Universal Multiple-Octet Coded Character Set

Doc Type: ISO/IEC JTC1/SC2/WG2

Title: Proposal for modifying the Old Hungarian block (range 10C80-10CFF)

Source: Institute for Hungarian Studies (Magyarságkutató Intézet)

Status: Expert Contribution

Experts: Bence FEHÉR, József Álmos KATONA

Action: For consideration by UTC and ISO/IEC JTC1/SC2/WG2

Date: 2021-04-12

About the proposal

Following the Unicode 14.0 Alpha Review this expert contribution is a feedback for the alpha review reported under PRI #428 by April 12, 2021.

This document contains the proposal of the Institute for Hungarian Studies to modify and add the items listed below to the so-called "Old Hungarian" block (<u>range 10C80-10CFF</u>). Please send any response to:

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The purpose of the proposal is to repeatedly highlight that the recent standard has misleading names, naming issues, missing characters and contains inaccurate elements that prevent both the proper scientific and contemporary usage, and thus it is forcing the major part of the Szekely-Hungarian Rovas user base to introduce and apply alternative solutions instead of the Unicode standards.

About the Experts

The Institute for Hungarian Studies (Magyarságkutató Intézet) has been established on the 1st of January, 2019 by the Government of Hungary and the Ministry of Human Capacities (Emberi Erőforrások Minisztériuma) with the goal to lead research activities regarding Hungarian genealogy, history and language, hold scientific events and publish on these fields.

The Institute for Hungarian Studies comprises of 8 Research Centres, of which 2 – the Research Centre for Classical Philology and the Research Centre for Language Planning – conduct scientific research activities related to ancient scripts (including Szekely-Hungarian Rovas) in the Carpathian Basin, and work on the language strategy of the Hungarian language – including the contemporary use and education of the Szekely-Hungarian Rovas.

The authors of the proposal are dr. habil Bence FEHÉR, DSc – director of the Research Centre for Classical Philology and József Álmos KATONA – director of the Research Centre for Language Planning at the Institute for Hungarian Studies.

List of modifications

1. Proposed name for the block: Szekely-Hungarian Rovas

First, the present name "Old Hungarian" leads to serious ambiguity, since this term is already used by Hungarian linguists for denoting a period in the history of the Hungarian language in which mostly the Latin script was used. For example, an article titled <u>Old Hungarian Codices</u> published in the Transactions of the Philological Society uses the term Old Hungarian orthography for the medieval, Latin script orthography of the Hungarian language. More arguments are to be found in <u>N4371</u> (<u>L2/12-332</u>). Therefore, using the term "Old Hungarian" for Rovas is incoherent.

Secondly, the Szekely-Hungarian Rovas is a contemporary script with rapidly growing user base, innovative technological solutions, gradual introduction to the educational system and emerging role in language planning – differing from extinct scripts usually named with the "Old" prefix.

Thirdly, the term for the proposed name "Szekely-Hungarian Rovas" is well-established in scientific literature, in the language use of contemporary user base, in technological developments and in public media as well. In contrast, alternatives like "Old Hungarian", "Hungarian Runic" etc. are misleading and non-scientific.

Finally, the Unicode standard now is in conflict with ISO 639-3 standards, where "Old Hungarian" is reserved for an extinct language used between 11th–16th centuries.

Refer to Appendix 5. for examples of use of "Old" prefix.

2. Proposed addition of missing characters

Ideally, the recent standard already would contain both the full set of scientifically proven historical, contemporary characters and numerals. In order to enable the recent standard to be used by the Szekely-Hungarian Rovas user base, we propose the following extension of the character set.

Refer to Appendix 1. for the proposed positions on the Unicode code chart.

2.a. Contemporary characters

First, we should comply with the needs of contemporary users through the use of the Unicode standard instead of bypassing it or using alternative solutions. To reach this goal, the following characters with individual code points are needed. The proposed allocation of the characters are:

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U+10CB3  
SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER DZ
U+10CB4  
SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER DZS
U+10CB5  
SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER Q
U+10CB6  
SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER W
U+10CB7  
SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER X
U+10CB8  
SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER Y

U+10CF3  
SZEKELY-HUNGARIAN ROVAS SMALL LETTER DZ
U+10CF4  
SZEKELY-HUNGARIAN ROVAS SMALL LETTER DZS
U+10CF5  
SZEKELY-HUNGARIAN ROVAS SMALL LETTER Q
U+10CF6  
SZEKELY-HUNGARIAN ROVAS SMALL LETTER W
U+10CF7  
SZEKELY-HUNGARIAN ROVAS SMALL LETTER W
U+10CF7  
SZEKELY-HUNGARIAN ROVAS SMALL LETTER X
U+10CF8  
SZEKELY-HUNGARIAN ROVAS SMALL LETTER X
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Please note the following:

The above mentioned Szekely-Hungarian Rovas characters are historical ones (some of them are almost 4 centuries old, and had been integrated into various alphabets). Their contemporary usage is also widespread. Most importantly, they are indispensable to transcribe Latin script to Szekely-Hungarian Rovas script (and vice versa).

Although the historical development of the characters DZ, DZS, Q, W, X and Y is similar to the method by which ligatures are created, these characters are not representing ligatures but individual characters both in the Hungarian version of the Latin script and in the Szekely-Hungarian Rovas script.

Furthermore, there are manufacturers (e.g. Apple) which do not support ligatures, thus the use of ZWJ (Zero Width Joiner) should be avoided.

Refer to Appendix 2. for examples of the above mentioned characters and why they cannot be replaced by ligatures.

Refer to Appendix 3. for downloadable font including the proposed characters.

2.b. Contemporary vowel Ű

In Hungarian the distinction between short and long vowels is essential – regardless which script is used. Furthermore, the short and long vowel pairs are topologically identical with systematic alteration, marking the length with diacritics: A–Á, E–É, I–Í, O–Ó, Ö–Ő, U–Ú, Ü–Ű.

During the development of the Szekely-Hungarian Rovas – presumably due to partial interaction with the Hungarian orthography of the Latin script – the differentiation of short and long vowels with topologically identical glyph variations happened gradually. Thus, by the late third of the 20th century, the majority of the vowel character pairs were finalized with slight differences depending on regions, user groups.

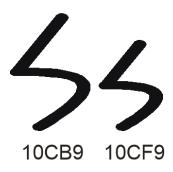
The latest development of the last decades is the usage of a distinctive contemporary \H U (UEE) – historical glyph variation used for \H U– \H U (UE–UEE) – that avoided the topological divergence which can be seen in the case of OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG UE versus the OLD HUNGARIAN CAPITAL LETTER RUDIMENTA UE – used for \H U– \H U (UE–UEE). Furthermore, the contemporary UEE avoids the misunderstanding and ambiguity caused by the fact that OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG UE is used for multiple sound values: \H U, \H U, \H U, \H U(UE, UEE, OE).



Historical examples of the proposed Ű (UUE) (ISBN 978-963-88437-1-5, p. 101)

Therefore, we propose to include the distinctive characters to the standard as follows:

U+10CB9 SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER UEE U+10CF9 SZEKELY-HUNGARIAN ROVAS SMALL LETTER UEE



2.c. Numeral 500

An important Szekely-Hungarian Rovas numeral - that is both topologically fitting the logical sequence of Rovas numerals and in use historically, contemporarily – is still missing from the recent Unicode standard, thus forcing the users to find bypass solutions. Therefore, we propose to include the following numeral:

U+10CBF ¥ SZEKELY-HUNGARIAN ROVAS NUMBER 500



Refer to Appendix 3. for actual downloadable font including this proposed character.

Refer to Appendix 4. for the historical and contemporary examples of the use of the above mentioned character.

3. Proposed change of characters

Reviewing the proposals submitted during the Szekely-Hungarian Rovas standardization procedure, the following issues seem to be already addressed but not modified. Based on priority, we propose to reconsider the following requests:

3.1. Ë - 10C8A / 10CCA Old Hungarian Capital / Small Letter Close E

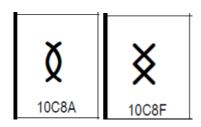
Requested changes:

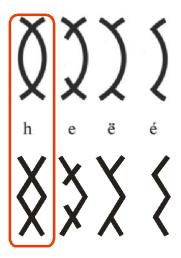
- 1. Change of the glyph.
- 2. Change of name (see Chapter 4.).

Recent code description:

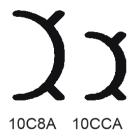
Reasoning:

1. The recent glyph of CLOSE E is topologically identical with 10C8F OLD HUNGARIAN CAPITAL LETTER EH, so the font design could lead to ambiguity and misunderstandings. It is noteworthy though that in some historical Szekely-Hungarian Rovas inscriptions the same glyph was used for the EH and CLOSE E.

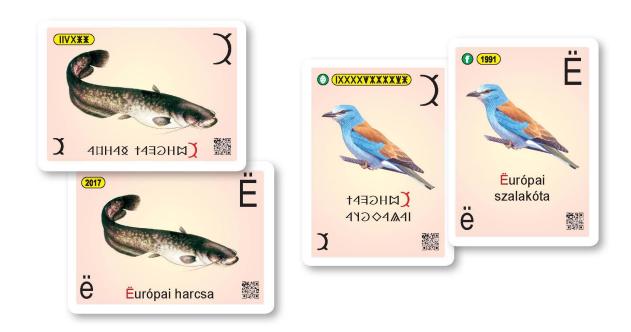




- 2. Members of the user base already submitted individual proposals about this issue, including the glyph design: <u>L2/12-218</u>. Most Hungarian dialects differentiate between e and ë. This means that they pronounce the two e sounds differently, and sometimes this results in a difference of meaning as well.
- 3. The proposed glyph variant is based on a historical glyph variation of E, which existed next to E and EE according to historical sources, therefore it could not be confused with letter EH.



4. The proposed form of the Szekely-Hungarian Rovas CLOSE E is already in practical contemporary use, just as the use of Ë–ë in the Hungarian version of the Latin script – thus preserving this feature of certain dialects in written form.



Popular educational matching pairs cards (First published 2009, Second edition 2021, published by Ráckevei Dunaági Horgász Szövetség, Hungary)

3.2. Ö - 10C9D / 10CDD Old Hungarian Capital / Small Letter Nikolsburg OE

The requested changes:

- 1. Change of name by removing "NIKOLSBURG".
- 2. Proposed names: CAPITAL LETTER OE, SMALL LETTER OE
- 3. Add to the code description of 10C9D: "also used for $\ddot{\text{U}}$ " similarly to 10CDD

Recent code description:

10C9D > OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG OE = Ö

10CDD → OLD HUNGARIAN SMALL LETTER NIKOLSBURG

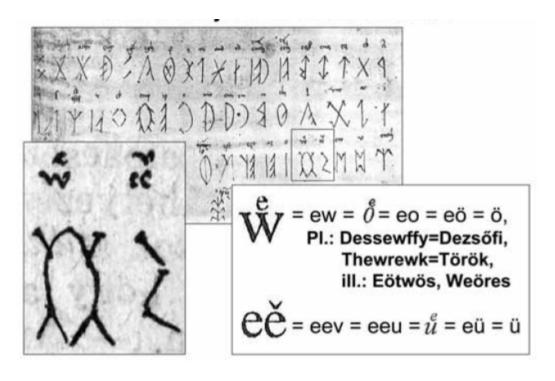
= ö

also used for ü

Reasoning:

1–2. The character "NIKOLSBURG" OE represents sound Ö in several sources; the most unambiguous of them is not the Nikolsburg alphabet but the alphabet of Marsigli. Since the other OE character (RUDIMENTA OE in the present standard) is represented only by historical inscriptions (in its present form it does not appear in the major alphabets), there is no need for distinction in the name of this letter – supposing the present character RUDIMENTA OE is named correctly.

Therefore, we propose to remove NIKOLSBURG word from the name: CAPITAL LETTER OE, SMALL LETTER OE



Source: Ferenc Sólyom (2008) in Élő Rovás, ISBN 978-963-87967-5-2 p.124

- 3. The code description of the small and capital letters shall be the same, containing the term: "also used for "u".
- 3.3. Ö 10C9E / 10CDE Old Hungarian Capital / Small Letter Rudimenta OE

The requested changes:

1. Change of name by replacing RUDIMENTA to CSIKSZENTMIHÁLY

Recent code description:

10C9E K OLD HUNGARIAN CAPITAL LETTER RUDIMENTA OE

= Ö

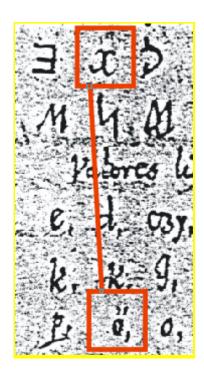
Reasoning:

The reference to Rudimenta is incorrect and the correct one is Csíkszentmihály. The glyph variant of the Rudimenta (with several other historical alphabets) is only a handwritten variant based on the glyph variant of the Csíkszentmihály inscription. It is absent from contemporary usage, because it can easily be mistaken for the glyph EB. Therefore, we propose replacing the word "Rudimenta" to "Csíkszentmihály" (Letter OE).

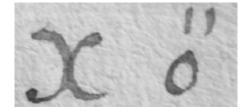
See the differences on the three copies of Rudimenta.



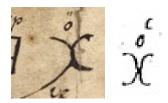
Csíkszentmihály inscription (1501) K shaped Ö (OE) letter



The Rudimenta ö/ő OE/OEE in the manuscript of Giessen



The Rudimenta ö/ő OE/OEE in the manuscript of Nagyenyed



Szilágyi István alphabet based on Rudimenta (1655)

3.4. Ű - 10CAC / 10CEC Old Hungarian capital / small letter Nikolsburg UE The requested changes:

1. Change of name by replacing NIKOLSBURG to HISTORICAL

Recent code description:

10CAC X OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG UE

=Ü

- also used for Ö
- used for Ű in Sándor Forrai's orthography

10CAD 4 OLD HUNGARIAN CAPITAL LETTER RUDIMENTA UE

= Ü, Ű

• used for Ü in Sándor Forrai's orthography

Reasoning: The character "NIKOLSBURG" UE represents $/\ddot{U}/$ in several sources, the most unambiguous of them is not the Nikolsburg alphabet. Historically, the use of the glyph was divergent: it represents UE = \ddot{U} in Marsigli's alphabet, OE = \ddot{O} in Kájoni's first alphabet. Its phonetic value is doubtful in the Nikolsburg alphabet.

In the inscriptions, the rare occurrences of the glyph are undecipherable, probably confused with the glyph AMB which is much alike in its shape. In the contemporary usage it is rare but not exceptional.

3.5. Ű - 10CAD / 10CED Old Hungarian capital / small letter Rudimenta UE

The requested changes:

1. Change of name by removing RUDIMENTA

Reasoning: The character "RUDIMENTA" UE was a historical glyph variant of the presently proposed glyph UEE, with the phonetic value \ddot{U} = UE and \ddot{U} = UEE, similar but not exactly the same as it appears in the Rudimenta. For the historical usage of the glyph, see 2.b., the proposal for the insertion of the glyph UEE. The value of the glyph was standardized as UE = \ddot{U} in contemporary usage, from the end of the 20th century onward.

3.6. TPRUS - 10CB1 / 10CF1 Old Hungarian capital / small letter Ent-shaped sign The requested changes:

- 1. Change of name by replacing ENT SHAPED SIGN to TPRUS.
- 2. Change description by removing the sentence in brackets.

Recent code description:

10CB1 OLD HUNGARIAN CAPITAL LETTER ENTSHAPED SIGN

 in earlier literature called "tprus" (later recognized as an abbreviation for "temperius")

Reasoning:

The present name and description (later recognized as an abbreviation for "temperius") are incorrect, because they are based on a scientifically still debated hypothesis. Furthermore, the descriptions are different at the small letter and at the capital letter version.

The proposed names are CAPITAL LETTER TPRUS and SMALL LETTER TPRUS. And the proposed description is: the name of the letter is TPR- in the Nikolsburg alphabet, with a contraction sign which in the earlier literature was interpreted as -US. Therefore the denomination of the glyph is generally TPRUS in contemporary use.

4. Proposed naming of the characters

Requested changes:

- 1. Replacing "Old Hungarian" with "Szekely-Hungarian Rovas" according to Chapter 1.
- 2. Replacing incorrect name elements referring to the character names.

Reasoning:

The Hungarian version of the Latin script has a standard letter naming tradition based on long historical practice. The contemporary Szekely-Hungarian Rovas almost exclusively follows this naming system – along with other orthographic and practical rules to ensure the highest possible level of mutual transcription.

Although few historical Szekely-Hungarian Rovas ABCs do differ from the above-mentioned conventional naming system (and the reason why is yet unknown), and few user groups use some variations of the non-conventional character names in their reprints of their Szekely-Hungarian Rovas ABC-variants, the vast majority of the user base do neither understand nor refer to these non-conventional character names.

The recent Unicode standard uses the non-conventional character names leading to further ambiguity as these names partially overlap with the right pronunciation of the standard Hungarian letter names.

Therefore, we propose the Hungarian and English names according to the following table:

Code Point	Unicode 13.0 Old Hungarian name	Proposed name
10C80	OLD HUNGARIAN CAPITAL LETTER A	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER A
10C81	OLD HUNGARIAN CAPITAL LETTER AA	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER AA
10C82	OLD HUNGARIAN CAPITAL LETTER EB	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER B
10C83	OLD HUNGARIAN CAPITAL LETTER AMB	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER AMB
10C84	OLD HUNGARIAN CAPITAL LETTER EC	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER C
10C85	OLD HUNGARIAN CAPITAL LETTER ENC	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER ENC
10C86	OLD HUNGARIAN CAPITAL LETTER ECS	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER CS
10C87	OLD HUNGARIAN CAPITAL LETTER ED	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER D
10CB3	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER DZ

10CB4	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER DZS		
10C88	OLD HUNGARIAN CAPITAL LETTER AND	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER AND		
10C89	OLD HUNGARIAN CAPITAL LETTER E	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER E		
10C8A	OLD HUNGARIAN CAPITAL LETTER CLOSE E	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER CLOSE E		
10C8B	OLD HUNGARIAN CAPITAL LETTER EE	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER EE		
10C8C	OLD HUNGARIAN CAPITAL LETTER EF	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER F		
10C8D	OLD HUNGARIAN CAPITAL LETTER EG	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER G		
10C8E	OLD HUNGARIAN CAPITAL LETTER EGY	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER GY		
10C8F	OLD HUNGARIAN CAPITAL LETTER EH	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER H		
10C90	OLD HUNGARIAN CAPITAL LETTER I	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER I		
10C91	OLD HUNGARIAN CAPITAL LETTER II	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER II		
10C92	OLD HUNGARIAN CAPITAL LETTER EJ	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER J		
10C93	OLD HUNGARIAN CAPITAL LETTER EK	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER K		
10C94	OLD HUNGARIAN CAPITAL LETTER AK	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER AK		
10C95	OLD HUNGARIAN CAPITAL LETTER UNK	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER UNK		
10C96	OLD HUNGARIAN CAPITAL LETTER EL	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER L		
10C97	OLD HUNGARIAN CAPITAL LETTER ELY	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER LY		
10C98	OLD HUNGARIAN CAPITAL	SZEKELY-HUNGARIAN ROVAS		

	LETTER EM	CAPITAL LETTER M
10C99	OLD HUNGARIAN CAPITAL LETTER EN	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER N
10C9A	OLD HUNGARIAN CAPITAL LETTER ENY	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER NY
10C9B	OLD HUNGARIAN CAPITAL LETTER O	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER O
10C9B	OLD HUNGARIAN CAPITAL LETTER OO	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER OO
10C9D	OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG OE	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER OE
10C9E	OLD HUNGARIAN CAPITAL LETTER RUDIMENTA OE	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER CSIKSZENTMIHALY OE
10C9E	OLD HUNGARIAN CAPITAL LETTER OEE	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER OEE
10CA0	OLD HUNGARIAN CAPITAL LETTER EP	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER P
10CB5	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER Q
10CA1	OLD HUNGARIAN CAPITAL LETTER EMP	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER EMP
10CA2	OLD HUNGARIAN CAPITAL LETTER ER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER R
10CA3	OLD HUNGARIAN CAPITAL LETTER SHORT ER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER SIMPLE R
10CA4	OLD HUNGARIAN CAPITAL LETTER ES	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER S
10CA5	OLD HUNGARIAN CAPITAL LETTER ESZ	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER SZ
10CA6	OLD HUNGARIAN CAPITAL LETTER ET	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER T
10CA7	OLD HUNGARIAN CAPITAL LETTER ENT	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER ENT
10CA8	OLD HUNGARIAN CAPITAL LETTER ETY	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER TY

10CA9	OLD HUNGARIAN CAPITAL LETTER ECH	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER CH
10CAA	OLD HUNGARIAN CAPITAL LETTER U	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER U
10CAB	OLD HUNGARIAN CAPITAL LETTER UU	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER UU
10CAC	OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG UE	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER HISTORICAL UE
10CAD	OLD HUNGARIAN CAPITAL LETTER RUDIMENTA UE	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER UE
10CB9	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER UEE
10CAE	OLD HUNGARIAN CAPITAL LETTER EV	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER V
10CB6	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER W
10CB7	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER X
10CB8	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER Y
10CAF	OLD HUNGARIAN CAPITAL LETTER EZ	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER Z
10CB0	OLD HUNGARIAN CAPITAL LETTER EZS	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER ZS
10CB1	OLD HUNGARIAN CAPITAL LETTER ENT-SHAPED SIGN	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER TPRUS
10CB2	OLD HUNGARIAN CAPITAL LETTER US	SZEKELY-HUNGARIAN ROVAS CAPITAL LETTER US
10CC0	OLD HUNGARIAN SMALL LETTER A	SZEKELY-HUNGARIAN ROVAS SMALL LETTER A
10CC1	OLD HUNGARIAN SMALL LETTER AA	SZEKELY-HUNGARIAN ROVAS SMALL LETTER AA

10CC2	OLD HUNGARIAN SMALL LETTER EB	SZEKELY-HUNGARIAN ROVAS SMALL LETTER B
10CC3	OLD HUNGARIAN SMALL LETTER AMB	SZEKELY-HUNGARIAN ROVAS SMALL LETTER AMB
10CC4	OLD HUNGARIAN SMALL LETTER EC	SZEKELY-HUNGARIAN ROVAS SMALL LETTER C
10CC5	OLD HUNGARIAN SMALL LETTER ENC	SZEKELY-HUNGARIAN ROVAS SMALL LETTER ENC
10CC6	OLD HUNGARIAN SMALL LETTER ECS	SZEKELY-HUNGARIAN ROVAS SMALL LETTER CS
10CC7	OLD HUNGARIAN SMALL LETTER ED	SZEKELY-HUNGARIAN ROVAS SMALL LETTER D
10CF3	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER DZ
10CF4	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER DZS
10CC8	OLD HUNGARIAN SMALL LETTER AND	SZEKELY-HUNGARIAN ROVAS SMALL LETTER AND
10CC9	OLD HUNGARIAN SMALL LETTER E	SZEKELY-HUNGARIAN ROVAS SMALL LETTER E
10CCA	OLD HUNGARIAN SMALL LETTER CLOSE E	SZEKELY-HUNGARIAN ROVAS SMALL LETTER CLOSE E
10CCB	OLD HUNGARIAN SMALL LETTER EE	SZEKELY-HUNGARIAN ROVAS SMALL LETTER EE
10CCC	OLD HUNGARIAN SMALL LETTER EF	SZEKELY-HUNGARIAN ROVAS SMALL LETTER F
10CCD	OLD HUNGARIAN SMALL LETTER EG	SZEKELY-HUNGARIAN ROVAS SMALL LETTER G
10CCE	OLD HUNGARIAN SMALL LETTER EGY	SZEKELY-HUNGARIAN ROVAS SMALL LETTER GY
10CCF	OLD HUNGARIAN SMALL LETTER EH	SZEKELY-HUNGARIAN ROVAS SMALL LETTER H
10CD0	OLD HUNGARIAN SMALL LETTER I	SZEKELY-HUNGARIAN ROVAS SMALL LETTER I
10CD1	OLD HUNGARIAN SMALL LETTER II	SZEKELY-HUNGARIAN ROVAS SMALL LETTER II

10CD2	OLD HUNGARIAN SMALL LETTER EJ	SZEKELY-HUNGARIAN ROVAS SMALL LETTER J
10CD3	OLD HUNGARIAN SMALL LETTER EK	SZEKELY-HUNGARIAN ROVAS SMALL LETTER K
10CD4	OLD HUNGARIAN SMALL LETTER AK	SZEKELY-HUNGARIAN ROVAS SMALL LETTER AK
10CD5	OLD HUNGARIAN SMALL LETTER UNK	SZEKELY-HUNGARIAN ROVAS SMALL LETTER UNK
10CD6	OLD HUNGARIAN SMALL LETTER EL	SZEKELY-HUNGARIAN ROVAS SMALL LETTER L
10CD7	OLD HUNGARIAN SMALL LETTER ELY	SZEKELY-HUNGARIAN ROVAS SMALL LETTER LY
10CD8	OLD HUNGARIAN SMALL LETTER EM	SZEKELY-HUNGARIAN ROVAS SMALL LETTER M
10CD9	OLD HUNGARIAN SMALL LETTER EN	SZEKELY-HUNGARIAN ROVAS SMALL LETTER N
10CDA	OLD HUNGARIAN SMALL LETTER ENY	SZEKELY-HUNGARIAN ROVAS SMALL LETTER NY
10CDB	OLD HUNGARIAN SMALL LETTER O	SZEKELY-HUNGARIAN ROVAS SMALL LETTER O
10CDC	OLD HUNGARIAN SMALL LETTER OO	SZEKELY-HUNGARIAN ROVAS SMALL LETTER OO
10CDD	OLD HUNGARIAN SMALL LETTER NIKOLSBURG OE	SZEKELY-HUNGARIAN ROVAS SMALL LETTER OE
10CDE	OLD HUNGARIAN SMALL LETTER RUDIMENTA OE	SZEKELY-HUNGARIAN ROVAS SMALL LETTER CSIKSZENTMIHALY OE
10CDF	OLD HUNGARIAN SMALL LETTER OEE	SZEKELY-HUNGARIAN ROVAS SMALL LETTER OEE
10CE0	OLD HUNGARIAN SMALL LETTER EP	SZEKELY-HUNGARIAN ROVAS SMALL LETTER P
10CF5	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER Q
10CE1	OLD HUNGARIAN SMALL LETTER EMP	SZEKELY-HUNGARIAN ROVAS SMALL LETTER EMP
10CE2	OLD HUNGARIAN SMALL LETTER ER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER R

10CE3	OLD HUNGARIAN SMALL LETTER SHORT ER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER SIMPLE R	
10CE4	OLD HUNGARIAN SMALL LETTER ES	SZEKELY-HUNGARIAN ROVAS SMALL LETTER S	
10CE5	OLD HUNGARIAN SMALL LETTER ESZ	SZEKELY-HUNGARIAN ROVAS SMALL LETTER SZ	
10CE6	OLD HUNGARIAN SMALL LETTER ET	SZEKELY-HUNGARIAN ROVAS SMALL LETTER T	
10CE7	OLD HUNGARIAN SMALL LETTER ENT	SZEKELY-HUNGARIAN ROVAS SMALL LETTER ENT	
10CE8	OLD HUNGARIAN SMALL LETTER ETY	SZEKELY-HUNGARIAN ROVAS SMALL LETTER TY	
10CE9	OLD HUNGARIAN SMALL LETTER ECH	SZEKELY-HUNGARIAN ROVAS SMALL LETTER CH	
10CEA	OLD HUNGARIAN SMALL LETTER U	SZEKELY-HUNGARIAN ROVAS SMALL LETTER U	
10CEB	OLD HUNGARIAN SMALL LETTER UU	SZEKELY-HUNGARIAN ROVAS SMALL LETTER UU	
10CEC	OLD HUNGARIAN SMALL LETTER NIKOLSBURG UE	SZEKELY-HUNGARIAN ROVAS SMALL LETTER HISTORICAL UE	
10CED	OLD HUNGARIAN SMALL LETTER RUDIMENTA UE	SZEKELY-HUNGARIAN ROVAS SMALL LETTER UE	
10CF9	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER UEE	
10CEE	OLD HUNGARIAN SMALL LETTER EV	SZEKELY-HUNGARIAN ROVAS SMALL LETTER V	
10CF6	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER W	
10CF7	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER X	
10CF8	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS SMALL LETTER Y	
10CEF	OLD HUNGARIAN SMALL LETTER EZ	SZEKELY-HUNGARIAN ROVAS SMALL LETTER Z	

10CF0	OLD HUNGARIAN SMALL LETTER EZS	SZEKELY-HUNGARIAN ROVAS SMALL LETTER ZS
10CF1	OLD HUNGARIAN SMALL LETTER ENT-SHAPED SIGN	SZEKELY-HUNGARIAN ROVAS SMALL LETTER TPRUS
10CF2	OLD HUNGARIAN SMALL LETTER US	SZEKELY-HUNGARIAN ROVAS SMALL LETTER US
10CFA	OLD HUNGARIAN NUMBER ONE	SZEKELY-HUNGARIAN ROVAS NUMERAL ONE
10CFB	OLD HUNGARIAN NUMBER FIVE	SZEKELY-HUNGARIAN ROVAS NUMERAL FIVE
10CFC	OLD HUNGARIAN NUMBER TEN	SZEKELY-HUNGARIAN ROVAS NUMERAL TEN
10CFD	OLD HUNGARIAN NUMBER FIFTY	SZEKELY-HUNGARIAN ROVAS NUMERAL FIFTY
10CFE	OLD HUNGARIAN NUMBER ONE HUNDRED	SZEKELY-HUNGARIAN ROVAS NUMERAL ONE HUNDRED
10CBF	MISSING LETTER	SZEKELY-HUNGARIAN ROVAS NUMERAL FIVE HUNDRED
10CFF	OLD HUNGARIAN NUMBER ONE THOUSAND	SZEKELY-HUNGARIAN ROVAS NUMERAL ONE THOUSAND

Appendix 1. Codepoints of the proposed characters

The requested characters are distributed accordingly on empty spaces within the block.

	10C8	10C9	10CA	10CB	10CC	10CD	10CE	10CF
0	10080	10090	1 0CA0	10CB0	10000	† 10CD0	1 00E0	Y
1	10081	1	10CA1	₩	4	1	10CE1	३ €
2	10082	1	H 10CA2	10CB2	X 10cc2	1 10CD2	H	1 0CF2
3	XX 10C83	10093	10042	10CB3	X	♦	10CE3	10CF3
4	10000	1	10CA3	¥	10003	10CD3	٨	¥
5	10084	10094	10CA4	10CB4	10004	10CD4	10CE4	10CF4
Ĭ	10C85	10C95	10CA5	10CB5	10CC5	10CD5	10CE5	10CF5
6	10086	10096	10CA6	10CB6	10006	1 0CD6	10CE6	1 0CF6
7	+	0	Ψ	₿	+	0	Ψ	₿
	10C87	10097	10CA7	10CB7	10CC7	10CD7	10CE7	10CF7
8	¥ 10C88	10098	10CA8	1 10CB8	★ 10008	10CD8	X 10CE8	10CF8
9	Ž)	X	5	Š)	X	4
ı	10C89	10C99	10CA9	10CB9	10CC9	10CD9	10CE9	10CF9

Α	X 10C8A	D 1009A	10CAA		X 10CCA	D 10CDA	₩ 10CEA	10CFA
В	\$ 10c8B)	10CAB		\$ 10CCB)	10CEB	V 10CFB
С	⊗ 10c8c	() 10c9c	X 10cac		⊗)	X 10CEC	X 10CFC
D	10c8D	\	10CAD		1 0000	\	1	V 10CFD
E	# 1008E	1009E	10CAE		# 1000E	K 10CDE	M 10CEE	X 10CFE
F	10C8F	1009E	10CAE	Y 10CBF	X 10ccf	10CDF	10CEF	X 10CFF

Appendix 2. Examples for use of the proposed characters

DZ	掛
Proper names:	4+)†H¤B
Dzurinda	
Common words:	
bodza, madzag, edz, pedz	XC相片 BP相PM,C相,EC相
Grammatic compound (verb modifier):	
-dzik: levedzik, vakaródzik	410: &@M&410, MPOPHG410
Difference between DZ and D+Z (reason why individual DZ is inevitable)	₽
DZ:	XC組队 ₿₽組₽ ል, ◊ ₹ዘጲ組1◊
bodza, madzag, kérődzik	日十
D+Z	◇P+BCBPC↑, ダ1+BPH,
kádzománc, hídzár, nádzöld, kardzörej	ር ኮ+¤ ሂል +, ◊ ኑዘ +¤ ሂዘ፪ቦ

DZS	¥
Proper names:	
Dzsudzsák, Dzsibuti, Dzsenifer	YMYPO, YTXWYT, YECT®EH
Common words:	
dzsindzsa, lándzsa, dzsungel	¥ነር¥Է ል▷ር¥Է ¥¤ርል፩ል
Difference between DZS and D+ZS (this is why an individual DZ is	¥
essential)	4¥)ተጋ 4¥)4
DZS:	Y+
maharadzsa, halandzsa, nindzsa	,ዘ1 <mark>Υ+</mark> Μ <u></u> , አል4 <mark>Υ+</mark> 1ጷ
D+ZS	ØCM+Y1M1E, ØG+Y1MEH

hídzsalu, lúdzsír, holdzsilip, hódzsiger	

Q	۵
Proper names: Aquincum	Pantchub
Common words:	
quad, quartz, quart	AMP+, AMPHKB, AMPHK
Difference between Q and K+V (this is why an individual DZ is essential)	A AMPHKEKK, AMICK
Q:	M◊
quartett, quint	ΛΣ <mark>◊</mark> ΜΡΗ, βΡ <mark>◊</mark> Μ†ΗΡΛ,
K+V lekvár, mákvirág, zsákvarró, lakva	4HOAW '9HHAWOAK

X	₿
Proper names:	
Xantus Xavér, Xénia	ALCKMY (ALMYH' (AKCIF
Common words:	
xilofon, szaxofon, fax, box	01&COCC, 1P0COCC, 0P0, XC0
Difference between X and K+SZ (this is why an individual DZ is	lo lo
essential)	<u> </u>
X:	than a shta
maximális, extra, pixel, taxi	Etaka, KPat
K+SZ	I 🌣
mákszem, rákszirom, lyukszám	BP♦IEB, HP♦ITHCB, OXI♦IPB

W	M
Proper names: Wass, Wekerle, Dessewffy, Weöres	ΜΡΛΛ, ΜΕΦΕΗΜΕ, +ελλεμφφη, Μεχηέλ
Common words: watt, wolfram, walesi, windowsos	MP/K, MC&@HPB, MP&EAt, MtC+CMACA
Difference between W and V+V (this is why an individual DZ is essential) W: whiskys, wattos, wurlitzer V+V kedvvel, nyelvvédő, év vége	M M&IAOTA, MPYYCA, MMH&IYBEH MM OE+MME&, DE&MMS+&, SMMS&E

Y	1
Proper names:	
Ybl Miklós, Yamaha, Yvett	TXA BIOAGA, TABAXA TMEKK
Common words:	
yard, spray, cowboy	16H+, ΛΕΗΡ1, ↑CMXC1
Ending of proper names:	OXADET, REAPT, [PCTOCMIOT
Kölcsey, Pesty, Janikovszky	

Difference between Y and J+I (this is why an individual DZ is essential)

Y:

nylon, ceyloni

J+I

H4割113Y , 43月113後

bájital, tájidegen, fejizom, tejipar

Appendix 3. Extended downloadable font

Font developers de facto use the missing characters in their downloadable fonts.

"The font contains all defined Unicode 8.0 glyphs in the U+10C80 - U+10CFF range, and some common contemporary ligatures, including dz, dzs, q, w, x, and y, and the non-standard representation of the numeral 500"

(https://oldhungarian.eu/index en.html)

Font

You can download and install the font locally that is used on this page from GitHub. After downloading the OldHungarian.zip file, extract it, and install the appropriate font for your machine.

The font contains all defined Unicode 8.0 glyphs in the U+10C80 - U+10CFF range, and some common contemporary ligatures, including dz (E), dzs (E),

The font alsow contains two auxiliary glyphs related to Old Hungarian, the reversed comma U+2E41 (,), and the reversed quotation mark U+2E42 (,)

Ligatures using embedded Old Hungarian font



Default order

Proced RTL
P

Appendix 4. Examples of the proposed Szekely-Hungarian Rovas numerical character 500



Alphabet from Barátosi Lénárth Lajos, 1943.



Székely Nemzet Atlasza (Atlas of Székely Nation, 2018 ISBN 9786158048408)

Appendix 5. About the meaning of "Old": extinct, historical

This appendix is to list the practical examples why the script name "Old Hungarian" is not correct.

5.1 ISO 639-3

Source: https://iso639-3.sil.org/code/ohu

639 Identifier Documentation: ohu

<< Back to Code Tables

Old Hungarian [ohu]

Identifier	Language Name(s)	Status	Code Sets	Scope	Language Type
ohu	Old Hungarian	Active	639-3	Individual	Historical

5.2 Multitree

Source: http://www.multitree.org/codes/ohu.html

Linguist List Status: Extinct

Name: Altungarisch

Type: Language

Alternate Name: Old Hungarian

Code: ohu

Code Standard: ISO 639-3

Documentation: LINGUIST List

5.3 Wikipedia

Source:

https://en.wikipedia.org/wiki/History of the Hungarian language#Old Hungarian



5.4. Wiktionary

Source: https://en.wiktionary.org/wiki/old#Etymology

According to Wiktionary etimology the meaning of old as adjective:

- Having been used and thus no longer new or unused.
- Having existed or lived for the specified time
- (heading) Of an earlier time
 - Former, previous.
 - That is no longer in existence.
 Obsolete; out-of-date

5.5. Scriptsource

Source: https://scriptsource.org/cms/scripts/page.php?item_id=script_overview_full

Scriptsource uses UNICODE as source (Some information is drawn from international standards such as > ISO 639-3 (languages), > Unicode (characters) and > ISO 15924 (scripts).)

Hung	Old Hungarian (Hungarian Runic)	European	abjad	LTR
Ital	Old Italic (Etruscan, Oscan, etc.)	European	alphabet	LTR
Narb	Old North Arabian (Ancient North Arabian)	Middle Eastern	abjad	LTR
Perm	Old Permic	European	alphabet	LTR
Xpeo	Old Persian	Middle Eastern	alphabet	LTR
Sogo	Old Sogdian	Middle Eastern	abjad	RTL

Sarb	Old South Arabian	Middle Eastern	abjad	RTL
Orkh	Old Turkic, Orkhon Runic	Central Asian	alphabet	RTL
Ougr	Old Uyghur	Central Asian	abjad	[unspecified]

Note: The entry "Old Hungarian" (Hungarian Runic) – other than being wrong denominations by default – has wrong attributes abjad and LTR. The correct attributes are alphabet and RTL, respectively.

5.6 Unicode charts:

Source: https://unicode.org/charts/charindex.html#O

Old Hungarian	10C80	Proposed by Michael Everson
Old Italic	10300	Proposed by Michael Everson
Old Permic	10350	Proposed by Michael Everson
Old Persian	103A0	Proposed by Michael Everson
Old Sogdian	10F00	Proposed by Anshuman Pandey
Arabian, Old North	10A80	Proposed by Michael Everson
Arabian, Old South	10A60	Proposed by Michael Everson and others

ISO/IEC JTC 1/SC 2/WG 2 PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646,1,1

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) fromhttp://std.dkuuq.dk/JTC1/SC2/WG2/docs/principles.htmlfor guidelines and details before filling this form.

A. Administrative

1. Title: Proposal for modifying the Old Hungarian block (range 10C80-10CFF)	
2. Requester's name: Institute for Hungarian Studies	
Requester type (Member body/Liaison/Individual contribution): expert contribut Submission date: 12.04.2021	ion
5. Requester's reference (if applicable):	
6. Choose one of the following:	
(or) More information will be provided leter:	X
(or) More information will be provided later.	
B. Technical – General	
Choose one of the following:	
a. This proposal is for a new script (set of characters):	
Proposed name of script:	
b. The proposal is for addition of character(s) to an existing block: Name of the existing block: 10C80-10CFF	yes
Name of the existing block: 10C80-10CFF 2. Number of characters in proposal:	15
Proposed category (select one from below - see section 2.2 of P&P document):	10
A-Contemporary x B.1-Specialized (small collection) B.2-Specialized (large	collection)
C-Major extinct D-Attested extinct E-Minor extinct	
F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usa	
4. Is a repertoire including character names provided? a. If YES, are the names in accordance with the "character naming guidelines"	yes
in Annex L of P&P document?	yes
b. Are the character shapes attached in a legible form suitable for review?	yes
5. Fonts related:	
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for public	shing the standard?
b. Identify the party granting a license for use of the font by the editors (include address, e-m	ail, ftp-site, etc.):
6. References:	
	yes
b. Are published examples of use (such as samples from newspapers, magazines, or other s	•
of proposed characters attached? <u>yes</u>	
7. Special encoding issues: Does the proposal address other aspects of character data processing (if applicable) such a	ae innut
presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information	on)?
Name correction	
8. Additional Information:	
Submitters are invited to provide any additional information about Properties of the proposed Chara- assist in correct understanding of and correct linguistic processing of the proposed character(s) or	acter(s) or Script that will
properties are: Casing information, Numeric information, Currency information, Display behaviour i	
breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collat	

at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database (

the Unicode Technical Committee for inclusion in the Unicode Standard.

Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard

http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by

Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

C. Technical - Justification

	addition of character(s) been submitted before?	yes
If YES explain	Earlier submitted proposals	
	ade to members of the user community (for example: National Body,	
	e script or characters, other experts, etc.)?	yes
If YES, with		
	ailable relevant documents: Conferences and publications with the exp	ert user base
	ser community for the proposed characters (for example:	
	oo, maanaan toomiology doo, or palaneimig doo, is moladed.	> 100.000
Reference:	Boy Scout movement, Elementary school education, amount of sold printe	
	with Szekely-Hungarian Rovas script	
	or the proposed characters (type of use; common or rare)	common
Reference:	Contemporary digital and printed contents, technological developments (check solutions, database creation)	
5. Are the proposed cha	aracters in current use by the user community?	yes
If YES, where? R		ses
After giving due cons	siderations to the principles in the P&P document must the proposed characte	ers be entirely
in the BMP?		no
If YES, is	s a rationale provided?	
	ES, reference:	
Should the proposed	I characters be kept together in a contiguous range (rather than being scatter	ed)? <u>yes</u>
8. Can any of the propo	osed characters be considered a presentation form of an existing	
character or chara	acter sequence?	no
If YES, is	s a rationale for its inclusion provided?	
	ES, reference:	
	osed characters be encoded using a composed character sequence of either	
	rs or other proposed characters?	no
If YES, is	s a rationale for its inclusion provided?	
	ES, reference:	
10. Can any of the prop	posed character(s) be considered to be similar (in appearance or function)	
to, or could be co	nfused with, an existing character?	no
If YES, is	s a rationale for its inclusion provided?	
If Y	ES, reference:	
11. Does the proposal in	nclude use of combining characters and/or use of composite sequences?	no
If YES, is a ration	ale for such use provided?	
	S, reference:	
Is a list of compos	site sequences and their corresponding glyph images (graphic symbols) prov	ided? no
If Y	ES, reference:	
12. Does the proposal of	contain characters with any special properties such as	
control function or	r similar semantics?	no
	describe in detail (include attachment if necessary)	
		4
13. Does the proposal of	contain any Ideographic compatibility characters?	no
	quivalent corresponding unified ideographic characters identified?	
	reference:	
, .		