER NA 1
30	∞̄		_ṇ	02CD+006E+0323	ISAN CHARACTER NA 2
31	ை		t	0074	ISAN CHARACTER TA 2
32	ை̄		_t	02CD+0074	ISAN CHARACTER TA 3
33	၆		t̄h	0074+0304+0068	ISAN CHARACTER THA 5
34	၈		th	0074+0068	ISAN CHARACTER THA 6
35	၈̄		_th	02CD+0074+0068	ISAN CHARACTER THA 7
36	ಎ		ṭh	0074+0323+0068	ISAN CHARACTER THA 8
37	⁻		_ṭh	02CD+0074+0323+0068	ISAN CHARACTER THA 9

No.	Akson-Tham-Isan character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
38	ກ		n	006E	ISAN CHARACTER NA 3
39			_n	02CD+006E	ISAN CHARACTER NA 4
40			_ _n	02CD+02CD+006E	ISAN CHARACTER NA 5
41	ກ		nā	006E+0061+0304	ISAN CHARACTER NAA
42	ບ		b	0062	ISAN CHARACTER BA
43	ປ		p	0070	ISAN CHARACTER PA 1
44	ປ		-p	002D+0070	ISAN CHARACTER PA 2
45	ຜ		p̄h	0070+0304+0068	ISAN CHARACTER PHA 1
46			_p̄h	02CD+0070+0304+0068	ISAN CHARACTER PHA 2
47	ຢ		f̄	0066+0304	ISAN CHARACTER FA 1
48	ຕ		ph	0070+0068	ISAN CHARACTER PHA 3
49	ຖ		f	0066	ISAN CHARACTER FA 2
50	ກ		p̣h	0070+0323+0068	ISAN CHARACTER PHA 4
51			_p̣h	02CD+0070+0323+0068	ISAN CHARACTER PHA 5
52	ຂ		m	006D	ISAN CHARACTER MA 1
53			_m	02CD+006D	ISAN CHARACTER MA 2
54			_ _m	02CD +02CD+006D	ISAN CHARACTER MA 3
55	ຘ		y	0079	ISAN CHARACTER YA 2
56	ປ		-y	002D+0079	ISAN CHARACTER YA 3
57	ຈ		r	0072	ISAN CHARACTER RA 1

No.	Akson-Tham-Isan character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
58	᧜		r-	0072+002D	ISAN CHARACTER RA 2 (ro rawong)
59	ᦵ		l	006C	ISAN CHARACTER LA 1
60	ᦵ		ˍl	02CD+006C	ISAN CHARACTER LA 2
61	ᦵ		-l	002D+006C	ISAN CHARACTER LA 3
62	ᦩ		w	0077	ISAN CHARACTER WA 1
63	ᦳ		ˍw	02CD+0077	ISAN CHARACTER WA 2
64	ᦳ		ˍˍw	02CD+02CD+0077	ISAN CHARACTER WA 3
65	ᦰ		ṣ̄	0073+0304+0323	ISAN CHARACTER SA 2
66	ᦱ		ṣ̄'	0073+0304+0323+031B	ISAN CHARACTER SA 3
67	ᦲ		s̄'	0073+0304+031B	ISAN CHARACTER SA 4
68	ᦳ		s̄	0073+0304	ISAN CHARACTER SA 5
69	ᦴ		-s̄	002D+0073+0304	ISAN CHARACTER SA 6
70	ᦵᦵ		s̄s̄	0073+0304+0073+0304	ISAN CHARACTER SA SA
71	ᦶ		h̄	0068+0304	ISAN CHARACTER HA 1
72	ᦷ		ˍh̄	02CD+0068+0304	ISAN CHARACTER HA 2
73	ᦸ		ḷ	006C+0323	ISAN CHARACTER LA 4
74	ᦹ		x	0078	ISAN CHARACTER O 1
75	ᦺ		ˍx	02CD+0078	ISAN CHARACTER O 2
76	ᦻ		ˍˍx	02CD+02CD+0078	ISAN CHARACTER O 3

No.	Akson-Tham -Isan character	Code position in ISO/IEC 10646	Roman- ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
77	ઽ		XY-	0078+0079+002D	ISAN CHARACTER OY1
78	ઽ		-xy	002D+0078+0079	ISAN CHARACTER OY2 *(yo yat nam)*
79	ઽ		h	0068	ISAN CHARACTER HA 3
80	ઽ		a	0061	ISAN SARA A 1
81	ઽ		ā	0061+0304	ISAN SARA AA
82	ઽ		a'	0061+031B	ISAN LONG SARA AA (long /ā/)
83	ઽ		✕i	0078+0069	ISAN INDEPENDENT SARA I
84	ઽ		¯i	02C9+0069	ISAN SARA I 1
85	ઽ		¯i'	02C9+0069+031B	ISAN SARA I 2
86	ઽ		✕ī	0078+0069+0304	ISAN INDEPENDENT SARA II
87	ઽ		¯ī	02C9+0069+0304	ISAN SARA II 1
88	ઽ		¯ī'	02C9+0069+0304+031B	ISAN SARA II 2
89	ઽ		¯ụ	02C9+0075+0323	ISAN SARA UE 1
90	ઽ		¯ụ'	02C9+0075+0323+031B	ISAN SARA UE 2
91	ઽ		¯ụ̄	02C9+0075+0304+0323	ISAN SARA UE 3
92	ઽ		✕u	0078+0075	ISAN INDEPENDENT SARA U
93	ઽ		_u	02CD+0078	ISAN SARA U 1
94	ઽ		__u	02CD+02CD+0078	ISAN SARA U 2
95	ઽ		✕ū	0078+0078+0069	ISAN INDEPENDENT SARA UU 1

No.	Akson-Tham-Isan character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
96	੨		$x\bar{u}$'	0078+0078+0069+031B	ISAN INDEPENDENT SARA UU 2
97	̄ᶙ		$\_\bar{u}$	02CD+0078+0069	ISAN SARA UU 1
98	̄ᶙ		$\_\_\bar{u}$	02CD+02CD+0078+0069	ISAN SARA UU 2
99	℮		xe	0078+0065	ISAN INDEPENDENT SARA E
100	ᦉ		xo	0078+006F	ISAN INDEPENDENT SARA O 1
101	ᦉ		xọ	0078+006F+0323	ISAN INDEPENDENT SARA O 2
102	℮-		e	0065	ISAN SARA E
103	℮℮-		ee1	0065+0065+1	ISAN SARA AE 1
104	⌒		¯ee2	02C9+0065+0065+2	ISAN SARA AE 2
105	⌒		¯ee3	02C9+0065+0065+3	ISAN SARA AE 3
106	ᦆ		¯ee4	02C9+0065+0065+4	ISAN SARA AE 4
107	℮		¯ee5	02C9+0065+0065+5	ISAN SARA AE 5
108	℮-		¯ee6	02C9+0065+0065+6	ISAN SARA AE 6
109	ℰ-		o	006F	ISAN SARA O 1
110	°		¯ẋ	02C9+0078+0323	ISAN NIKKHAHIT (Pali marker)
111	ᦆ-		i̱	0069+0331	ISAN SARA AI 1

No.	Akson-Tham-Isan character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
112	ໄ-		i̤	0069+0323	ISAN SARA AI 2
113	ເົາ		exā	0065+0078+0061+0304	ISAN INDEPENDENT SARA AO
114	ຖ		v	0076	ISAN INDEPENDENT SARA RUE 1
115	ຽ		v̤	0076+0323	ISAN INDEPENDENT SARA RUE 2
116	˘		¯a	02C9+0061	MAI SAT
117	⌒		¯a̤	02C9+0061+0323	MAI KONG
118	໐		0	0030	ISAN DIGIT ZERO
119	໑		1	0031	ISAN DIGIT ONE
120	໒		2	0032	ISAN DIGIT TWO
121	໓		3	0033	ISAN DIGIT THREE
122	໔		4	0034	ISAN DIGIT FOUR
123	໕		5	0035	ISAN DIGIT FIVE
124	໖		6	0036	ISAN DIGIT SIX
125	໗		7	0037	ISAN DIGIT SEVEN
126	໘		8	0038	ISAN DIGIT EIGHT
127	໙		9	0039	ISAN DIGIT NINE

Note that

x_y   =   grapheme y is placed below grapheme x

e.g.,   ̄ɔ   =   _k   ᝳᝅ /s̄k_k/ 'god Sakka'

x_ _y   =   grapheme y is placed two levels below grapheme x

e.g.,   ̄ₒ   =   _ _w   ᝳᝇᝀ /h̄_l_ _wng/ 'royal'

x ̄y   =   grapheme y is placed above grapheme x

e.g.,   ̾-   =   ̄ng   ᝅ /k̄h ̄ng_x/ 'of'

y-x   =   grapheme x is placed following grapheme y

e.g.,   -ʃ   =   -c̄h   ᝆᝇᝃ /m̄ a̱c-c̄hā/ 'fish'

x-y   =   grapheme x is placed preceding grapheme y

e.g.,   (̣   =   r-   ᝁᝃᝅ /r- pha/ 'monk'

II. Romaization of Akson-Thai-Noi

1. Akson-Thai-Noi Script

Akson-Thai-Noi Script is among the Sukhothai group of Thai characters, with morphology similar to that developed during the reign of King Phraya Li Thai of Sukhothai (A.D. 1347-1368) and alphabet characters adapted from the 'Fak Kham' characters of the Lanna Kingdom. Thai Noi characters and orthographic rules were in use throughout the Lan Chang and Isan Regions of Thailand, and can be found in many stone inscriptions and various documents that record events relating to governance (Lai Jum Script), medical prescriptions, folk tales, and blessing ceremonies (*e.g.* the 'Su Khwan' Ceremony), among other writings.

Akson-Thai-Noi Script was used in religious and secular communities of the Isan Region until the reign of King Rama V (A.D. 1868-1910). Following the Primary Education Act of B.E. 2464 (A.D. 1921), which required the population to study Standard Thai in the schools, the Akson-Thai-Noi Script fell out of favor in the region.

In Laos, when the country became independent from France, the Lao Ministry of Education developed a simplified version of Thai Noi, featuring added tone markers and abbreviated characters for ease of mechanical reproduction, that is used in government documents to this day.

At the same time, the Akson-Thai-Noi characters and orthographic features in the Isan Region of Thailand have retained the former characteristics and are therefore to be considered a separate alphabet set from that of Lao.

Orthographic Features

Consonants: Twenty-six consonants and a number of digraphs and consonant combinations appear in palm leaf documents found throughout the Isan Region and the Lan Chang Kingdom.

Vowels: Twenty-three vowel graphemes, representing twenty vowel sounds, are found in Isan Region palm leaf texts.

Tone Markers: Tone markers do not appear in records found either in Isan or in Laos; the reader determined the tone to be applied, although the Lao Script was eventually modified to include tone markers.

Orthographic Rules In a manner similar to that of Standard Thai Script, Akson-Thai-Noi initial and final consonant characters are placed on the line, with accompanying vowels placed in positions preceding, following, below, and above the initial consonant character or consonant cluster. The second component of a digraph is represented by an abbreviated version of the consonant character or by a variation borrowed from *Akson-Tham-Isan* characters. (see also *Akson-Tham-Isan* script)

 2. Orthographic Features of Akson-Thai-Noi

2.1   Consonants

There are two types of consonant graphemes, "simple" and "bound":

2.1.1   Simple Graphemes (thirty nine full-form characters)

ꨀ k	ꩺ k̄h	ꩺ k̲h	ꨁ kh	ꨂ ng							
ꨄ c	ꩻ s	ꩻ s̲									
	ꨝ ṭ	ꨦ ṯh		ꨧ ṇ							
ꨣ d	ꨤ t	ꨥ ṯh	ꨦ ṯh'	ꨧ th	ꨨ th	ꨩ n					
ꨪ b	ꨫ p	ꨬ p̄h	ꨭ f	ꨮ ph	ꨯ f	ꨰ ph	ꨱ m				
ꨲ y	ꨳ r	ꨴ l	ꨵ l'	ꨶ w	꨷ s̱	꨸ s̱'	꨹ s̄	꨺ s̊'	꨻ h̄	꨼ ḷ	꨽ x	꨾ h

2.1.2   Bound Graphemes (eight full form characters, two special forms, and five
graphemes borrowed from Akson-Tham-Isan).

2.1.2.1 Bound Graphemes, or digraphs, are formed from two simple characters bound
together as a single form. In the examples below, the two characters forming the digraph
are shown in brackets.

2.1.2.1.1 ꩺꨩ [ꩺ + ꨩ] *e.g.,* ꩺꨩꨱꨣ /k̄h.nād/ (a whole lot)

2.1.2.1.2 ꩺꨩ [ꩺ + ꨩ] *e.g.,* ꩺꨩꨱꨣ /k̄h.mxd/   (suffering)

2.1.2.1.3 ꨁꨩ   [ꨁ + ꨩ] *e.g.,* ꨁꨩꨂ /kh.ning/ (thinking of, missing)

2.1.2.1.4 ఴ͟ [ͼͽ + ͻ] *e.g.,* ͼͽͻ͟ /s̄.nun/ (rotted vegetation)

2.1.2.1.5 ͼͽ͟ [ͼͽ + ͻ] *e.g.,* ͼͽͻ /s̄.mā/ (ask for forgiveness)

2.1.2.1.6 ͞ͻ [͞ + ͻ] *e.g.,* ͞ͻͽͻ /t̄h.nxm/ (to treasure)

2.1.2.1.7 ͞ͻ [͞ + ͻ] *e.g.,* ͞ͻͼͻͽ /h̄.nxeenw/ (parentage, lineage)

2.1.2.1.8 ͞ͻ [͞ + ͻ] *e.g.,* ͞ͻͻͽͼ /h̄.mākị m/ (fruit)

2.1.2.2 A special form consonant grapheme comprises two allographs, neither of which resembles the original character:

2.1.2.2.1 Initially, the grapheme is written
ͻ /xy-/ (called *yo yat nam*); *e.g.,* ͻͻͽͻ /xy-ādn⁻x̩ ā/ (to offer up in merit).

2.1.2.2.2 In final position the grapheme is written
ͻ /-xy/ ; *e.g.,* ͻͻ /k̄h-xy/ (first person singular pronoun).

2.1.2.3 In some cases, graphemes from Akson-Tham-Isan script are used. There are seven Akson-Tham-Isan graphemes used in Akson-Thai-Noi:

2.1.2.3.1   ͞   /k/

2.1.2.3.2   J   /-y/

2.1.2.3.3   ͻ   /-y'/

2.1.2.3.4   ͻ   /_**r** /

2.1.2.3.5   ͻ   /_l/

2.1.2.3.6   ͻ   /-s̄'/

2.1.2.3.7   ͻ   /v/

2.2 Vowels and Special Markers

2.2.1 There are twenty-four vowel graphemes in Akson-Thai-Noi, representing twenty vowel sounds. One vowel, /əɪ/, exhibits four different graphemes (marked with an * in the table below).

-ฺ̃ a	o̊o a̱	˘ ‾a	-ว ā	°⸰ ‾i	°⸰ ‾i̇	°⸰ ‾u̞	ꞯ ̄ _u	ꞯ ̄ _ū
ꞓ- e	Ꞓ- ee	Ꞙ- o	ꞓ-วꞢ e– ‾āa	-ꙍ x	ꞑꞝ ‾aw			
ꞓ̆ꙍ e – ‾ay *	-ꙍ y *	ꞓ ̆ ꝿ e – ‾a-y *	-ꝿ -y *					
ꞓ°ꙍ e– ‾i̇x	ꞓ°⸰ e– ‾i	-°Ꞣ ‾x̣ ā	ꙟ- i̞	ꞓ-Ꞣ e– ‾a̞ā				

There are only sixteen unique forms of vowel graphemes:

-ฺ̃ a	o̊o a̱	-ว ā	°⸰ ‾i	°⸰ ‾i̇	°⸰ ‾u̞	ꞯ ̄ _u	ꞯ ̄ _ū
ꞓ- e	Ꞓ- ee	Ꞙ- o	-°Ꞣ ‾x̣ ā	ꙟ- i̞			
˘ ‾a	Ɬ ‾a̞	° ‾x̣					

2.2.2   Three special markers are used with or in place of vowel characters:

⌣ *mai sat*	-used as the vowel /⁻a/ with a final consonant; *e.g.*, ນັນ /n ⁻an/ (that)
	-used in conjunction with the vowel symbol ເ- /e/ preceding a final consonant; *e.g.*, ເປັນ /ep⁻an/ (be)
	-used in the vowel dipthong ເ-ັຍ /e -⁻ay/ when there is no final consonant; *e.g.*, ເສັຍ /es̄⁻ay/ (lost, loss).
⌢ *mai kong*	-used to shorten the vowel ໂ /o/ preceding a final consonant; *e.g.*, ຄົນ /k⁻ạ n/ (person)
	-used in conjunction with the vowel symbol -ວ /w/; *e.g.*, ກົວ /k ⁻ạ w/ (comparative marker), ຫົວ /h̄⁻ạ w/ (head)
	-used in conjunction with ເ-າ /e – a̅/ ; *e.g.*, ເອົາ /ex⁻aạ̅/ (take), ເຮົາ /eh⁻aạ̅/ (we), ເມົາ /em⁻aạ̅/ (intoxicated)
° *mai ko*	-used as the vowel –ອ /x̣/ without a final consonant; *e.g.*, ພໍ /phx̣/ (enough, father), ກໍ /kx̣ / (therefore, thus)

2.3 There are ten numeral graphemes:

0	1	2	3	4	5	6	7	8	9
໐	໑	໒	໓	໔	໕	໖	໗	໘	໙

2.4   Combining Characters

Initial and final consonant characters in a Akson-Thai-Noi syllable are placed on the same line, with the vowel character placed in a position preceding, following, above or below the initial consonant or consonant cluster.

Above the line; ຊື່ /s⁻ụ / (name), ເມືອງ /em⁻ụxng / (town)

Below the line; ກູແກວ /k_ūeekw / (Ku Kaew), ສູ /s̄_ū / (you)

Preceding the accompanying consonant; ແມ /eem / (mother), ແກ /eek / (old), ແຕ /eet / (but)

Following the accompanying consonant; ມາ /ma̅/ (come), ຣາຊາ /rāsā/ (monarch)

3. Arrangement of character sequence

3.1 The conversion is made character by character from left to right.

3.2   A character may be accompanied by an upper level or a lower level character; the sequence of the characters must be as follows:

a. Type the consonant first; then
b. Type the upper level character or the lower level character
e.g.,   ປ໌ວຍ /p_lāy/ = 'end'
          The order of typing must be as follows:

ປ   ̬   ວ   ຍ

ຄໍນ /k¯ạ n/ = 'person'
The order of typing must be as follows:

ຄ   ̂   ນ

4. Typing sequence

If a Roman character contains a combining diacritical mark, type the character before the
mark,
          e.g.,   s̄ The order of typing must be as follows: s ¯
                      ṣ The order of typing must be as follows: s .
                      s̄ˀ The order of typing must be as follows: s ¯ , '

Romanization of Akson-Thai-Noi

Special symbols: Refers to the seven symbols used to specify character position and differentiate one Roman character that represents the same sound converted from different Akson-Thai-Noi characters:

Position:	p = preceding	(HYPHEN-MINUS	002D)
	f = following	(HYPHEN-MINUS	002D)
	a = above	(MODIFIER LETTER MACRON	02C9)
	b = below	(MODIFIER LETTER LOW MACRON	02CD)
	. = binding two characters together as a single form		
		(FULL STOP	002E)

Combining Diacritical Marks:

COMBINING MACRON	0304
COMBINING DOT BELOW	0323
COMBINING MACRON BELOW	0331
COMBINING HORN	031B

Remarks:

1. Code position of Akson-Thai-Noi character in ISO/IEC 10646 will be added later.

2. Some fonts may be modified as appropriate.

No.	Akson-Thai-Noi character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
1	ก		k	006B	THAI NOI CHARACTER KA
2	ຂ		k̄h	006B+0304+0068	THAI NOI CHARACTER KHA 1
3	ຊ		k̄ḥ	006B+0304+0323+0068	THAI NOI CHARACTER KHA 2
4	ค		kh	006B+0068	THAI NOI CHARACTER KHA 3
5	ງ		ng	006E+0067	THAI NOI CHARACTER NG
6	จ		c	0063	THAI NOI CHARACTER CA
7	ຸ		s	0073	THAI NOI CHARACTER SA 1
8	ຸ		ṣ	0073+0323	THAI NOI CHARACTER SA 2
9	ຍ		ṭ	0074+0323	THAI NOI CHARACTER TA 1
10	ຊ		ṭ̄h	0074+0304+0323+0068	THAI NOI CHARACTER THA 1
11	ຎ		ṇ	006E+0323	THAI NOI CHARACTER NA 1
12	ດ		d	0064	THAI NOI CHARACTER DA
13	ຕ		t	0074	THAI NOI CHARACTER TA 2
14	ຖ		t̄h	0074+0304+0068	THAI NOI CHARACTER THA 2
15	ຖ		t̄h'	0074+0304+0068+031B	THAI NOI CHARACTER THA 3
16	ທ		th	0074+0068	THAI NOI CHARACTER THA 4
17	ຘ		ṭh	0074+0323+0068	THAI NOI CHARACTER THA 5
18	ນ		n	006E	THAI NOI CHARACTER NA 2
19	ບ		b	0062	THAI NOI CHARACTER BA
20	ປ		p	0070	THAI NOI CHARACTER PA
21	ຜ		p̄h	0070+0304+0068	THAI NOI CHARACTER PHA 1
22	ຝ		f̄	0066+0304	THAI NOI CHARACTER FA 1
23	ພ		ph	0070+0068	THAI NOI CHARACTER PHA 2
24	ຟ		f	0066	THAI NOI CHARACTER FA 2
25	ຠ		ṗh	0070+0323+0068	THAI NOI CHARACTER PHA 3

No.	Akson-Thai-Noi character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
26	ບ		m	006D	THAI NOI CHARACTER MA
27	ຍ		y	0079	THAI NOI CHARACTER YA 1
28	ຽ		-y	002D+0079	THAI NOI CHARACTER YA 2
29	ຽ		-y'	002D+0079+031B	THAI NOI CHARACTER YA 3
30	ຣ		r	0072	THAI NOI CHARACTER RA 1
31	ຼ		_r	02CD+0072	THAI NOI CHARACTER RA 2
32	ລ		l	006C	THAI NOI CHARACTER LA 1
33	ລ		l'	006C+031B	THAI NOI CHARACTER LA 2
34	ຼ		_l	02CD+006C	THAI NOI CHARACTER LA 3
35	ວ		w	0077	THAI NOI CHARACTER WA
36	ຕ		ṣ̄	0073+0304+0323	THAI NOI CHARACTER SA 3
37	ຝ		ṣ̄'	0073+0304+0323+031B	THAI NOI CHARACTER SA 4
38	ຽ		-ṣ̄'	002D+0073+0304+0323+031B	THAI NOI CHARACTER SA 5
39	ຌ		s̄	0073+0304	THAI NOI CHARACTER SA 6
40	ຎ		s̄'	0073+0304+031B	THAI NOI CHARACTER SA 7
41	ຫ		h̄	0068+0304	THAI NOI CHARACTER HA 1
42	ອ		x	0078	THAI NOI CHARACTER O
43	ໍ		‾x̣	02C9+0078+0323	THAI NOI MAI KO
44	ຯ		h	0068	THAI NOI CHARACTER HA 2
45	ຨ		k̄h.n	006B+0304+0068+002E+006E	THAI NOI CHARACTER KHA 1 + NA 2
46	ຩ		k̄h.m	006B+0304+0068+002E+006D	THAI NOI CHARACTER KHA 1 +MA
47	ຄ		kh.n	006B+0068+002E+006E	THAI NOI CHARACTER KHA 3 + NA 2
48	ຨ		s̄.n	0073+0304+002E+006E	THAI NOI CHARACTER SA 3 + NA

No.	Akson-Thai-Noi character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
49	ฌบ		s̄.m	0073+0304+002E+006D	THAI NOI CHARACTER SA 3 + MA
50	ฑน		t̄h.n	0074+0304+002E+006E	THAI NOI CHARACTER THA 1+ NA
51	ฌน		h̄.n	0068+0304+002E+006E	THAI NOI CHARACTER HA 1+ NA
52	ฌม		h̄.m	0068+0304+002E+006D	THAI NOI CHARACTER HA 1+ MA
53	ฮ		xy-	0078+0079+002D	THAI NOI PRECEDING CHARACTER O+ YA
54	ๅ		-xy	002D+0078+0079	THAI NOI FOLLOWING CHARACTER O+ YA
55	-ะ		a	0061	THAI NOI SARA A 1
56	ะ		a̱	0061+0331	THAI NOI SARA A 2
57	ั		¯a	02C9+0061	THAI NOT MAI SAT
58	็		¯ạ	02C9+0061+0323	THAI NOI MAI KONG
59	-า		ā	0061+0304	THAI NOI SARA AA
60	ิ		¯i	02C9+0069	THAI NOI SARA I
61	ี		¯ī	02C9+0069+0304	THAI NOI SARA II
62	ึ		¯ụ	02C9+0075+0323	THAI NOI SARA UE
63	ุ		_u	02CD+0078	THAI NOI SARA U
64	ู		_ū	02CD+0078+0069	THAI NOI SARA UU
65	เ-		e	0065	THAI NOI SARA E
66	แ-		ee	0065+0065	THAI NOI SARA AE
67	โ-		o	006F	THAI NOI SARA O
68	ไ-		ị	0069+0323	THAI NOI SARA AI
69	๐		0	0030	THAI NOI DIGIT 0
70	๑		1	0031	THAI NOI DIGIT 1
71	๒		2	0032	THAI NOI DIGIT 2

No.	Akson-Thai-Noi character	Code position in ISO/IEC 10646	Roman-ized character	Code position(s) of Romanized characters in ISO/IEC 10646	Comments
72	ວ		3	0033	THAI NOI DIGIT 3
73	ໄ		4	0034	THAI NOI DIGIT 4
74	ໄ		5	0035	THAI NOI DIGIT 5
75	໓		6	0036	THAI NOI DIGIT 6
76	໗		7	0037	THAI NOI DIGIT 7
77	ຟ		8	0038	THAI NOI DIGIT 8
78	ໜ		9	0039	THAI NOI DIGIT 9

Note that

x_y   =   grapheme y is placed below grapheme x

e.g.,   ฌ   =   _l

ป้วย /p_lāy/ = 'end'

x.y   =   grapheme y is bound to grapheme x

e.g.,   ໝ   =   h̄.m

ໝາກ /h̄māk/   = 'fruit'

x̄y   =   grapheme y is placed above grapheme x

e.g.,   ◌̂   =   ̄a̤

ค̄ิນ /k̄a̤ n/ = 'person'

y-x   =   grapheme x is placed following grapheme y

e.g.,   ໄ   =   -xy

ຂໄ /k̄h-xy/ = 'first person singular pronoun'

x-y   =   grapheme x is placed preceding grapheme y

e.g.,   ປ   =   xy-

ປວດບໍ /xy-ādn̄x̤ ā/ = 'to offer up in merit'