

From: <gsdit@access.sanet.ge>  
Subject: Georgian Unicode standard proposal  
Date: 03/03/2003 10:17

Dear Mrs. Moore,

Thank you for your letter. We hope to receive the favorable decision on our proposal at this UTC meeting. We attach to this letter a table which describes the alterations that we propose for Georgian scripts (alphabets) Asumtavruli, Nuskhuri and Mkhedruli. Nuskhuri script is absent from the actual Georgian Unicode standard, and we ask to include it in a new standard. As a justification of our proposal for Nuskhuri script, we attach here the letter of Catholicos Patriarch of all <?xml:namespace prefix = stl ns = "urn:schemas-microsoft-com:office:smarttags" />Georgia. We are preparing a letter of President of Georgia on the same issue that we will send you as soon as it is ready (formal procedure of preparation of this letter will take several days). For all three Georgian scripts we attach here Windows fonts (ttf). Our proposal considers the right sequence of Georgian characters. And finally, it includes one character that is absent from Mkhedruli script (character 7-10F in our table). Of course, the most important from this amendments is an inclusion of Nuskhuri script.

David Tarkhan-Mouravi

Charman of the Georgian State Department of Information Technology (See attached file: Church to Unicode 3 Page.jpg) (See attached file: Church to Unicode 2 Page.jpg) (See attached file: Church to Unicode 1 Page.jpg) (See attached file: g&g\_asom.TTF) (See attached file: g&g\_nusx.TTF) (See attached file: Geo\_Standart.jpg) (See attached file: GS\_GRIGL.TTF)



# 11

January 29, 2001

The President of Unicode Consortium  
Mister Mark Davis

Mister Davis,

The patriarchy of the Georgian Orthodox Church expresses its respect to the secular organization Unicode Technical Committee and blesses its activity for the worldwide progress of the human society.

The will of the Technical Committee to join our nation's ancient culture to the achievements of the recent civilization through its highest step – the computer technique, deserves a gratitude of the orthodox Christians of Georgia.

The question of standardization of the Georgian writing in the up-to-date high technology can not be resolved in disruption with the history of writing of our language, having 3000 years history. However, the real development of the Georgian writing is connected with the adoption by the Georgian people in 337 of the True Faith from the hands of the equal-apostle Nina Kapadokian, that was followed by the translation into the Georgian language of the Holy Writ and other numerous religious revelations.

All further development of the Georgian writing, at least during the first millennium of its existence, was determined by the goals and tasks of support and propagation of the True Faith among the Georgian population, and sometimes by the selfless fight with the cursed strangers. One can note three major stages of that path.

- A. The epoch of the initial propagation of the True Faith in Georgia (from IV till VIII century), when the holy books were written in the "Asomtavruli" alphabet.
- B. The epoch of the Arabian invasion, the ejection of Arabs and the creation of the Unified Orthodox Georgian State. Big number of holy books are created, in overwhelming majority, written in "Nuskhuri" alphabet.
- C. The epoch of the Mongolian invasion and the further weakening of the Georgian State. The holy books are still written in "Nuskhuri" alphabet till XVIII-XIX centuries, though in secular life the alphabet "Mkhedruli" becomes more and more used. After the creation of the Georgian polygraph this alphabet becomes the principal for the writing of holy books.

Each of above mentioned alphabets has its special meaning for the Georgian culture. The most important role of the alphabet "Asomtavruli" in the epoch of emergence and domination of other alphabets is its use as the capital characters at the beginning of the sentence and as the proper names, like it was in the Latin, modern Cyrillic, Greek and Armenian alphabets, and in the early epoch such use of "Asomtavruli" most frequently occurred at the beginning of the paragraph. In the contemporary epoch this idea was propagandized by the biggest specialist of the Georgian language – Academician Akaki Shanidze. The principal arguments of the



opponents was that, in difference with the Latin and Cyrillic alphabets, the alphabet "Mkhedruli", used in the Georgian civic writing, came through the long and difficult path of development, and practically it is very difficult to consider it as a stylistic variant of "Asomtavruli". The initial conservative point of view, which is mostly explained by the existent tradition, ascending to the Arabian-Persian writing, the recent years gradually is under revision. Especially, the interest to the alphabet "Asomtavruli" raised after the disintegration of USSR and the restoration of the Georgian State, that induced the sharp increase of the role of independent Georgian press in the life of the democratic state, for which this alphabet is the important representational instrument.

Taking care of the revival and spiritual development of Georgians, the Orthodox Church highly appreciates and blesses the decision of the Technical Committee to legitimate the use of the alphabet "Asomtavruli", as an independent variant of the Georgian alphabet, that undoubtedly will contribute to the further development of the Georgian writing.

The object of the constant care of the Georgian Orthodox Church is also the alphabet "Nuskhuri", in which is written the overwhelming part of the historically known Georgian holy books, and today is still published the important part of the church literature. The knowledge of this language is obligatory for the persons of the ecclesiastical dignity. The long historical path, passed by the alphabet "Nuskhuri" (factually historically more lasting, than alphabet "Asomtavruli"), determines some particularities in it, which do not allow to consider, that the characters of this alphabet correspond unequivocally to the characters of alphabet "Mkhedruli", especially it is wrong to think, that it is simply another graphical image of the alphabet "Mkhedruli".

One of the commonly known difference is the writing of the character "UN", that in the early variants of the alphabet "Nuskhuri" is the evident ligature of two characters "O" and "VIE", and that corresponds with the conceptual basis of its predecessor – the alphabet "Asomtavruli", and has origin from the Greek tradition of ignoring the phoneme "U". In the later variants of the alphabet "Nuskhuri", this ligature, under the influence of the urgent require of the Georgian orthography, is becoming the congealed combination of signs, that afterwards is passing to the alphabet "Mkhedruli", in somewhat stylized form.

In fact the Georgian alphabet "Nuskhuri" always existed only as a cursive alphabet. That's why the use of graphemes, that are included in it, had considerably the ligature's nature, i.e. the writing of each character depended very strongly on the context of the surrounding characters, like this is a place in the modern Arabian and Persian languages. This example of the creation of the character "U" as a ligature of "O" and "VIE" is only one of the evident examples, reflected in the followed alphabet "Mkhedruli". One can give many other examples of dependence of the writing of grapheme on its surroundings, for example, there are different writings of the character "I" in the contexts "LI", "IT", "TSI", "IP", "RLI", "MI".

Certainly, in the proposals of the Georgian State Department of Information Technology there is only one concrete grapheme for each character of the alphabet "Nuskhuri", that corresponds to the its isolate writing. But the writing of the graphemes of the alphabet "Nuskhuri", adequate to the existing manuscripts, is possible only taking in consideration the mechanism of creation of the ligatures.

It is important to note, that in the initial stage of its existence the alphabet "Mkhedruli" had as well very developed traditions of creation of the ligatures, but considerably different, than they were in the alphabet "Nuskhuri". These traditions were factually extinguished with the appearance of the Georgian polygraph, when each character were written by separate grapheme. Presently the polygraph fonts, created on the base of the alphabet "Mkhedruli", like modern Latin and Cyrillic fonts, do not have the ligatures.

Thus, though there is a reciprocal unequivocal relation between the characters of the alphabets "Nuskhuri" and "Mkhedruli", the alphabet "Nuskhuri", necessary for the writing of more than 90% of the historical monuments of the Georgian writing, in the first place of the ecclesiastical nature, should be represented by the separate set of codes. This is necessary, in the first place, to ensure the possibility of reflection of the unique ligature combinations of characters, inherent only to this alphabet. The complete resolution of this task requires the realization of considerable textologic researches, however, it is necessary already today, to adopt such standard, that would serve as a base for the knowledge representation about the system of characters design in the alphabet "Nuskhuri" (the systems of the artificial intelligence of the same function are developed



for the Arabian writing).

Beside above cited particularities, the alphabet "Nuskhuri" characterizes the use of some important special characters, existing only in this version of the alphabet of the Georgian language, that should be necessarily included in the standard. This is, in particular, a superlinear abbreviations signs "KARAGMNA", marking the standard combinations of characters, inherent to the most frequently used words. For example, the word "YOU" = "shen" is written in most manuscripts as "sh~n", the word "SINCE" = "rametu" as "r~", the word "WHICH" = "romeli" as "r~i", etc.

Another unique particularity of the alphabet "Nuskhuri", occurring only in the manuscripts of X-XI centuries, like the Byzantine manuscripts of the same time, is the use of the special signs for the reflection of the height of the musical tone on singing the correspondent text. The semantic of these signs, studied by the known Georgian scientist Pavle Ingorokva, till this time has not an indisputable interpretation. Beside this, in the alphabet "Nuskhuri" there are yet some original signs of quotation and signs of scholastic. The entire classification of these signs is not yet finished, but they should be also necessarily included in the standards of the alphabet "Nuskhuri".

The comprehension of those losses, that are possible in the case of mechanical equating of the content of three Georgian alphabets, is seen clearly at the scribes of the ecclesiastical books, who were always choosing an alphabet in accordance with a text. In particular, many texts are written in two alphabets and even in all three alphabets. The wide computer archives of such texts is accumulated presently in the Frankfurt University by the worldwide known scientist, Prof. Jost Gippert.

The Georgian Orthodox Church is applying to the Technical Committee with Christian request to promote the spiritual development of the common belief Georgian people, and to legitimate in the world's culture community the use of the alphabet Nuskhuri, as an independent variant of the Georgian alphabet.

Yours sincerely,



**Catholicos Patriarch  
of all Georgia**

ASOMTAVRULI, NUSKHURI and MKHEDRULI GEORGIAN

FOR EXAMPLE:

FOR EXAMPLE:

FOR EXAMPLE:

	107	108	109	10A	10B	10C	10D	10E	10F
0	Ⴊ	Ⴋ	Ⴌ	Ⴍ	Ⴎ	Ⴏ	Ⴐ	Ⴑ	Ⴒ
1	Ⴓ	Ⴔ	Ⴕ	Ⴖ	Ⴗ	Ⴘ	Ⴙ	Ⴚ	Ⴛ
2	Ⴜ	Ⴝ	Ⴞ	Ⴟ	Ⴀ	Ⴁ	Ⴂ	Ⴃ	Ⴄ
3	Ⴅ	Ⴆ	Ⴇ	Ⴈ	Ⴉ	Ⴊ	Ⴋ	Ⴌ	Ⴍ
4	Ⴎ	Ⴏ	Ⴐ	Ⴑ	Ⴒ	Ⴓ	Ⴔ	Ⴕ	Ⴖ
5	Ⴗ	Ⴘ	Ⴙ	Ⴚ	Ⴛ	Ⴜ	Ⴝ	Ⴞ	Ⴟ
6	Ⴀ	Ⴁ		Ⴂ	Ⴃ		Ⴄ	Ⴅ	Ⴆ
7	Ⴇ	Ⴈ		Ⴉ	Ⴊ		Ⴋ	Ⴌ	Ⴍ
8	Ⴎ	Ⴏ		Ⴐ	Ⴑ		Ⴒ	Ⴓ	Ⴔ
9	Ⴊ	Ⴋ		Ⴌ	Ⴍ		Ⴎ	Ⴏ	Ⴐ
A	Ⴓ	Ⴔ		Ⴕ	Ⴖ		Ⴗ	Ⴘ	Ⴙ
B	Ⴚ	Ⴛ		Ⴜ	Ⴝ		Ⴞ	Ⴟ	
C	Ⴀ	Ⴁ		Ⴂ	Ⴃ		Ⴄ	Ⴅ	
D	Ⴇ	Ⴈ		Ⴉ	Ⴊ		Ⴋ	Ⴌ	
E	Ⴎ	Ⴏ		Ⴐ	Ⴑ		Ⴒ	Ⴓ	
F	Ⴊ	Ⴋ		Ⴌ	Ⴍ		Ⴎ	Ⴏ	