L2/01-046

Georgian State Department of Information Technology

✂/FAX: (99532) 99-78-66
E_mail: gsdit@access.sanet.ge

77 Kostava Str., Tbilisi, Georgia, zip code: 380075

№ 08-1/8, 22.01.2001

To: **Lisa Moore**
Chair, Unicode Technical Committee

From: **David Tarkhan-Mouravi, Chairman**

Dear Mrs. Moore,

The Georgian State Department of Information Technology has honor to express its deep respect to the Technical Committee of Unicode and provides the following information in response of your letter 01006.rtf:

1. The order of arrangement of the Georgian characters while its standardization has a principal importance for the Georgian culture and technology.

1.1 Referred order takes its origin from the 1500-years old tradition of existence of monuments of the Georgian writing and represents the most important attribute of national culture, at the same time reflecting in indirect form the important protolinguistic knowledge about the Georgian language. The alteration of this order, resulted from the insufficient competence of the expert, occasionally involved by the international organization, looks at least unpersuasive.

1.2. Those five characters, that are placed in the present Unicode-propositions at the end of the alphabet for the reasons of their archaistic nature, in fact are not archaistic, i.e. not used in the modern publishing. The archaistic characters are, for example, in the Russian language, in which the characters, excluded from it by the communist reform of 1918, are never used these days, and all historic texts are written without them. In the Georgian language, unlike the Russian language, the reform of the writing, that was carried out at the end of XIX century, simplified the orthography by means of above referred characters, but not regarded to the historic texts, that are written in the full 38 character alphabet, and without them their writing becomes incorrect. The phonemes, designated by these characters are present today in the dialects of the Georgian language, and in the classic works of literature of the Georgian writers and poets of the early epoch. In particular, the rejection of these characters is not possible without loosing of the transmission of the exact rhythm of the classic work of the Georgian literature "The knight in the tiger's skin" of Shota Rustaveli. The well-known example of the analogous justified conservatism is the rejection by the Anglophone countries of the well-known proposition of Bernard Show about the reform of the English writing.

1.3. In the Georgian language, like in Greek, Armenian and some other languages of Near-Est, is preserved a tradition to write the numbers from 1 to 9999 by the numeric interpretation of 36 characters of alphabet. The displacement of above referred five characters, that we should make for system reasons not only for Mkhedruli, but for Asomtavruli too, obviously will destroy the logic of the representation of the numbers, which is widely enough used in the modern texts, especially in those with scientific and religious nature.

1.4. The presence in the proposed Unicode-standard at the same time of Asomtavruli and Mkhedruli scripts means, that the displacement of five characters at the end of the alphabet leads to the inevitable contradiction in the logic structure of the standard. If this displacement is made only in script Mkhedruli, then the conformity of the codes between the scripts Asomtavruli and Mkhedruli is destroyed, as in the historical variant of the script Asomtavruli these characters were always placed not at the end, but in that places of the alphabetic sequence, which were corresponding to their numeric meaning. And if this displacement is made at once in both scripts, then on preserving the order of the codes, is destroyed the historically existing and fixed during 1500 years order of characters in the script Asomtavruli.

1.5. Above referred five characters are necessary to write texts in the three Kartvelian languages that are in close relationship with the Georgian language (see p.2 below).

2. The extension of the Unicode-standard by three characters in the positions 10F7, 10F8 and 10F9, that is proposed by the Georgian State Department of Information Technology, is motivated by the necessity of the standardization of the text-writing not only in the Georgian language, but also in three Kartvelian languages, which are in close relationship with it: Megrelian, Laz and Svan.

2.1 Cited three languages are very close to the Georgian language and used by three ethnic groups of Georgians: Megrelians (about 1 million), Lazs (in the territory of Georgia there are several thousands, in Turkey there are, by very roughly estimates, more than 500 thousands), and Svans (less than 100 thousands), which had not their own writings till this time. The problem of the text-writing in these languages historically was not actual because the religious procedures in the Georgian Orthodox church (since 337) and the documentation of the unified Georgian State (since XI century) were carried out only in Georgian language. The problem became actual in the end of XIX century because of scientific study of these languages and a fixation of the monuments of the oral literature, the publishing of their dictionaries and reader. In this period, by the Georgian linguists with the participation of well-known foreign scientists, were studied in details the phonetic properties and grammar of these languages, and then were created the graphical patterns of the proposed characters, that are coordinated with the graphic of the Georgian language.

2.2 In these days, in connection with the wide democratic reforms in the Georgian State, the status of these languages is constantly rising according to the international standards. In the development of this process, the support by the world community of the battle of Georgia against the aggressive separatism is playing a big role. All that makes very actual in perspective the task of preparation of the linguistic infrastructure for the development of civil society of the future Georgian State. The important part of this problem is the standardization of necessary additional characters of the Georgian alphabet, that was already carried out by the Department, with the personal control by the President of Georgia, Mister Eduard Shevardnadze. These characters is necessary to standardize at the level of international requirements, in the first place in such an authoritative organization, as UTC.

2.3 Already in XIX century all scientists concluded, that for the text-writing in these languages, taking into consideration their phonetic, structuralistic, lexicon, and geographic proximity to the Georgian language, the Georgian alphabet fits the best, on condition that five characters would be used (see p.1 above), which are not used in the orthography of the modern Georgian language. Aside them, it is necessary to use yet another four characters, one of them (FITA) is already included in the proposition for Unicode-standard in the position 10F6.

2.3.1 10F7: U-BRJGU - labial variant of ordinary “U”.

2.3.2 10F8: AINI; the approximate similar phoneme, which exists in the majority of the dialects of the Arabian language.

2.3.3 10F9: IRRATIONAL VOWEL; this phoneme exists in the majority of the North-Caucasian languages, though in many of them it is not used because of restrictions, connected with the Cyrillic alphabet, which was imposed to these languages by force, in tragic 30-th.

2.4 The particularity of the encoding of the character 10F7 U-BRJGU is that it can be considered as a precomposed character, consisting of two grapheme in one field: UN (Georgian U) and CIRCOMFLEX (upper diacritical sign), that can be the counter argument against its own position for its code. In fact such resolution will be wrong, as a character U-BRJGU was introduced in the

Georgian writing not in the XIX-XX centuries, like other characters of the Kartvelian languages, but much earlier – in the XVI-XVII centuries, when the Georgian society got acquainted with the advanced European science by that time, including with the polygraph technology, which was developed by that time. Presently there is a big number of monuments of the Georgian writing, written and published by means of this character, and while their publishing during 300 years, there was established a tradition of using the fonts with the separate code position for U-BRJGU, and its infraction would create the considerable difficulties in publishing of such texts.

It is necessary to note, that the Georgian language have a vary old tradition of the creation of the precomposed characters, which was established in the IX-X centuries in the script Nuskhuri. That is connected with the fact that in the original variant of the Georgian alphabet, as well as in Armenian, Coptian, Goth, Oldslav and some other alphabets, which were developed under the influence of Greek alphabet, it was missing a separate character "U", which were not needed in the prototype – Greek alphabet. For the writing of the character "U" in Asomtavruli were used a ligature of two characters: "ON" + "VIE", which were unified later in one grapheme, receiving a phonetic interpretation as "U".

Yet more important argument for the allocation of the separate encoding position for U-BRJGU is its special role in the writing of texts in the Svan language. As it is known, in that language, unlike any other Caucasian language, it is missing a phoneme "V", which is pronounced as labial "U", that determines an unique importance of that phoneme in text writing in Svan language and will complicate considerably the transition in new system of encoding for the numerous texts, which are transferred into machine form presently.

2.5 In the annex of this text there are given the examples of the newly published texts in Megrelian and Svanian languages, which include above-described characters. On request of the UTC the illustrative material can be widen.

The question of the presentation of the script Nuskhuri in the Unicode-standard has a great importance for the presentation of the oldest historical and religious texts in Georgian language. The appearance of this script coincides in time with the prosperity of the domination of the Arabian Khalifat in Georgia (IX century), which, despite of the cruelty of occupants, incurred some development of the Georgian culture under the influence of the Arabian culture (perhaps for the opposition to it by the Georgian religion and culture), which was one of the most developed culture by this time. In particular, there was an essential development of the Georgian writing, and the creation of the Christian documents. In this epoch was created factually completely new form of writing Nuskhuri, oriented, in difference with Asomtavruli, to the fast writing on paper (while Asomtavruli was oriented to the convenience of the inscriptions on the stone walls of the numerous Christian churches, that were under construction by that time).

At the same time, in the Georgian language is making a disruption with the Greek tradition, that was expressed in the creation of the character "U", and also is making the considerable changes of the grammar and the lexicon of the language, that are called by the specialists-Kartvelologists "the end of the epoch of KHANMETI". Approximately at the same time, under the influence of the Arabian and Persian cultures and writing, in the civil circles (not belonging to the clergy) is creating yet another form of writing - Mkhedruli, reflecting the same processes, as Nuskhuri, but oriented to the completely different social context, in the first place – to the economic and military life. Because of these social processes, in particular, in particular it became possible the appearance of the historical documents, in which there are all scripts at once – Asomtavruli, Nuskhuri, Mkhedruli; that is the reflection of some social realities. One can note here the semantic parallels with the Gothic and ordinary Latin scripts in the European (in the first place – German) cultures. The examples of the Georgian texts with use of three scripts, as far as we know, were sent to UTC by the well-known German specialist in Kartvelology, Prof. Jost Gippert. The more detailed explanation of the arguments, confirming that the script Nuskhuri is an independent script of the Georgian language, and has its own field of application, independent from Mkhedruli, will be gently prepared on our request by the specialists of the Patriarchy of the Georgian Orthodox church and will be sent to UTC in the other day.

3 In conclusion I consider that it is necessary to emphasize, that the Georgian State Department of Information Technology is making decisions on standardization of the various aspects of the Georgian

language only based on the opinion of the most qualified specialists in this field in Georgia and abroad. In particular, the biggest influence in decision making had a point of view of such authoritative scientists in the field of Kartvelology, as deceased Prof. Gerhardt Deeters (Germany), Georgiy Klimov (Russia), now working Prof. Jost Gippert, Wilfried Boeder, Heinz Faehnrich (Germany), Donald Rayfield (England), Howard Aronson (USA), and many others. Among the Georgian scientists it is necessary to note the opinion of such recognized authoritative scientists, as Academicians Akaki Shanidze, Arnold Chikobava, Tomas Gamkrelidze.

The Georgian State Department of Information Technology respects absolutely the principle of minimal changes in already adopted standards, that is maintained by the UTC, and understands its importance from the point of view of the support of continuity of policy and integrity of international standards having worldwide importance. However, it is impossible to deny, that this is charging with special responsibility the selection of the experts, who are stating their final opinion on the key issues of the national cultures of the relatively not-numerous nations, having at the same time the language, not belonging to the Indo-European family and not using the writing on the base of the Latin alphabet. The technical mistake of the single expert in such a complex context should not be a base for the incorrect resolution of the very important scientific and practical task, that has already created some problems for Georgia.

In connection with above-said, we are strongly asking you to support us in the given situation, and to further the adoption of our proposals, as exception.

Yours sincerely,

David Tarkhan-Mouravi,
Chairman