INTERNATIONAL STANDARD

L2/01-238

ISO 10586

> First edition 1996-12-15

## Information and documentation — Georgian alphabet coded character set for bibliographic information interchange

Information et documentation — Jeu de caractères codés de l'alphabet géorgien pour les échanges d'informations bibliographiques



ISO 10586:1996(E)

### **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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 10586 was prepared by Technical Committee ISO/TC 46, Information and documentation, Subcommittee SC 4, Computer applications in information and documentation.

Annexes A and B of this International Standard are for information only.

© ISO 1996

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

# Information and documentation — Georgian alphabet coded character set for bibliographic information interchange

#### 1 Scope

- **1.1** This International Standard specifies a set of 42 graphic characters and their coded representations. It consists of a code table and a legend showing each graphic and its name. Explanatory notes are also included. The character set is primarily intended for the interchange of information among data processing systems and within message transmission systems.
- **1.2** These characters constitute a character set for the international interchange of bibliographic citations, including their annotations, in the modern Georgian (mxedruli) script.

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were 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 editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO/IEC 2022:1994, Information technology — Character code structure and extension techniques.

International register of character sets to be identified by means of escape sequences. 1)

#### 3 Implementation

- **3.1** The implementation of this coded character set in physical media and for transmission, taking into account the need for error checking, is the subject of other International Standards (see annex B).
- **3.2** The implementation of this International Standard is in accordance with the provisions of ISO/IEC 2022 <sup>2)</sup> and is identified by an escape sequence. (To be assigned.)
- **3.3** The unassigned positions in the code tables shall not be utilized in the international interchange of bibliographic information.

<sup>1)</sup> Available on application to the Secretariat of the Registration Authority: ECMA, 114 rue du Rhône, CH-1204 Genève, Switzerland.

<sup>2)</sup> G0: ESC 2/8 F; G1: ESC 2/9 F; G2: ESC 2/10 F; G3: ESC 2/11 F ("F" represents the final character of the escape sequence).

ISO 10586:1996(E) © ISO

## 4 Code table for the Georgian alphabet

Table 1 is the code table for the Georgian alphabet.

Table 1

				b <sub>7</sub>	0	0	0	0	1	1	1	1
				·b <sub>6</sub>	0	0	1	1	0	0	1	1
				b <sub>5</sub>	0	1	0	1	0	1	0	1
b₄	b <sub>3</sub>	b₂	b <sub>1</sub>		0	1	2	3	4	5	6	7
0	0	0	0	0				<b>***</b>	<b>***</b>	۵	3	3
0	0	0	1	1			***	<b>**</b>	***	δ	ป	ь
0	0	1	0	2			***	***	<b>***</b>	δ	б	ડ
0	0	1	1	3			***	***	***	Q	ı	x
0	1	0	0	4			<b>**</b>	***	<b>***</b>	3	ð	3
0	1	0	1	5			***	***	<b>***</b>	3	უ	₽
0	1	1	0	6			***	***	<b>**</b>	ъ	3	ф
0	1	1	1	7			***	***	***	હ	3	<b>***</b>
1	0	0	0	8			***	<b>***</b>	<b>***</b>	6	3	<b>***</b>
1	0	0	1	9			<b>***</b>	<b>**</b>	***	n	б	***
1	0	1	0	Α			***	***	***	ડ	y	<b>***</b>
1	0	1	1	В			<b>***</b>	***	***	ß	ð	***
1	1	0	0	С			***	***	***	9	В	***
1	1	0	1	D			***	***	:	Б	В	***
1	1	1	0	Е			***	**		Ω	д	***
1	1	1	1	F			***	***	:•	ሙ	v	

**Reserved** for future standardization

ISO 10586:1996(E)

## 5 Legend

Table 2 gives the code, graphic and name of each character.

Table 2

Code (	Graphic	Name	Code	Graphic	Name
21-2F		(These positions shall not be used)	60	Э	GEORGIAN LETTER PAR
			61	J	GEORGIAN LETTER ZHAR
30-3F		(These positions shall not be used)	62	б	GEORGIAN LETTER RAE
			63	b	GEORGIAN LETTER SAN
40-4C		(These positions shall not be used)	64	ð	GEORGIAN LETTER TAR
			65	უ	GEORGIAN LETTER UN
4D	:	GEORGIAN FULL STOP	66	3	GEORGIAN LETTER WE
4E	•	GEORGIAN COMMA	67	3	GEORGIAN LETTER PHAR
4F	:•	GEORGIAN PARAGRAPH SEPARATOR	68	3	GEORGIAN LETTER KHAR
			69	Q	GEORGIAN LETTER GHAN
50	5	GEORGIAN LETTER AN	6A	ម	GEORGIAN LETTER QAR
51	δ	GEORGIAN LETTER BAN	6B	ð	GEORGIAN LETTER SHIN
52	δ	GEORGIAN LETTER GAN	6C	ß	GEORGIAN LETTER CHIN
53	Q	GEORGIAN LETTER DON	6D	ß	GEORGIAN LETTER CAN
54	3	GEORGIAN LETTER EN	6E	4	GEORGIAN LETTER JIL
55	3	GEORGIAN LETTER VIN	6F	Ŷ	GEORGIAN LETTER CIL
56	ზ	GEORGIAN LETTER ZEN			
57	છ	GEORGIAN LETTER HE	70	3	GEORGIAN LETTER CHAR
58	σ	GEORGIAN LETTER TAN	71	b	GEORGIAN LETTER XAN
59	n	GEORGIAN LETTER IN	72	ડ	GEORGIAN LETTER HAR
5A	ડ	GEORGIAN LETTER KAN	73	x	GEORGIAN LETTER JAN
5B	$\mathfrak{A}$	GEORGIAN LETTER LAS	74	કે	GEORGIAN LETTER HAE
5C	9	GEORGIAN LETTER MAN	75	₽	GEORGIAN LETTER HOE
5D	6	GEORGIAN LETTER NAR	76	ф	GEORGIAN LETTER FI
5E	Ω	GEORGIAN LETTER HIE			
5F	m	GEORGIAN LETTER ON	77 - 7	'E	(These positions shall not be used)

ISO 10586:1996(E) © ISO

#### 6 Explanatory notes

#### 6.1 Punctuation and numerals

Punctuation marks and numerals in European style used with Georgian are available in the basic Cyrillic set (Registration No. 37 in the international register with which this set is designed for use).

#### 6.2 Rendering of characters

The rendering of graphic characters is intended solely to identify letters of the Georgian alphabet uniquely. The graphics used do not necessarily represent the most desirable calligraphic forms.

#### 6.3 Names of characters

The names of characters (but not codes) have been made to correspond as much as possible to those assigned in ISO/IEC 10646-1.

#### Annex A

(informative)

## **Development of the Georgian script**

Armenian and Georgian, two of the multitudinous tongues spoken in the Caucasian Region, are vehicles of millennial civilizations. Both languages present peculiar phonetic resemblances in spite of their completely different origins. Georgian, or Grusinian, is a member of the Kartvelian language family. Armenian is a member of the Indo-European language family. Each language has its own alphabet, which resemble one another, since the alphabets developed from the same source.

According to one tradition, these two alphabets were invented circa A.D. 406 by the Armenian monk, missionary and theologian Mesrop Mašt'oc' (ca. A.D. 360 to A.D. 439), who also invented an alphabet for the now extinct language Albani (or Caucasian Albanian). According to another tradition, the Georgian script was invented circa A.D. 300 by the Georgian king, Parnavaz. Some scholars allege that it was invented many centuries earlier. The origin of, and the relations between, the three forms of the script are also still in dispute.

More likely, the Georgian script was derived, as was the Armenian script, from a Semitic alphabet, the Pahlavi script, used in Persia in the 4th century. It was developed under a strong Greek influence (by Mašťoc' or perhaps one of his disciples) into an alphabet enabling the Georgian people to spell their language, with its wealth of sounds, in a simple and phonemic way. Owing to phonetic evolution, a few letters became superfluous. In former times, the Georgian alphabet was also used in writing Ossetic and Abkhaz. The oldest inscription in Georgian dates back to the 5th century. The oldest manuscripts date from the 8th century. The period from A.D. 980 to A.D. 1220 is considered the golden age of Georgian literature.

The Georgian script exists in the following three forms.

- a) Asomtavruli or mrglovani: an upper-case script for ecclesiastical use. It was used from the 5th to the 11th century.
- b) Nusxaxucuri: a lower-case script, developed from the asomtavruli (mrglovani) script, also for ecclesiastical use. It was used from the 9th to the 18th century. Both scripts, referred to collectively by the term xucuri (i.e. "script of the priests"), are still sometimes used for religious writings. Asomtavruli as an ornamental version (for inscriptions, titles, initials) of nusxaxucuri.
- c) Mxedruli (i.e. "script of the warriors"): a lay or civil script, probably developed from the asomtavruli and nusxaxucuri scripts. It has been used since the 11th century and is the form of the Georgian script commonly used today.

The Georgian script consists of 39 letters. The modern Georgian script does not have different upper-case and lower-case forms for each letter. The old punctuation consists of a full stop (period), comma, and a paragraph separator. The modern punctuation used is similar to that used with the Latin script. Today, Georgian is spoken in the Republic of Georgia by 3 400 000 people, where it is the official language, and also by Georgian minorities in Turkey, Iran, and elsewhere in the world.

#### Annex B

(informative)

## **Bibliography**

- [1]  $\,$  ISO/IEC 646:1991, Information technology ISO 7-bit coded character set for information interchange.
- [2] ISO 962:1974, Information processing Implementation of the 7-bit coded character set and its 7-bit and 8-bit extensions on 9-track 12,7 mm (0.5 in) magnetic tape.
- [3] ISO 1113:1979, Information processing Representation of the 7-bit coded character set on punched tape.
- [4] ISO 1155:1978, Information processing Use of longitudinal parity to detect errors in information messages.
- [5] ISO 1177:1985, Information processing Character structure for start/stop and synchronous character oriented transmission.
- [6] ISO 1745:1975, Information processing Basic mode control procedures for data communication systems.
- [7] ISO 2375:1985, Data processing Procedure for registration of escape sequences.
- [8] ISO/IEC 10646-1:1993, Information technology Universal Multiple-Octet Coded Character Set (UCS) Part 1: Architecture and Basic Multilingual Plane.
- [9] ČENKELI, K. Einführung in die georgische Sprache. Zürich: [s.n.] (1958).
- [10] DIRINGER, David. The alphabet. 3rd ed. London: Hutchinson (1968).
- [11] FOSSEY, Charles, Notices sur les caractères anciens et modernes. Paris: Imprimerie nationale (1927).
- [12] JUNKER, Heinrich F.J. Das Awesta: Alphabet und der Ursprung der armenischen und georgischen Schrift. Cascasis; Leipzig: [s.n.] (1925-1926).
- [13] VOGT, Hans. Esquisse d'une grammaire du géorgien moderne. Oslo: A.W. Brøggers bogtrykkeri (1930).
- [14] ZIGZIGURI, Šot'a. Die georgische Sprache. Halle/Saale: M. Niemeyer (1973).
- [15] ZWOLANEK, Renée & ASSFALG, Julius. *Altgeorgische Kurzgrammatik*. Freiburg, Schweiz: Universitätsverlag; Göttingen: Vandenhoeck & Ruprecht (1976).







#### ICS 35.040

**Descriptors:** documentation, bibliographies, data processing, information interchange, graphic characters, Georgian characters, character sets, coded character sets.

Price based on 6 pages