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Information and documentation — Transliteration of scripts in use in Thailand —

Part 1: Transliteration of Akson-Thai-Noi

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Information et documentation — Translittération des scripts utilisés en Thaïlande —
Partie 1: Translittération du Akson-Thaï-Noï

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Foreword

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 46, *Information and documentation*.

A list of all parts in the ISO 20674 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The Akson-Thai-Noi characters of this document have been developed as modern representations of scripts found in inscriptions and palm leaf religious texts which have been adapted by the Royal Institute of Thailand[1)].

The selection of Romanized characters follows, to the extent possible, the phonemic/phonetic representations used in the transliteration of Standard Thai as described in 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-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.

This document is one of a series of International Standards, dealing with the conversion of systems of writing. The aim of this document and others in the series is to provide a means for international communication of written messages in a form which permits the automatic transmission and reconstitution of these by men or machines. The system of conversion, in this case, is univocal and entirely reversible.

This means that no consideration should be given to phonetic and aesthetic matters nor to certain national customs: all these considerations are, indeed, ignored by the machine performing the function.

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The adoption of this document for international communication leaves every country free to adopt for its own use a national standard which may be different, on condition that it be compatible with the document. The system proposed herein should make this possible and be acceptable to international use if the graphisms it creates are such that they may be converted automatically into the graphisms used in any strict national system.

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The adoption of national standards compatible with this document will permit the representation, in an international publication, of the morphemes of each language according to the customs of the country where it is spoken. It will be possible to simplify this representation in order to take into account the number of the character sets available on different kinds of machines.

1) 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).

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Information and documentation — Transliteration of scripts in use in Thailand —

Part 1: Transliteration of Akson-Thai-Noi

1 Scope

This document describes the orthographic system of the Akson-Thai-Noi script using Romanized characters.

This document can be used by anyone who has a clear understanding of the system and is certain that it can be applied without ambiguity. The result obtained will not give a correct pronunciation of the original text in a person's own language, but it will serve as a means of finding automatically the original graphism and thus allow anyone who has a knowledge of the original language to pronounce it correctly.

NOTE Similarly, one can only pronounce correctly a text written in, for example, English or Polish, if one has a knowledge of English or Polish.

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2 Normative references

There are no normative references in this document.

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3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
character
element of an alphabetical or other type of writing system that graphically represents a phoneme, a syllable, a word or even a prosodical characteristic of a given language; it is used either alone (for example, a letter, a syllabic sign, an ideographical character, a digit, a punctuation mark) or in combination (such as an accent or a diacritical mark)

Note 1 to entry: A letter having an accent or a diacritical mark, for example â, è, ö, is therefore a character in the same way as a basic letter.

3.2
Akson
letter of the alphabet

3.2.1
Akson-Thai-Noi
script used in religious and secular communities of the Isan Region of Thailand

Note 1 to entry: See Annex A.

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3.2.2
Akson-Tham-Isan
script used in the north eastern region of Thailand suitable for writing Pali-Sanskrit texts

3.2.3
Akson-Thai-Noi characters
Akson-Thai-Noi (3.2.1) alphabetic letters, special markers, and Akson-Thai-Noi digits

3.3
vowel
letter that represents a sound produced by humans when the breath flows out through the mount without being blocked by the teeth, tongue or lips

3.4
consonant
one of the speech sounds or letters of the alphabet which is not a *vowel* (3.3)

3.5
tone marker
sign which shows a sound that represents different meaning, depending on how high or low it is spoken

3.6
transliteration
process which consists of representing the *characters* (3.1) of an alphabetical or syllabic system of writing by the characters of a conversion alphabet

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3.7
retransliteration
process whereby the *characters* (3.1) of a conversion alphabet are transformed back into those of the converted writing system

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3.8
transcription
process whereby the sounds of a given language are noted by the system of signs of a conversion language

3.9
romanization
conversion of non-Latin writing systems to the Latin alphabet

4 General principles of conversion of writing systems

4.1 The words in a language, which are written according to a given script (the converted system), sometimes have to be rendered according to a different system (the conversion system) normally used for a different language. The procedure is often used for historical or geographical texts, cartographical documents and in particular bibliographical work where characters shall be converted from different writing systems into a single alphabet to allow for alphabetical intercalation in bibliographies, catalogues, indexes, toponymic lists, etc. It is indispensable in that it permits the univocal transmission of a written message between two countries using different writing systems or exchanging a message the writing of which is different from their own.

It thereby permits transmission by manual, mechanical as well as electronic means.

The two basic methods of conversion of a system of writing are transliteration and transcription.

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4.2 Transliteration is the easiest way to ensure the complete and unambiguous reversibility of the conversion alphabet in the converted system.

In exceptional cases, such as when the number of characters used in the conversion system is smaller than the number of characters of the converted system, it is necessary to use digraphs or diacritical marks. In this case, one shall avoid as far as possible arbitrary choice and the use of purely conventional marks and try to maintain a certain phonetic logic in order to give the system a wide acceptance.

However, it shall be accepted that the graphism obtained may not always be correctly pronounced according to the phonetic habits of the language (or of all the languages) which usually use(s) the conversion alphabet. On the other hand, this graphism shall be such that the reader who has a knowledge of the converted language may mentally restore unequivocally the original graphism and thus pronounce it.

4.3 Retransliteration is the exact opposite of the transliteration process in that the rules of a transliteration system are applied in reverse in order to reconvert the transliterated word to its original form.

4.4 A transcription system is of necessity based on the orthographical conventions of the conversion language. Transcription is not strictly reversible.

Transcription may be used for the conversion of all writing systems. It is the only method that can be used for systems that are not entirely alphabetical or syllabic and for all ideophonographical systems of writing like Chinese.

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4.5 To carry out romanization, either transliteration or transcription or a combination of the two may be used depending on the nature of the converted system.

4.6 A conversion system proposed for international use may call for compromise and the sacrifice of certain national customs. It is therefore necessary for each community of users to accept concessions, fully abstaining in every case from imposing as a matter of course solutions that are actually justified only by national practice (for example, pronunciation, orthography, etc.).

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When a country uses two systems univocally converting one into the other to write its own language, the system of transliteration implemented shall be taken from before as a basis for the international standardized system, as far as it is compatible with the other principles exposed hereafter.

4.7 When necessary, the conversion systems should specify an equivalent for each character, not only the letters but also the punctuation marks, numbers, etc. They should similarly take into account the arrangement of the sequence of characters that make up the text, for example the direction of the script, and specify the way of distinguishing words and of using separation signs, following as closely as possible the customs of the language(s) which use the converted writing system.

When romanizing a script which does not have upper-case characters, it is normal to capitalize some words, following national usage.

5 Principles of conversion for alphabetical writing systems

5.1 The conversion may be made at various levels.

The first level is that of completely reversible stringent transliteration which is necessary to attain, in full, the aim given in 4.2. This conversion applies all principles of transliteration without exception. However, whenever it is useful to distinguish the end or beginning of a syllable (a morpheme or a word) variants may be used. The conventional systems of stringent transliteration shall be applied as such without any change to meet national or regional customs as regards pronunciation or orthography. They permit the univocal international transmission of messages by mechanical or electronic means.

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To permit an international unequivocal communication, International Standards on transliteration shall, by priority, apply the principle of stringent conversion. They can then be used as a basis for the establishment of rules for simplified conversion and for preparation of national standards.

The second level is that of simplified conversion. The simplification may be made necessary, for example, by the use of machines that do not accept all the alphabet characters required for stringent conversion. The method of conversion may allow national or regional variants, which may not permit complete reversibility. The simplified conversion may be the subject of International Standards or agreements.

The third level is that of popular conversion which, for example, should enable the same foreign names to be written in a uniform manner in the newspapers of a given country. It is obliged to take into account phonetic or graphic practices and therefore can only be national.

5.2 In cases where the same characters appear in one alphabet used with some differences by different languages, these characters would be transliterated in the same way, irrespective of the language they belong to.

5.3 If the converted alphabet gives a different form to the same character according to its place in the word (as is the case for example in the Arabic, Hebrew and Greek alphabets), the conversion alphabet will use only one character of constant form.

6 Akson-Thai-Noi orthographic rules and features

6.1 General

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6.1.1 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 abbreviated version of the consonant character or by a variation borrowed from Akson-Tham-Isan characters.

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6.1.2 Orthographic features: There are consonants and vowels in Akson-Thai-Noi, but not a tone marker.

6.1.3 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.

6.1.4 Vowels: Twenty-three vowel graphemes, representing 20 vowel sounds, are found in Isan Region palm leaf texts.

6.1.5 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.

6.2 Consonants

6.2.1 There are two types of consonant graphemes, “simple” and “bound”.

6.2.1.1 Simple graphemes (39 full-form characters) are given in Table 1.

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Table 1 — Full-form characters

k	k̄ h	ḳh	kh	ng								
c	ch	s										
	ṭ	ṭh			ṇ							
d	t	t̄ h	t̄ h′	th	ṭh	n						
b	p	p̄ h	f̄	ph	f	p̣h	m					
y	r	l	l′	w	ṣ̄	ṣ′	s̄	s̄ ′	h̄	ḷ	x	ḥ

6.2.1.2 Bound graphemes consist of eight full form characters, two special forms, and five graphemes borrowed from Lao and Akson-Tham-Isan.

Bound graphemes, or digraphs, are formed from two simple characters bound together with a full stop (002E) as a single form. When dealing with joined characters like "h̄ .n", the input sequence in transliteration will be "h, combining macron, full stop, n". For example:

1) [+], for example, /k̄ h.nād/ (a whole lot)

2) [+], for example, /k̄ h.mxd/ (suffering)

3) [+], for example, /kh.ning/ (thinking of, missing)

4) [+], for example, /s̄ .nun/ (rotted vegetation)

5) [+], for example, /s̄ .mā/ (ask for forgiveness)

6) [+], for example, /t̄ h.nxm/ (to treasure)

7) [+], for example, /h̄ .ňænw/ (parentage, lineage)

8) [+], for example, /h̄ .mākịm/ (fruit)

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

1) Initially, the grapheme is written as follows:

/x′y/ (called *yo yat nam*); for example, /x′yādnå/ (to offer up in merit).

2) In final position the grapheme is written as follows:

/xy′/ ; for example, /k̄ hxy′/ (first person singular pronoun).

6.2.3 In some cases, five Lao and Akson-Thai-Tham characters may be referenced to, i.e.:

1) /ỵ/

2) /ỵ′/

3) /ṛ/

4) /ḷ′/

5) /ṣ̄ ′/

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