

# International Standard



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## Documentation — Transliteration of Slavic Cyrillic characters into Latin characters

*Documentation — Translittération des caractères cyrilliques slaves en caractères latins*

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 9 was prepared by Technical Committee ISO/TC 46, *Documentation*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

# Documentation — Transliteration of Slavic Cyrillic characters into Latin characters

## 0 Introduction

### 0.1 Standards on conversion of systems of writing

This International Standard is one of a series of International Standards dealing with the conversion of systems of writing. The aim of this International Standard 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, must be univocal and entirely reversible.

This means that abstraction should be composed of all phonetic and aesthetic considerations, as well as certain national customs; all these considerations are ignored by the machine performing the function.

The adoption of this International Standard 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 this International Standard. The system proposed herein should make this possible; and be acceptable for international use if the graphisms it creates are such that they may be converted automatically into the graphisms used in any strict national system.

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

The adoption of national standards compatible with this International Standard 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.

### 0.2 General principles of conversion of writing systems

#### 0.2.1 Definitions and methods

**0.2.1.1** 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. This procedure is often used for historical or geographical texts, cartographical documents and in particular bibliographical work where characters must 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.

**0.2.1.2 Transliteration** is the process which consists of representing the characters<sup>1)</sup> of an alphabetical or syllabic writing by the characters of a conversion alphabet.

In principle, this conversion should be made character by character: each character of the converted graphical system is rendered by only one character of the conversion alphabet, this being the easiest way to ensure the complete and unambiguous reversibility of the conversion alphabet in the converted system.

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 must 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.

1) A character is an 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 (for example an accent, a diacritical mark). 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.

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

**0.2.1.3 Retransliteration** is the process whereby the characters of a conversion alphabet are transformed back into those of the converted writing system. It 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.

**0.2.1.4 Transcription** is the process whereby the pronunciation of a given language is noted by the system of signs of a conversion language.

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.

**0.2.1.5** To carry out **romanization**, the conversion of non-Latin writing systems to the Latin alphabet, either transliteration or transcription or a combination of the two may be used depending on the nature of the converted system.

**0.2.2** 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 as regards pronunciation, orthography, etc.).

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

**0.2.3** Where 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 and capital letters, following as closely as possible the customs of the language(s) which use the converted writing system.

## 0.3 Principles of conversion for alphabetical writing systems

**0.3.1** 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 aims given in 0.2.1.2. This conversion applies all principles of transliteration without exception. It does not permit variants. The conventional systems of stringent transliteration should 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.

To permit an internationally unequivocal communication, International Standards on transliteration must apply by priority the principles of stringent conversion. They, then, can 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**. This simplification may be made necessary, for example, by the use of machines that do not accept all the alphabet characters required for stringent conversion. This 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.

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

**0.3.3** 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.

## 1 Scope and field of application

This International Standard establishes a system for the transliteration of Slavic Cyrillic characters into Latin characters following the principles of stringent conversion in order to permit international information exchange, particularly by electronic means.

2 Transliteration table — General

NOTE — For the diacritical signs used, see the annex.

Cyrillic character					Transliteration into Latin characters from Cyrillic characters of Slavic alphabets (Bulgarian, Byelorussian, Macedonian, Russian, Serbo-Croatian, Ukrainian)		Respective languages	Examples	
No.	printed		written						
1	а	А	а	А	а	А	all	адрес	adres
2	б	Б	б	Б	b	B	all	баба	baba
3	в	В	в	В	v	V	all	вы	vy
4	г	Г	г	Г	g	G	all	голова	golova
5	д	Д	д	Д	d	D	all	да	da
6	ђ	Ђ	ђ	Ђ	đ	Đ	sr	ђон	don
7	ѓ	Ѓ	ѓ	Ѓ	ǵ	Ǵ	mk	ѓуѓум	ǵugum
8	е	Е	е	Е	e	E	all	еда	eda
9	ё	Ё	ё	Ё	ë	Ë	be ru	ёлка	ëlka
10	є	Є	є	Є	ê	Ê	uk	твоє	tvoë
11	ж	Ж	ж	Ж	ž	Ž	all	журнал	žurnal
12	з	З	з	З	z	Z	all	звезда	zvezda