

Title: Reply to Georgian State Department of Information Technology
Source: Unicode Technical Committee
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Distribution: David Tarkhan-Mouravi, Chairman, Georgian State Dept. of IT
Arnold Winkler, Vice Chair, Unicode Technical Committee
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Action: For Review and Response
Date: April 16, 2001

The Unicode Technical Committee (UTC) is much indebted to Chairman Tarkhan-Mouravi and the Georgian State Department of Information Technology for your January 22, 2001 letter, character usage examples, and completed proposal summary form. The letter provided further detailed information on ordering and the justification for encoding three additional Georgian characters. Based on your January documents, the UTC was able to accept two of the three characters, but still could not accede to your request to move the encoding positions of the existing characters. Please find our detailed response below.

1. Additional Georgian Characters. The Unicode Technical Committee and the ISO JTC1/SC2/WG2 character encoding committee have both considered your request for encoding the three Georgian characters: U-BRJGU, AINI, and IRRATIONAL VOWEL. The UTC accepted the two characters AINI and IRRATIONAL VOWEL at the January UTC meeting and forwarded your proposal to WG2 for their consideration. Last week, the WG2 committee met and passed a resolution accepting these two characters, with, however, name changes. The UTC will have to ratify the new names at the May 21 - 24, 2001 meeting, but there should be no problem with this.

The two additional Georgian characters will be included in the repertoire of Unicode 3.2, and will be published by ISO/IEC as part of 10646-1:2000, Amendment 1, pending final ballot voting. The names and encoding positions agreed to last week are:

IRRATIONAL VOWEL, accepted as GEORGIAN LETTER YN at U+10F7
AINI, accepted as GEORGIAN LETTER ELIFI at U+10F8

The third proposed character, U-BRJGU, was not accepted. Your letter of January 22, 2001, provided extensive documentation on the character's well-attested and historical usage. The UTC doesn't doubt that it has been used for some centuries, but the character can be represented today in Unicode by the sequence <U+10E3, U+030C>, GEORGIAN LETTER UN followed by COMBINING CARON. Font technology has advanced in recent times, and the UTC expects combining characters to be widely supported.

2. Presentation of Nuskhuri. As part of Unicode 3.1, published March 30, 2001, the text on Georgian was revised considerably. The new text discusses script forms and case forms, and provides a figure which prints the Georgian code chart in an ecclesiastical font. Please review this new text and code chart and see if this responds to your concerns. Unicode 3.1 is published on the Unicode web site and can be found at: <http://www.unicode.org/unicode/reports/tr27/>.

3. Ordering. The UTC does not dispute the correctness of the ordering proposed by the Georgian State Department of Information Technology. This same order has been used for Georgian characters in the Default Unicode Collation Element Table, found at: <http://www.unicode.org/unicode/reports/tr10/allkeys.txt>

Correct collation, or ordering, of characters is achieved through collation tables, not through binary ordering based on code point assignments. No language represented by characters in the Unicode Standard can be correctly collated using the Unicode code point binary ordering. For correct ordering of any language, collation tables must be used. The case for Georgian is no different than the case for French. Both languages require collation tables for correct ordering.

Culturally correct collation is not addressed directly by the Unicode Standard. However, the Unicode Technical Committee provides a separate standard, *Unicode Technical Standard #10: Unicode Collation Algorithm*, to define a method of achieving culturally correct ordering. This Unicode Technical Standard employs the Default Unicode Collation Element Table referenced above.