Universal Multiple-Octet Coded Character Set International Organization for Standardization Organisation Internationale de Normalisation Международная организация по стандартизации

Doc Type: Working Group Document Title: Proposal to encode Latin letters used in the Former Soviet Union Authors: Nurlan Joomagueldinov, Karl Pentzlin, Ilya Yevlampiev Status: Expert Contribution Action: For consideration by JTC1/SC2/WG2 and UTC Date: 2011-10-18

# Terminology used in this document:

"Descender" refers to the specially formed appendage on letters like the one in the already encoded letter U+A790 LATIN CAPITAL LETTER N WITH DESCENDER.

*"Typographical descender"* refers to the part of a letter below the baseline, thus resembling the term "descender" as used in typography.

# 1. Introduction

In the wake of the October Revolution of 1917 in Russia, alphabetization of the people living in the then formed Soviet Union became an important point of the political agenda. At that time, some languages spoken in the Soviet Union had no standardized orthography at all, while others (especially in areas where the Islam was the predominant religion) used the Arabic script. As most of these orthographies did not reflect the phonetics of these languages very well, and as the Arabic script was considered unnecessarily difficult by some due to its structure, for most of the non-Slavic languages it was decided to design new orthographies from scratch. An important event was the Turkologic congress in Baku of 1926 where the Janalif alphabet was passed. Following this decision, Latin orthographies for several other languages were designed in the following years.

The Latin orthographies were in use as the primary orthographies of these languages, and several books, magazines, and newspapers were printed using them.

They were abandoned from 1938 on, as Stalin requested the use of the Cyrillic script for all these languages after a decision that all citizens of the Soviet Union have to learn Russian The Cyrillic orthographies designed then are mostly the ones still in use today, except where they are replaced again by Latin orthographies in the countries which do no longer belong to Russia after the decease of the Soviet Union.

Detailed information is found in [4] and [5] (see section 5. "References").

An early summary of the Latin letters designed for the Latin orthographies which are subject of this proposals is found in [1] (Yushmanov, see section 5. "References").

This proposal highly relies on this compilation and presents the characters with references to it, see fig. 1 to fig. 3. (However, for all characters proposed here we show actual use; no character is proposed based only on its listing in Yushmanov. Also, the languages listed for each character are based on the evidence presented here, rather than citing Yushmanov's listings.)

The characters proposed here are primarily needed by librarians and historians, to enable the correct referencing and citing of the numerous original works using the Latin orthographies.

# 2. Encoding Considerations

All characters proposed here are Latin letters without special properties, mostly in case pairs. A few are lowercase only, as two orthographies (Adyghe and Abkhaz) are monocameral.

# 2.1 The descender

A common feature of the letters newly created for the 1020s/1930s Latin orthographies of the Soviet Union is the descender.

It is an appendage put on the bottom of the letter to create a new one, which usually is phonetically related to the original one. Obviously, it has its model in the appendage which distinguishes the Cyrillic letters  $\coprod$  (SHA) and  $\coprod$  (SHCHA).

In the Latin orthographies, it has no precedence and therefore no typographic tradition. Thus, in the evidence presented here it shows many different forms (rectangle, triangle, Щ-descender, hook similar to a palatal hook, cedilla, or comma below). Most often, it is placed at the right end of the bottom of the base character, but small right deplacement from the central line or exact central placements also occur (especially on letters with round bottom like C/D/S). Usually (but not in every case), it is more prominent than the Ш/Щ difference in common Cyrillic fonts, probably to support eves which are not accommodated to the Ш/Щ difference.

This variation occurs within samples of the same orthography and even also within the same book (see e.g. fig. Komi-3).

## Therefore, all forms of the same Latin base letter with descender are unified.

In accordance with the already encoded Latin H/K/N/Z with descender, and as the descender has no characteristic shape by itself, all letters with descender are proposed as individual atomic letters, rather than to propose a new diacritical mark "DESCENDER BELOW".

This is also done for C and S. These letters, while occasionally show a form of the descender resembling a cedilla or comma below, in most of the specimens show a form resembling the descender form used for the other letters (e.g. triangle). Also, the horizontal placement is right from the vertical center in many cases (it is even at the extreme right in the Adyghe samples). The Komi examples show such variations even in the same book. See also fig. Kabardian-3.

# 2.2 Glyph variations in vertical extension

A feature which distinguishes the Latin script from the Cyrillic script is the fact that Latin letters which end in a vertical line or an open bow at the bottom, are commonly extended to the descender line in Latin (i.e. they have a typographical descender), while they do not this consequently in the Cyrillic script (i.e. they show the shape of the capital letter, only being reduced to x-height).

Thus, when Latin letters are modeled after the Cyrillic case pairs 3/3 4/4, they will look 3/3 4/4 (showing "long" glyphs for the lowercase letters; consequently done also in another area as shown in fig. 7 and 8).

In fact, such "long" glyphs are found, while the "short" glyphs are also found. The same is the case for similar letters like the "mirrored ghe"s 1/1 1/1 1/1 1/1 3/3, or the already encoded 3/3, or the already encoded 1/3 for which glyphs like 01/3 occur.

For these letters, the "long" or "true Latin" forms (which show the typographic descenders) are proposed for the representative glyphs, while the "short" forms are considered as glyph variants.

In no case, we have proposed different letters only to separate the "long" from the "short" forms. Consequently, we have unified the "short" 3 with the already encoded "3" (U+0292).

In the same way, we have unified the "short h with hook", which has no real ascender (see fig. Kabardian-2) with the already encoded "fi".

# 2.3 Other glyph variations within the 1920s/1930s Latin orthographies

As the users of the newly orthographies were not used to the typographical traditions of the Latin script, while some were familiar with the Cyrillic script, some glyph variants occurred which may look strange for people familiar with the Latin script.

The capital Y often shows a form resembling the Cyrillic Y. This form obviously matches the common form of the lowercase y.

The capital D occasionally shows a form following the curvature direction of the lowercase d, thus appearing mirrored to users familiar with the Latin tradition (see fig. Udi-1). In the area where Komi is spoken, such glyph variants also show a little ascender, obviously influenced by the Cyrillic letters U+0500/0501 d/d which were in use 1918-1930 predating the introduction of the Latin alphabet in that area.

Such glyph variants are treated as such and are not proposed here as new letters.

## 2.4 Character forms similar to Cyrillic ones

The Latin and Cyrillic alphabets share several letters which commonly have identical forms, independent whether they usually denote the same phoneme (A/a) or different ones (P/p). Also, in several cases, the complete case pair resembles (e.g. C/c), while in other cases only the capital letters resemble (e.g. T/t vs. T/r).

Thus, it is no surprise that some of the additional letters proposed here also resemble Cyrillic letterforms.

However, for complete case pairs, this is only true for the following ones:

Ь/ь, Ҕ/ҕ, Ҳ/ҳ, Ҳ/ҳ.

(Additionally, the pair  $f_h$  vs.  $f_h$  could be called resembling by glyph variation.)

This leads to the possibility of unifying the Latin characters proposed here with the existing Cyrillic letters, to save a few code points.

However, we consider such script mixing being a bad thing for the following reasons:

- The issue of identically looking letters in different scripts is understood and handled very well already.
- Script mixing within one orthography (i.e. within one locale) makes issues like sorting and searching (and specifying the rules for this) unnecessary complicated.
- Script mixing within one orthography hampers spoofing protection in IDNs (like URLs or e-mail addresses) based on disallowing script mixing (like accessing an URL "google.com" where the second letter is a Greek omicron and the third one is a Cyrillic small o). The fact that users will create URLs containing letters of the orthographies considered here is not confined to the theoretical possibility that such orthographies will be revived. It is expected that historians or individuals will create archive pages using the original titles of publications using these orthographies, e.g. (see the newspaper title in fig. Kazhak-1) www.mydiscussionpage.xy/kazhak\_history/newspapapers/sotsijaldb\_qazaqlstan.html .

- Script mixing irritates the common user, as when they know that they have to use Cyrillic letters in Latin text anyway, they will do so when the outcome shows correct to them. Thus, they will use Cyrillic character even when an appropriate Latin one exists (e.g. Cyrillic small B instead of Latin small capital B, to give an example not as trivial as mixing Cyrillic P/p with Latin P/p in the same text although in fact only the latter one was yielded).
- Regarding X/x, X/x which are independent straightforward derivations of the respective Latin and Cyrillic base letters, it would be obviously especially irritating if the derived letters were unified across scripts, while the base letters are not.
- Besides the heritage of Unicode 1.0, script mixing within European Alphabetic Scripts was done in no case for orthographies (i.e. character sets which are intended for use in everyday life, as opposed to scientific sets like the Uralic Phonetic Alphabet).
   As a recent example, U+A698/A699 CYRILLIC CAPITAL/SMALL LETTER DOUBLE O were accepted (see PDAM 1.2, WG2 N4107), instead of unifying them with U+A74E/A74F LATIN CAPITAL/SMALL LETTER OO which exactly look the same.

# 2.4.1 The special case of Latin Ь/ь

There exists a letter pair U+0184/0185 LATIN CAPITAL/SMALL LETTER TONE SIX, which is used for a historic orthography of Zhuang (used 1957-1982) which was claimed in earlier discussions on the Unicode mailing list to be identical to the Latin Ь/ь.

This issue can be resolved only by thorough examination and discussion of the glyph variation which this letter has in Zhuang source material.

This is beyond of the scope and the resources of the work presented here, and therefore will be discussed in a separate paper at a later time.

The possible outcomes of such a discussion are:

- Either, the Latin b/b will be unified with the Zhuang tone six, and the representative glyph will be changed resembling the Cyrillic b/b, as such glyphs are used in several orthographies (Janalif and most of the orthographies considered here), while Zhuang then is just one orthography among many using this character.
- Or, such a glyph change is not appropriate for Zhuang. This means that we have different letters here, as the glyph variations do not overlap considerably, and the Latin b/b gets encoded as a new true Latin letter.

# 2.5 Casing issues

Special casing (tailoring; like for Turkish I/ $i - \dot{I}/i$ ) is to be used anyway for most of the orthographies considered here, as they pair U+0042 LATIN LETTER CAPITAL B with U+0299 LATIN LETTER SMALL CAPITAL B as lowercase form. This was decided for the Janalif alphabet which acted as precedent for several of these orthographies.

Thus, it imposes no additional complexity if existing forms are paired with newly encoded letters, thus avoiding the encoding of letters looking identical to existing ones only to get complete case pairs which are marked as such unambiguously by Unicode properties.

#### 2.5.1 Capital and lowercase forms resembles existing letters, but are not paired

In this case, no new letters are proposed, as such cases can be handled by tailoring.

## 2.5.2 The capital form resembles an existing letter, while the lowercase form does not

In this case, only the lowercase letter is proposed as a new character, and the casing has to be handled by tailoring.

In this proposal, this applies to the case pairs:

- U+A780 LATIN CAPITAL LETTER TURNED L is the uppercase form for the proposed LATIN SMALL LETTER REVERSED GHE.
- U+A7FB LATIN EPIGRAPHIC LETTER REVERSED F, although having the property Lo rather than Lu, is the uppercase form of the proposed LATIN SMALL LETTER REVERSED F.

#### 2.5.3 The lowercase form resembles an existing letter, while the capital form does not

If the existing lowercase letter has no capital counterpart until now, this imposes no problem as the newly encoded capital letter is simply to be formally paired with the existing lowercase letter. (However, this proposal does not contain such capital letters.)

Otherwise (if the existing lowercase letter already has a capital counterpart, which does not resemble the capital letter proposed here), only the capital letter is proposed as a new character, and the casing has to be handled by tailoring.

However, having capital letters (declared by property Lu) without lowercase counterparts imposes problems, as due to stability policies it is not possible to declare lowercase counterparts when they are finally included in a Unicode version. Also, they could not be used in any IDNs (e.g. URLs or e-mail addresses), as they had to be mapped on their non-existing lowercase counterparts there.

To circumvent any such issues, they are treated as follows:

- They are mapped to their lowercase counterpart formally. This has the consequence that casing is not a roundtrip operation for this letter, as lowercasing and then uppercasing yields the original capital counterpart of the associated lowercase letter. This follows the precedent of U+1E9E LATIN CAPITAL LETTER SHARP S.
- They are given a compatibility equivalence to the original capital counterpart of the associated lowercase letter.
   This circumvents all problems with IDNs (URLs and e-mail addresses), as the newly encoded letter and the original capital counterpart of the associated lowercase letter are

thus declared to be equivalent when used there.

• They are placed into a specific group, by proposing to be placed in the "Alphabetic **Presentation Forms**" block.

As true presentation forms (like U+FB16 LATIN SMALL LIGATURE ST) will no longer be encoded, the gaps in this block are considered to be now the appropriate place for letters which are special by having a compatibility equivalence to other letters.

It is noted that, in spite of the compatibility equivalences given for technical reasons, the capital forms are full-fledged letters by their own, different from the already encoded letters which have developed in unrelated areas and eras.

They are not glyph variants. Glyph variation is something which must be recognized by the users; e.g. the g/g variation (or the variation between triangle-formed and hook-like descenders) appears to the same group of users. But the groups of common users of H and  $\mathfrak{h}$  are divided by geography and time, and they never see the other group's character in ordinary life. Even if they could decipher it correctly, they would consider it wrong, like an English speaker would look at an "E" found in the place of an "E".

# Being forced to use African letters like H/H/H/H instead of 6/b/H/H means having to use a cipher rather than an encoding.

The fact that such ciphering is supported by font technology (like it was used to write Greek in the 8-bit area by using special fonts which mapped Greek letters on ASCII code points), does not change this.

It is dangerous to burden the users e.g. of bibliographical databases to force to care about font selection only to get their database records presented correctly (as they could get wrong presentations when using fonts with the wrong glyphs but being correct in Unicode terms).

# 2.6 Special naming issues

The capital forms of "h" and related letters (turned h, heng) which are based on the common lowercase form are named "wide", as they usually are distinguished by their considerably wide appearance from the lowercase ones (see e.g. fig. Abaza-6 for the WIDE H WITH LEFT HOOK, or fig. Ingush-1 for the WIDE HENG).

# **3. Proposed Characters**

Annotations in parentheses address special issues for a character, or reference to figures where such special issues are discussed. (These annotations are not intended to be retained in the character list when copied into the standard.)

As the figures are ordered by language, evidence for the characters is found in the figures related to the language, besides any "Yu-*x-yy*" reference which refers to the specimen numbered "x-yy" in fig. "x".

Languages and other annotations are usually given for the lowercase letters. The alphabets designed for Adyghe and Abkhaz are lowercase-only. Thus, evidence for the capital letters is to be looked at in the figures for other languages. Latin Extended-E

AB3 AB4 AB5 AB6 AB7 AB8 AB9 ABA ABB Х P h Γ 0 AB70 AB80 AB90 ABA0 h **T** ABA1 Х p 1 AB71 AB81 AB91 Ţ Ŗ Х ĥ 2 AB92 ABA2 AB72 AB82 Ж Ţ Ҕ 3 p AB93 ABA3 AB73 AB83 Э S J Į Х 4 AB64 ABA4 AB74 AB84 AB94 Э 1 J 8 χ 5 AB75 AB65 AB85 AB95 ABA5 C К S  $\mathbf{x}$ J 6 AB66 AB76 AB86 AB96 ABA6 Z ¥ Ç К Ş 7 AB67 AB77 AB87 . AB97 ABA7 Ţ C D Z ų 8 AB68 AB78 AB88 AB98 ABA8 3 ſ ſ d t 9 AB69 AB79 AB89 AB99 ABA9 Б f L З A AB6A AB7A AB8A g 1 Ъ b в AB6B AB7B AB8B 1 Ρ Ψ G С AB6C AB7C AB8C AB9C 1 ц AB6D Ρ Ψ D AB9D AB7D AB8D P £ Ψ QĮ Е AB6E AB7E AB8E AB9E թ Ψ đ Ą F AB8F AB9F AB7F

Printed using UniBook<sup>™</sup>

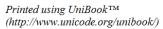
Date: 18-Okt-2011

(http://www.unicode.org/unibook/)

Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

**AB30** 

FB0 FB1 FB2 FB3 FB4 0 1 2 3 4 5 6 7 Ħ 8 FB18 Н 9 FB19 ĥ А FB1A  $\underset{\scriptscriptstyle \mathsf{FB1B}}{h}$ в Ч С FB1C D Е D F FB0F



Date: 18-Okt-2011

Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

FB4F

# Block: Latin Extended-E

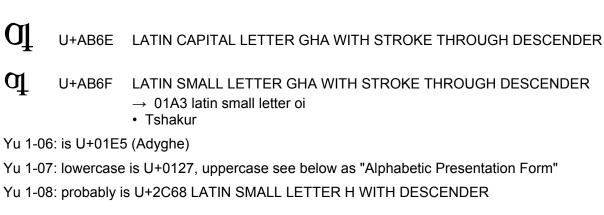
Orthographies of the Soviet Union used in the 1920s/1930s

Е	U+AB64	LATIN CAPITAL LETTER C WITH MIDDLE TILDE
e	U+AB65	LATIN SMALL LETTER C WITH MIDDLE TILDE <ul> <li>Komi</li> </ul>
Ç	U+AB66	LATIN CAPITAL LETTER C WITH DESCENDER $\rightarrow 2185$ roman numeral six late form
Ç	U+AB67	<ul> <li>LATIN SMALL LETTER C WITH DESCENDER</li> <li>→ 0481 cyrillic small letter koppa</li> <li>→ 04AB cyrillic small letter es with descender</li> <li>Abkhaz, Adyghe, Kabardian, Komi, Udi</li> <li>(see fig. Adyghe-1 for glyph with descender at extreme right)</li> <li>(see fig. Kabardian-3 for contrastive use to c with cedilla)</li> </ul>
Yu 1-01	: already a	ccepted for Unicode 6.1 (U+A792/A793)

Yu 1-02: lowercase is U+0111, uppercase see below as "Alphabetic Presentation Form"

D	U+AB68	LATIN CAPITAL LETTER D WITH DESCENDER
d	U+AB69	LATIN SMALL LETTER D WITH DESCENDER • Adyghe, Komi (Yu-1-03)
f	U+AB6A	<ul> <li>LATIN SMALL LETTER REVERSED F</li> <li>→ A7FB latin epigraphic letter reversed f</li> <li>• as capital form, U+A7FB is to be used by tailoring</li> <li>• Abaza, Abkhaz, Adyghe (Yu-1-04)</li> </ul>
		hip to U+A7FB LATIN EPIGRAPHIC LETTER REVERSED F cannot be racter properties due to stability policies.)
g	U+AB6B	LATIN SMALL LETTER SCRIPT G WITH ASCENDER • Abkhaz (Yu-1-05)

- $G_1$  U+AB6C LATIN CAPITAL LETTER SHUGHNI GHE
- لع U+AB6D LATIN SMALL LETTER SHUGHNI GHE • Shughni



 h U+AB70 LATIN CAPITAL LETTER WIDE H WITH LEFT HOOK
 h U+AB71 LATIN SMALL LETTER H WITH LEFT HOOK

 Abaza, Kabardian (Yu-1-09)

Yu 1-10: lowercase is U+0266, uppercase see below as "Alphabetic Presentation Form"

Yu 1-11: lowercase is U+A727, uppercase see below as "Alphabetic Presentation Form"

U+AB72	LATIN CAPITAL LETTER GHE WITH MIDDLE HOOK
U+AB73	<ul> <li>LATIN SMALL LETTER GHE WITH MIDDLE HOOK</li> <li>→ U+0495 cyrillic small letter ghe with middle hook</li> <li>Kabardian (Yu-1-12)</li> </ul>
U+AB74	LATIN CAPITAL LETTER I WITH DESCENDER $\rightarrow 0131$ latin small letter dotless i
U+AB75	LATIN SMALL LETTER DOTLESS I WITH DESCENDER • Azerbaijani, Nogai (Yu-2-01)
U+AB76	LATIN CAPITAL LETTER KRA WITH DESCENDER (see fig. Kabardian-2)
U+AB77	<ul> <li>LATIN SMALL LETTER KRA WITH DESCENDER</li> <li>→ U+0138 latin small letter kra</li> <li>Abaza, Kabardian</li> <li>(see fig. Abaza-4 showing contrastive use to U+2C6A LATIN SMALL LETTER K WITH DESCENDER)</li> </ul>
	U+AB73 U+AB74 U+AB75 U+AB76

Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Page 10 of 50

C	U+AB78	LATIN CAPITAL LETTER L WITH HOOK	
ſ	U+AB79	LATIN SMALL LETTER WITH HOOK AND TURNED DES • Abaza (Yu-2-02)	CENDER
Ц	U+AB7A	LATIN CAPITAL LETTER L WITH DESCENDER	
1	U+AB7B	LATIN SMALL LETTER L WITH DESCENDER • Abaza, Kabardian, Komi (Yu-2-03)	
l	U+AB7C	LATIN SMALL LETTER L WITH DEFERRED DESCENDE • Adyghe, Avar	R
1	U+AB7D	LATIN SMALL LETTER L WITH TURNED DESCENDER  • Adyghe	
£	U+AB7E	LATIN SMALL LETTER L WITH TURNED DESCENDER A • Adyghe, Avar	ND STROKE
•	lowing chara ing over coli	acters are Yu-2-05, Yu-2-03, Yu-2-04a, reordered to prevent	case pairs
ſ	U+AB7F	<ul> <li>LATIN LETTER SMALL CAPITAL P WITH LOW LEFT HO</li> <li>→ 1D18 latin letter small capital p.</li> <li>Adyghe</li> <li>(Yu-2-05)</li> </ul>	ОК
Р	U+AB80	LATIN CAPITAL LETTER OPEN P (see fig. Kurdish-4)	
p	U+AB81	LATIN SMALL LETTER OPEN P → A783 latin small letter insular r • Abaza, Abkhaz, Tshakur, Udi (Yu-2-04)	
<b>b</b>	U+AB82	LATIN CAPITAL LETTER P WITH APPENDAGE	
p	U+AB83	<ul> <li>LATIN SMALL LETTER P WITH APPENDAGE</li> <li>→ 048F cyrillic small letter er with tick</li> <li>Avar, Kurdish, Lak, Lezgian</li> <li>the appendage may take the shape of a comma or a way (Yu-2-04a)</li> </ul>	vy line
Propos	al to ancoda l	l atin letters used in the Former Soviet I Inion	Page 11 of 50

<b>S</b>	U+AB84	LATIN CAPITAL LETTER S WITH SHORT STROKE
8	U+AB85	<ul> <li>LATIN SMALL LETTER S WITH SHORT STROKE</li> <li>→ A7A9 latin small letter s with oblique stroke</li> <li>Komi, Kumyk, Tshakur</li> <li>stroke varies between vertical, diagonal, and horizontal form (Yu-2-06)</li> </ul>
Yu 2-07	: lowercase	is U+017F, capital letter see U+ABA9
S	U+AB86	LATIN CAPITAL LETTER S WITH DESCENDER $\rightarrow$ 015E latin capital letter s with cedilla
Ş	U+AB87	LATIN SMALL LETTER S WITH DESCENDER • Abaza, Abkhaz, Avar, Bashkir
Ţ	U+AB88	LATIN CAPITAL LETTER T WITH DESCENDER
t	U+AB89	LATIN SMALL LETTER T WITH DESCENDER • Abaza, Abkhaz, Avar, Komi, Kurdish, Tshakur, Udi (Yu-2-08)
Ъ	U+AB8A	LATIN CAPITAL LETTER T WITH BOWL <ul> <li>glyph variants look like U+0462 cyrillic capital letter yat</li> </ul>
t	U+AB8B	<ul> <li>LATIN SMALL LETTER T WITH BOWL</li> <li>Adyghe, Bashkir, Shughni</li> <li>glyph variants look like U+0180 latin small letter b with stroke (Yu-2-09)</li> <li>(the representative glyph for the capital letter is taken from Shugni; the one for the small letter is taken from Adyghe)</li> </ul>
Р	U+AB8C	LATIN CAPITAL LETTER TP $\rightarrow$ 01A4 latin capital letter p with hook
Р	U+AB8D	LATIN SMALL LETTER TP • Abaza, Abkhaz (Yu-2-10)
ዋ	U+AB8E	LATIN CAPITAL LETTER TP WITH DESCENDER
ዋ	U+AB8F	LATIN SMALL LETTER TP WITH DESCENDER • Abaza, Abkhaz (Yu-2-11)

Ҳ	U+AB90	LATIN CAPITAL LETTER X WITH DESCENDER
X	U+AB91	LATIN SMALL LETTER X WITH DESCENDER → 04B3 cyrillic small letter ha with descender • Avar, Lak, Tshakur (Yu-3-01)
Х	U+AB92	LATIN CAPITAL LETTER X WITH STROKE
X	U+AB93	LATIN SMALL LETTER X WITH STROKE → 04FF cyrillic small letter ha with stroke • Avar, Lak, Shughni. Tshakur (Yu-3-02)
Χ	U+AB94	LATIN CAPITAL LETTER X WITH TWO HOOKS ABOVE
X	U+AB95	LATIN SMALL LETTER X WITH TWO HOOKS ABOVE • Abaza, Kabardian (Yu-3-03)
$\mathbf{x}$	U+AB96	LATIN SMALL LETTER SCRIPT X <ul> <li>Adyghe</li> <li>typographically a ligature of reversed c and c</li> </ul>
Z	U+AB97	LATIN CAPITAL LETTER Z WITH STROKE AND DESCENDER
Z	U+AB98	<ul> <li>LATIN SMALL LETTER Z WITH STROKE AND DESCENDER</li> <li>→ 01B6 latin small letter z with stroke</li> <li>→ 26C6 latin small letter z with descender</li> <li>• Tshakur (Yu-3-04)</li> </ul>
3	U+AB99	LATIN CAPITAL LETTER ZE $\rightarrow$ 021C latin capital letter yogh $\rightarrow$ 0417 cyrillic capital letter ze
3	U+AB9A	LATIN SMALL LETTER ZE → 0292 latin small letter ezh • Azerbaijani, Sami, Shugni; 19 <sup>th</sup> century Slovene (Yu-3-06; see also fig. 7, 8)
Ⴢ	U+AB9B	LATIN SMALL LETTER LOW TURNED C WITH ASCENDER • Adyghe

ID		
Ψ	U+AB9C	LATIN CAPITAL LETTER CAUCASIAN CHE
Ψ	U+AB9D	LATIN SMALL LETTER CAUCASIAN CHE → 04BD cyrillic small letter abkhasian che • Abaza, Abkhaz, Udi (Yu-3-07)
Ψ	U+AB9E	LATIN CAPITAL LETTER CAUCASIAN CHE WITH DESCENDER
Ψ	U+AB9F	<ul> <li>LATIN SMALL LETTER CAUCASIAN CHE WITH DESCENDER</li> <li>→ 04BF cyrillic small letter abkhasian che with descender</li> <li>Abaza, Abkhaz, Udi (Yu-3-08)</li> </ul>
Γ	U+ABA0	<ul> <li>LATIN LETTER SMALL CAPITAL GHE</li> <li>→ 0433 cyrillic small letter ghe</li> <li>→ 1D26 greek letter small capital gamma</li> <li>Adyghe (Yu-3-09)</li> <li>(a "latin small letter ghe" is presumed to have a typographic descender, in accordance with Latin che or ze, or the reversed ghe shown below. As Adyghe makes use of "small capital" letters anyway, the identification as another "small capital" letter is considered appropriate.)</li> </ul>
Γ	U+ABA1	<ul> <li>LATIN SMALL LETTER REVERSED GHE</li> <li>→ A780 latin capital letter turned I</li> <li>• as capital form, U+A780 is to be used by tailoring</li> <li>• Abaza, Abkhaz, Kabardian, Udi (Yu-3-10)</li> </ul>
Ţ	U+ABA2	LATIN CAPITAL LETTER REVERSED GHE WITH STROKE $\rightarrow$ A780 latin capital letter turned I
Ţ	U+ABA3	LATIN SMALL LETTER REVERSED GHE WITH STROKE • Abaza, Abkhaz, Kabardian, Udi (Yu-3-11)
J	U+ABA4	LATIN CAPITAL LETTER REVERSED GHE WITH LOW LEFT HOOK
J	U+ABA5	LATIN SMALL LETTER REVERSED GHE WITH LOW LEFT HOOK • Abaza, Abkhaz, Adyghe (Yu-3-12)

 U+ABA6 LATIN SMALL LETTER REVERSED GHE WITH LOW RIGHT HOOK
 Adyghe (Yu-3-13)

Yu 3-14: lowercase is U+0265, uppercase see below as "Alphabetic Presentation Form"

 $\begin{array}{ccc} \mathbf{Y} & \mathbf{U}\text{+}\mathbf{ABA7} & \text{LATIN CAPITAL LETTER TURNED WIDE H WITH STROKE THROUGH DESCENDER} \\ & \rightarrow & \mathbf{0427 \ cyrillic \ capital \ letter \ che} \end{array}$ 

 $\begin{array}{ccc} \textbf{U} & \textbf{U} \textbf{+} \textbf{ABA8} & \textbf{LATIN SMALL LETTER TURNED H WITH STROKE THROUGH DESCENDER} \\ & \rightarrow & 0265 \text{ latin small letter turned h} \\ & \bullet & \textbf{Abkhaz, Udi} \\ & (Yu-3-15) \end{array}$ 

U+ABA9 LATIN CAPITAL LETTER LONG S

- $\rightarrow$  017F latin small letter long s
- ≈ 0053 latin capital letter s
- Abaza, Udi
- (Yu-2-07)

(The compatibility equivalence follows the one of its lowercase counterpart. Also, it is noted that U+017F is formally case-mapped to U+0053 also, thus, Abaza+Udi case mapping has to be acquired by tailoring.)

# **Block: Alphabetic Presentation Forms**

ſ

(The code points are selected to have no overlap with the proposal WG2 N4079, which utilizes the first free codepoints FB07...FB0E following a similar rationale. Also, to have the H-related letters together in a sequence, the gap FB18...FB1C is used, rather than to scatter these over the next free gaps FB10...FB12 and FB18...FB1C.)

# Capital letters for orthographies of the Soviet Union used in the 1920s/1930s

The lowercase counterparts of these letters are formally paired with those capital letters to which a compatibility equivalence is declared.

D	U+FB0F	LATIN CAPITAL LETTER D WITH RIGHT STROKE = latin capital letter Bashkir dhe → 0111 latin small letter d with stroke ≈ 0110 latin capital letter d with stroke • Bashkir (Yu-1-02)
Ħ	U+FB18	<ul> <li>LATIN CAPITAL LETTER H WITH LEFT STROKE</li> <li>→ 0127 latin small letter h with stroke</li> <li>≈ 0126 latin capital letter h with stroke</li> <li>• Avar, Udi (Yu-1-07)</li> </ul>

Н U+FB19 LATIN CAPITAL LETTER H WITH VERTICAL STROKE → 0127 latin small letter h with stroke ≈ 0126 latin capital letter h with stroke Kurdish, Judeo-Tat (Yu-1-07) (for Judeo-Tat, see fig. 8) ĥ U+FB1A LATIN CAPITAL LETTER WIDE H WITH HOOK  $\rightarrow$  0266 latin small letter h with hook → A694 cyrillic capital letter hwe ≈ A7AA latin capital letter h with hook Abaza, Kabardian (Yu-1-10) h U+FB1B LATIN CAPITAL LETTER WIDE HENG → A727 latin small letter heng ≈ A726 latin capital letter heng Ingush, Nivkh (Yu-1-11) Ч U+FB1C LATIN CAPITAL LETTER TURNED WIDE H = latin capital letter che  $\rightarrow$  0265 latin small letter turned h → 0427 latin capital letter che ≈ A78D latin capital letter turned h • Abaza; 19<sup>th</sup> century Slovene

(Yu-3-14; see also fig. 7)

# **Properties**

AB64;LATIN CAPITAL LETTER C WITH MIDDLE TILDE;Lu;0;L;;;;N;;;;AB65; AB65;LATIN SMALL LETTER C WITH MIDDLE TILDE;L1;0;L;;;;N;;;AB64;;AB64 AB66;LATIN CAPITAL LETTER C WITH DESCENDER;Lu;0;L;;;;N;;;;AB67; AB67;LATIN SMALL LETTER C WITH DESCENDER;Ll;0;L;;;;N;;;AB66;;AB66 AB68;LATIN CAPITAL LETTER D WITH DESCENDER;Lu;0;L;;;;N;;;;AB69; AB69;LATIN SMALL LETTER D WITH DESCENDER;L1;0;L;;;;N;;;AB68;;AB68 AB6A;LATIN SMALL LETTER REVERSED F;L1;0;L;;;;N;;;A7FB;;A7FB AB6B;LATIN SMALL LETTER SCRIPT G WITH ASCENDER;L1;0;L;;;;N;;;; AB6C;LATIN CAPITAL LETTER SHUGHNI GHE;Lu;0;L;;;;;N;;;;AB6D; AB6D;LATIN SMALL LETTER SHUGHNI GHE;L1;0;L;;;;N;;;AB6C;;AB6C AB6E;LATIN CAPITAL LETTER GHA WITH STROKE THROUGH DESCENDER;Lu;0;L;;;;N;;;;AB6F; AB6F;LATIN SMALL LETTER GHA WITH STROKE THROUGH DESCENDER;Ll;0;L;;;;N;;;AB6E;;AB6E AB70;LATIN CAPITAL LETTER WIDE H WITH LEFT HOOK;Lu;0;L;;;;N;;;;AB71; AB71;LATIN SMALL LETTER H WITH LEFT HOOK;L1;0;L;;;;N;;;AB70;;AB70 AB72;LATIN CAPITAL LETTER GHE WITH MIDDLE HOOK;Lu;0;L;;;;N;;;;AB73; AB73;LATIN SMALL LETTER GHE WITH MIDDLE HOOK;L1;0;L;;;;N;;;AB72;;AB72 AB74;LATIN CAPITAL LETTER I WITH DESCENDER;Lu;0;L;;;;;N;;;;AB75; AB75;LATIN SMALL LETTER DOTLESS I WITH DESCENDER;L1;0;L;;;;N;;;AB74;;AB74 AB76;LATIN CAPITAL LETTER KRA WITH DESCENDER;Lu;0;L;;;;N;;;;AB77; AB77;LATIN SMALL LETTER KRA WITH DESCENDER;L1;0;L;;;;N;;;AB76;;AB76 AB78;LATIN CAPITAL LETTER L WITH HOOK;Lu;0;L;;;;;N;;;;AB79; AB79;LATIN SMALL LETTER WITH HOOK AND TURNED DESCENDER;L1;0;L;;;;N;;;AB78;;AB78 AB7A;LATIN CAPITAL LETTER L WITH DESCENDER;Lu;0;L;;;;N;;;;AB7B;

AB7B;LATIN SMALL LETTER L WITH DESCENDER;L1;0;L;;;;N;;;AB7A;;AB7A AB7C;LATIN SMALL LETTER L WITH DEFERRED DESCENDER;L1;0;L;;;;N;;;; AB7D;LATIN SMALL LETTER L WITH TURNED DESCENDER;L1;0;L;;;;N;;;;; AB7E;LATIN SMALL LETTER L WITH TURNED DESCENDER AND STROKE;L1;0;L;;;;N;;;; AB7F;LATIN LETTER SMALL CAPITAL P WITH LOW LEFT HOOK;Ll;0;L;;;;N;;;; AB80;LATIN CAPITAL LETTER OPEN P;Lu;0;L;;;;N;;;;AB81; AB81;LATIN SMALL LETTER OPEN P;L1;0;L;;;;N;;;AB80;;AB80 AB82;LATIN CAPITAL LETTER P WITH APPENDAGE;Lu;0;L;;;;N;;;;AB83; AB83;LATIN SMALL LETTER P WITH APPENDAGE;L1;0;L;;;;N;;;AB82;;AB82 AB84;LATIN CAPITAL LETTER S WITH SHORT STROKE;Lu;0;L;;;;N;;;;AB85; AB85;LATIN SMALL LETTER S WITH SHORT STROKE;Ll;0;L;;;;N;;;AB84;;AB84 AB86;LATIN CAPITAL LETTER S WITH DESCENDER;Lu;0;L;;;;N;;;;AB87; AB87;LATIN SMALL LETTER S WITH DESCENDER;L1;0;L;;;;N;;;AB86;;AB86 AB88;LATIN CAPITAL LETTER T WITH DESCENDER;Lu;0;L;;;;N;;;;AB89; AB89;LATIN SMALL LETTER T WITH DESCENDER;L1;0;L;;;;N;;;AB88;;AB88 AB8A;LATIN CAPITAL LETTER T WITH BOWL;Lu;0;L;;;;N;;;;AB8B; AB8B;LATIN SMALL LETTER T WITH BOWL;Ll;0;L;;;;N;;;AB8A;;AB8A AB8C;LATIN CAPITAL LETTER TP;Lu;0;L;;;;N;;;;AB8D; AB8D;LATIN SMALL LETTER TP;L1;0;L;;;;N;;;AB8C;;AB8C AB8E;LATIN CAPITAL LETTER TP WITH DESCENDER;Lu;0;L;;;;N;;;;AB8F; AB8F;LATIN SMALL LETTER TP WITH DESCENDER;L1;0;L;;;;N;;;AB8E;;AB8E AB90;LATIN CAPITAL LETTER X WITH DESCENDER;Lu;0;L;;;;N;;;;AB91; AB91;LATIN SMALL LETTER X WITH DESCENDER;Ll;0;L;;;;;N;;;AB90;;AB90 AB92;LATIN CAPITAL LETTER X WITH STROKE;Lu;0;L;;;;N;;;;AB93; AB93;LATIN SMALL LETTER X WITH STROKE;L1;0;L;;;;N;;;AB92;;AB92 AB94;LATIN CAPITAL LETTER X WITH TWO HOOKS ABOVE;Lu;0;L;;;;N;;;;AB95; AB95;LATIN SMALL LETTER X WITH TWO HOOKS ABOVE;L1;0;L;;;;N;;;AB94;;AB94 AB96;LATIN SMALL LETTER SCRIPT X;L1;0;L;;;;N;;;;AB97;LATIN CAPITAL LETTER Z WITH STROKE AND DESCENDER;Lu;0;L;;;;N;;;;AB98; AB98;LATIN SMALL LETTER Z WITH STROKE AND DESCENDER;L1;0;L;;;;N;;;AB97;;AB97 AB99;LATIN CAPITAL LETTER ZE;Lu;0;L;;;;N;;;;AB9A; AB9A;LATIN SMALL LETTER ZE;L1;0;L;;;;AB99;;AB99 AB9B;LATIN SMALL LETTER LOW TURNED C WITH ASCENDER;L1;0;L;;;;N;;;; AB9C;LATIN CAPITAL LETTER CAUCASIAN CHE;Lu;0;L;;;;N;;;;AB9D; AB9D;LATIN SMALL LETTER CAUCASIAN CHE;Ll;0;L;;;;N;;;AB9C;;AB9C AB9E;LATIN CAPITAL LETTER CAUCASIAN CHE WITH DESCENDER;Lu;0;L;;;;N;;;;AB9F; AB9F;LATIN SMALL LETTER CAUCASIAN CHE WITH DESCENDER;L1;0;L;;;;N;;;AB9E;;AB9E ABA0;LATIN LETTER SMALL CAPITAL GHE;L1;0;L;;;;N;;;; ABA1;LATIN SMALL LETTER REVERSED GHE;Ll;0;L;;;;N;;;A780;;A780 ABA2;LATIN CAPITAL LETTER REVERSED GHE WITH STROKE;Lu;0;L;;;;N;;;;ABA3; ABA3;LATIN SMALL LETTER REVERSED GHE WITH STROKE;L1;0;L;;;;N;;;ABA2;;ABA2 ABA4;LATIN CAPITAL LETTER REVERSED GHE WITH LOW LEFT HOOK;Lu;0;L;;;;N;;;;ABA5; ABA5; LATIN SMALL LETTER REVERSED GHE WITH LOW LEFT HOOK; L1;0; L;;;; N;;; ABA4;; ABA4 ABA6;LATIN SMALL LETTER REVERSED GHE WITH LOW RIGHT HOOK;Ll;0;L;;;;N;;;; ABA7;LATIN CAPITAL LETTER TURNED WIDE H WITH STROKE THROUGH DESCENDER;Lu;0;L;;;;;ABA8; ABA8;LATIN SMALL LETTER TURNED H WITH STROKE THROUGH DESCENDER;L1;0;L;;;;N;;;ABA7;;ABA7 ABA9;LATIN CAPITAL LETTER LONG S;Lu;0;L;<compat> 0053;;;;N;;;;017F; FB0F;LATIN CAPITAL LETTER D WITH RIGHT STROKE;Lu;0;L;<compat> 0110;;;;N;;;0111; FB18;LATIN CAPITAL LETTER H WITH LEFT STROKE;Lu;0;L;<compat> 0126;;;;N;;;;0127; FB19;LATIN CAPITAL LETTER H WITH VERTICAL STROKE;Lu;0;L;<compat> 0126;;;;N;;;;0127; FB1A;LATIN CAPITAL LETTER WIDE H WITH HOOK;Lu;0;L;<compat> A7AA;;;;N;;;0266; FB1B;LATIN CAPITAL LETTER WIDE HENG;Lu;0;L;<compat> A726;;;;N;;;;A727; FB1C;LATIN CAPITAL LETTER TURNED WIDE H;Lu;0;L;<compat> A78D;;;;N;;;;0265;

# 4. Acknowledgements

Many thanks to the Russian Wikipedia user "Geoalex" for supplying many valuable information. We respect his wish to not publish his full name here.

Also; special thanks to Juris Cibuls for providing many examples from his collection of historic primers, and for his critical remarks based on them.

# 5. References

Here, references are listed which are used in the introduction part of this proposal or therwise generally. References applying to single figures are given in the figure legend.

- [1] Юшманов, Николай Владимирович [Yushmanov, Nikolai Vladimirovich]: Определитель Языков [Determinant of languages]. Москва/Ленинград [Moscov/Leningrad (now Saint Petersburg); Russia] 1941
- [2] Марр, Николай Яковлевич [Marr, Nikolai Yakovlevich]: Абхазский аналитический алфавит [Abkhaz analytical alphabet]. Ленинград [Leningrad, now Saint Petersburg; Russia] 1926
- [3] Литературная энциклопедия: в 11 т [Encyclopedia of literature, in 11 volumes]. Москва [Moscow; Russia]1929–1939.
- [4] Baldauf, Ingeborg: Schriftreform und Schriftwechsel bei den muslimischen Russland- und Sowjettürken (1850-1937) [Script reform and script change for the Muslim Turk people in Russia and the Soviet Union; in German]. Budapest (Hungary) 1993, ISBN 963 05 6531 5
- [5] Frings, Andreas: Sowjetische Schriftpolitik zwischen 1917 und 1941 eine handlungstheoretische Analyse [Soviet writing systems politics between 1917 and 1941—an analysis based on theory of action]. Stuttgart (Germany) 2007, ISBN 978-3-515-08887-9
- [6] Metelko, Franz Seraph: Lehrgebäude der slowenischen Sprache im Königreiche Illyrien und in den benachbarten Provinzen [Theory of the Slovene language in the kingdom of Illyria and the neighboring counties; in German]. Laibach (now Ljubljana; Slovenia) 1825.
- [7] Russian Wikipedia user "Geoalex", <u>http://ru.wikipedia.org/wiki/%D0%A3%D1%87%D0%B0%D1%81%D1%82%D0%BD%D0%B8%D0%BA:Geoalex</u> (retrieved 2011-10-02). See also section 4. "Acknowledgements".

# 6. Examples and Figures

Figures which apply to several languages, or which provide additional evidence outside the scope of this proposal for characters proposed here, are given decimal numbers and are listed first.

They are followed by figures which apply to a specific language. These are identified by the English language name + "-" + a decimal number. They are listed alphabetically by language name, and within a language section by the number part.

If a specimen showing the complete alphabet of a language was found and considered relevant, usually it is given as the first figure filed for this language (thus numbered "Language"-1).

Characters proposed in this document are referenced here by their name, without the proposed code point. Already encoded letters are referenced by their code point (U+xxxx) and name.

**Disclaimer:** The political, ideological, philosophical, or religious views expressed in some of the text specimens presented here are not necessarily the ones of the authors of this proposal.

**Fig. 1:** From [1], p. 28/29. Showing the first column, with the references added which are used in this proposal.

	ä	вепс., ижор., ингуш., карел.
	A	адыгейский
	æ	ингуш., кетский, осет., сель-
		купский, удэйский
	č	ингуш., осет., чеченский
1-01	€	курдский, саамский
	-	[большинство 1]
1-02	đ	абхаз., адыг., башк., шугн.
1-03	d	адыг., белуджский
	Ð	[большинство <sup>2</sup> ]
	ล	курдский
1-04		абаз., абхаз., адыг., кабард.
		абазинский, абхазский
	•	адыгейский
1-00		[большинство <sup>3</sup> ]
1-07		абаз., адыг., дагест., курд.,
		татск.
1-08	h	дагест., татск., шугнанский
		абаз., кабардинский
1-10	ĥ	абаз., адыг., кабардинский
		ингуш., кабардинский, кет-
		ский, маньс., ненецкий,
		нивх., осет.
1-12	ħ	адыгейский
	1	абазинский, абхазский
	ī	таджикский

Fig. 2: From [1], p. 28/29.

Showing the second column, with the references added which are used in this proposal.

0	
2-01	ц хакасский
	Ј ТУВИНСКИЙ
-	қ кавказские, курдский
	ћ, в адыгейский
2-02	садыг., кабардинский
	<i>й</i> авар., ительм., хант., эским.
<b>2-0</b> 3	1 абаз., авар., адыг., кабард.
	<b>ў хантыйски</b> й
	<b>ц</b> ингуш., тюркские, <sup>4</sup> чеченский
	<b>у языки</b> народов Севера
	ö вепс., ижор., карел., чеченский
	ө [большинство <sup>5</sup> ]
	р адыгейский
2-04	р абаз., абхаз., кабард.
2-04a	р дагест. (кроме авар.), курд.
2-05	р адыгейский
	q абаз., абхаз., дагест., ка-
	бард.
	ғ нивхский
	š адыг., ингуш., чеченский
	ș [большинство <sup>6</sup> ]
2-06	в дагест., маньс., саам., хант.
2-07	f абазинский, абхазский
2-08	t белудж., кавк., курд., сир.
2-09	ѣ адыг., башк., шугнанский
2-10	Р, Рабхазский 2-11

**Fig. 3:** From [1], p. 28/29.

Showing the third column, with the references added which are used in this proposal.

- й чеченский
- ū см. й, ů
- й казах., каракалпакский
- **й таджи**кский
- х ингуш., чеченский
- 3-01 х дагестанские
- 3-02 х дагест., шугнанский
- 3-03 х абаз., адыг., кабард.
  - ž ингуш., осет., чеченский
  - **д кавказские**
  - z дунганский
  - *и* [большинство<sup>7</sup>]
- 3-04 з даргинский, табасаранский
- **3-05** 3 кавказские, нанайский, саам., удэйск., эвенк., эвенск.
  - 3 коми
- З-06 з саамский, шугнанский
- з-от, ов Ф, Ф, абазинский, абхазский
  - ь [большинство<sup>8</sup>]
- 3-09 г, ř адыгейский
- з-10,11 ч, ч абаз., абхаз., кабард.
- 3-12 Лабаз., абхаз., адыгейский
- 3-13 7, адыгейский
- з-14,15 ц, ц абаз., абхаз., кабард.
  - вепс., таджикский, тюркские (*реже другие*).

**Fig. 4:** [1], p. 28/29. Showing the whole double page, showing in the header also the Abkhaz letters introduced by Marr [2] which are not subject of this proposal, and the Yakut letters from the Novgorodov alphabet which are subject of a separate proposal (as they were introduced earlier, based on a different principle [being an extension of an IPA-based orthography]).

В алфавитный список не вкли	очены первичные латиницы, замененн	ЫЕ ВПОСЛЕДСТВИИ ЛОУГИМИ: абааа
(особенности — ә, ћ, 1, J, ф, ш,	<ul> <li>д, уу; буквы с точками, как э, э, кр</li> <li>собенности — à, è, ý; ç, l, ş; х; b; соче</li> </ul>	ружками, как пь, зубчиками, ка
	р, у, э, Э, Я, но, з; двоеточие как зна	
букв и знаков препинания еет).		
Ингушская, осетинская и ч	еченская латиницы употребляли много	сочетаний согласных с -h вза
	Языки народов Севера пользовались	
ский, эвенкийский, эвенский),	под согласными (ительменский, не	нецкий, нивхский, саамский, с
купский) и ' после согласных (ите.	льменский, нивхский, нымыланский, э	скимосский).
	ų	
ä вепс., ижор., ингуш., карел.	ц хакасский	й чеченский
А адыгейский	Ј ТУВИНСКИЙ	ū cm. ŭ, ů
а ингуш., кетский, осет., сель-	<b>к</b> кавказские, курдский	й казах., каракалпакский
купский, удэйский	ћ, в адыгейский	й таджикский
č ингуш., осет., чеченский	садыг., кабардинский	х ингуш., чеченский
< курдский, саамский	ł авар., ительм., хант., эским.	х дагестанские
с [большинство <sup>1</sup> ]	1 абаз., авар., адыг., кабард.	х дагест., шугнанский
đ абхаз., адыг., башк., шугн.	<b>ұ хантыйски</b> й	🗙 абаз., адыг., кабард.
d, адыг., белуджский	<b>ц</b> ингуш., тюркские, <sup>4</sup> чеченский	ž ингуш., осет., чеченский
Ә [болышинство <sup>2</sup> ]	ŋ языки народов Севера	<b>д кавказские</b>
б курдский	ö вепс., ижор., карел., чеченский	z дунганский
ł абаз., абхаз., адыг., кабард.	⊕ [большинство <sup>5</sup> ]	≠ [большинство <sup>7</sup> ]
д абазинский, абхазский	Р адыгейский	z даргинский, табасарански
д адыгейский	р абаз., абхаз., кабард.	з кавказские, нанайский, са
ој [большинство <sup>3</sup> ]	р дагест. ( <i>кроме</i> авар.), курд.	удэйск., эвенк., эвенск
ћ абаз., адыг., дагест., курд.,	р адыгейский	З коми
татск.	<b>q абаз., абхаз.,</b> дагест., ка-	, з саамский, шугнанский
<b>ң дагест., татск., шугнанский</b>	бард.	ч, ч, абазинский, абхазский
h абаз., кабардинский	ғ нивхский	ь [большинство <sup>8</sup> ]
h абаз., адыг., кабардинский	š адыг., ингуш., чеченский	г, ř адыгейский
h ингуш., кабардинский, кет-	ș [большинство <sup>6</sup> ]	ч, ц абаз., абхаз., кабард.
ский, маньс., ненецкий,	в дагест., маньс., саам., хант.	J абаз., абхаз., адыгейский
нивх., осет.	ſ абазинский, абхазский	<b>Ъ а</b> дыгейский
ђ адыгейский	t белудж., кавк., курд., сир.	ц, ц абаз., абхаз., кабард.
1 абазинский, абхазский	ѣ адыг., башк., шугнанский	вепс., таджикский, тюрко
ї таджикский	Р, Рабхазский	(реже другие).
<sup>2</sup> Иранские (кроме талжик.), кавки ский, тюркские (кроме карачбалк., кирти <sup>3</sup> Иранские, кавказские (кроме ады 4 Кроме азербайджанского.	ивказские, карельский, сирийский, тюркские ( азские (кроме абаз., авар., кабард.), северны из., крымтат., кумык., вогайск., ойрот., туви г.), тюркские (кроме ойрот., туркмен., хакас.,	е (кроме ительм., маньс., нымыл.), си н., узбек., хакас., шор., якут.). , шор.).
шугнанский.	бурятский, калмыцкий, лакский, лезгинск: авказские (кроме адыг.), карельский, сирийски	

Fig. 5: [2], vol. 3, p. 134.

Аварский		Дарги	псиий	Лак	Лакский		icenz
a	T	a	Ĩ	a	Ĩ	a	īÌ
b c	ب چ ( آ	b	÷	b	Ŷ	b	4
c	Q	C	0	с	÷ ÷	c ç	て ( っ ららを ) ( - )
	-	ç	ē			ç	C
£	Ċ	e	C	£	e	e	e
d e	ی د اه	d e		d e	ت ه ۱	d	
	01	ə	1	ə	i	ə	1
		f	ف			f	ف
g	J	g	ſ	g	5	e ə f g	5
		g 01	Ĵ				A MARK MARK
01	Ż		Ż	01	Ś	01	ż
h	۵	h	ھ	h	ھ	h	\$
ħ	2	ħ	C	ĥ	C		
h ·	3	h	3	<b>A</b>	3		
h i j k	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	i j k	- ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	h i j	م ل د د بوای می ل	i j	5555
·k	0: 1	J L	0: 1	J k	0: 1	k	1:0
ĸ	5 5	k	3 5	k	5	k,	5
1	Ĩ	1	1	i	Ĩ	i	1
Ļ	J		-				-
Ł	Ĩ						
m	4	m	P	m	p	m	P
п	Ċ	n	Ċ	n	٩ ت	n	U
0	اؤ	0	اؤ			1.80	
				θ	اق	θ	اق
р	÷	p	ų	p	¥	р	ž
		R	ب	B	ب	B	<i>ب</i> 
q	e	q	3	q	Ê	q	و
đ	ë	p R q q r	ق	4	Ï	q	ى
r	د	r	د	p p q q r s	ر	r s	ر
5 5	~	S S	2	9		9	~
		ş		ş	 دن	\$	ش
ş t		t		t		t	Ü
t	او ط (: ش چې ځ ر (ف: ق: او ط (: ش چې ځ	t	وه د د د د د د د د و ب	t	وه و زوی و د وی و در و	t	اه ال ال ال ال ال ال ال ال
u	اه	u	وا	u	او	u	او
					1	у	
v	9	v	Ļ	v	و	v	9
		W	و	1.10		-	11.0
x	ż	x	Ż	x	Ż	x	Ċ
x	5	-X	5	X,	5	X	5
x	Ö	×	ĉ	x	Ĉ	×	Ĉ
X X X Z Z Z	いいい いきょう	W X X X X Z Z Z	j	X X, X Z Z Z	いいこう	X X X Z Z Z	د د کېندل. د او
Z	ژ	Z	Ċ	Z	ژ	Z	ĉ
Z	3	Z	· ・ · · · · · · · · · · · · · · · · ·	Z	ڌ	4	ŗ
1	and a second	ζ	ض	199		1	

Showing the Latin and Arabic alphabets for Avar, Dargwa, Lak, and Lezgian.

**Fig. 6:** p.83 from: Agarunov, Yakovich Mixhael and Agarunov, Mixhael Yakovich. 1997. Judeo-Tat – Russian Dictionary. Moscow: Hebrew University, Moscow. Showing additional evidence for LATIN LETTER H WITH VERTICAL STROKE for an application related to, but not exactly within the scope of this proposal. The publication date may indicate modern use. *This is Fig. 1 from L2/08-034R (submitted 2008-04-18 by Lorna Priest).* 

83	(GH)
zэгэ подмигивать, делать кому- либо знаки глазами	həddən zijod, əz həddiş zijod - безмерно
hyndyr 1. a) высокий; hyndyrə mərd мужчина высокого роста; рос- лый мужчина; б) громкий; 2. a) высоко; б) громко; hyndyr birə стать высоким; hyndyr varafdə повышаться, возвышаться, под- ниматься	həddsyz 1. безграничный, чрезмер- ный, неограниченный; 2. а) без- гранично, беспредельно; б) без меры; множество həddsyz-hisobsyz несметный, бес- численный, бессчетный
hyndyrэbuj рослый, высокий, высо- кого роста hyndyri вышина, высота, возвышен- ность; э hyndyri вверх, вверху; навсрх, наверху; э hyndyri a)	həjf 1. жаль, жалко; досадно; həjf kəşirə жалеть, сожалеть; 2. месть; həjfjurə vədəşəndə метить, отометить həjf-həjf, həjfki межд. жаль! увы!
с высоты; б) громко hyndyrirəpəjmun высотомер	həjfi жалко
hyzym дрова, полено, кусок древе- сины; hyzym vənçirə рубить	həjkəl (həkəl) статуя, изваяние bəjkəlsox, həjkəlşunas ваятель, схульптор
дрова hyzymi древесный; годный на дрова hyzymvənçi лесоруб, дровосск	ћәјо стыд, стыдливость; ћәјо кәзігә тувствовать, испытывать силь- ный стыд; стыдиться, стесняться; ћәјо dorә устыдить; выговари- вать
H	<ul> <li>ћәјоlу стыпливый, скромный, за- стенчивый</li> <li>ћәјоsyz бесстыдный, беззастенчи- вый, наглый, нахальный</li> <li>ћәјоsyzi бесстыдство, наглость, на- кальство</li> </ul>
həb пилюяя həcə 1. подпорка с раздвоенным концом; 2. развилистый, раздво- енный həcəjazuhun имеющий раздвоенный язык	hajot двор hajru очарованный, восхищенный; hajru soxda очаровывать, вос- хищать, пленять; hajru bira очаровываться, восхищаться, пленяться; ma arity hajru gardom! (obpaщenue к дорогому человеку) да буду я восхищен тобой!
ћасратат 1) медицинские банки, ста- вящиеся на лоб или затылок с целью отсасывания крови и кро- вопускания (изготавливаются из рогов домашних животных); 2) кровопускание	ћајуоп 1) животное, скотина; узћаз ћајуоп зверь; днкий зверь; 2) перен жалкий, несчастный; 3) ру- гат. скотина, болван; ћајуоп bira ругат. озвереть, стано- виться скотиной
həçətxunə (см. тэк. zoxut) туалет, уборная	ћәjvondor животновод
hodd 1) границы, предел; 2) мера (стелель); эг hodd vodarfdo пе- реходить границы ( <i>дозволенного</i> ), переборщить;	hajvoni 1. скотство; 2. скотский; зве- риный; 2) <i>перен</i> . грубость, хам-

Fig. 7: [6], p. 1:

Showing the Metelko alphabet (which was used for the Slovene language in the 1820s) in relation to contemporary Latin alphabets (referred as "Neu-Krain.", i.e. "new Slovene"). While this alphabet itself is not subject of this proposal, it contains letters which are used in the Latin alphabets of the Soviet Union also about 100 years later, and therefore are proposed here. A feature of this alphabet is that letters which are modeled after Cyrillic letters are adapted to have a real Latin look. Regarding the Latin small ZE and small CHE, this is done by expanding the letter downwards, giving them a true x-height body and a full typographic descender. In fact, the small CHE can be unified with U+0265 LATIN SMALL LETTER TURNED H.

معف الأرادي									
E	- <b>4</b> -	44			- 🔺 '		44		
0		- 11	1	а.	L	Т	н	<b>a</b> .	
· •			•		-		••	2.	
								-	

Rrainische und aus andern Alphabeten gleichbedeutende Schriftzeichen :

Reus Rrain. Ults Rrain. Rroatifche, Deutsche, Frangof. Italienische.

	Aa	<b>A</b>		a		a .
	ВЬ	Ь	Ь	6	Ь	Ь
· (	Dd	ď	ď, p	6	d	d
	Еe	e	e	ă.	e	e aperto
	E c	<b>é</b>	-()	¢ .	é f	e chiuso(?)
	Ff	I Charles	f	f	-	f
	Gg Hh	8 h	B b	\$	g: gant	g: gara
				ų	— h	
	Hh.	h	h 🔅	<b>ģ</b>	· · ·	
	Ii	i	i	Ĵ.	i	i
1.	Ii 2 a Jj	1, ù, e	- (?)	e	e: que	
	Jj	j,	<b>j</b> -	t	i : mien	
	Kk	k	k	t .	c: car	ch
	LI	1	1	I.	1	1
	11	Ij	ly	<b></b>	il :' ail	gl: gli
	Mm	m	m	m	m	m
	Nn	n	n	n -	n	n
	Nn	nj	ny .	<u> </u>	gn	gn .
	0 0	0	0	D.	0	o chiuso
1	00	ò		· ····	oi (?)	o aperto (?)
	Рр	<b>.</b> P	<b>p</b> / ·	Þ	P	P
	Rr	r	r	t	<b>r</b> .	r ´
	S s	ſ	5Z	<b>Ø</b>	s: son	8: SODO
	W w	fh	ss, sh	ſ¢)	che	sce
	ष्य भू	fhzh	sch	fchtfch		· · · ·
	3 3 96 32	•	2	f: lefen	z	S: TOSA
	<b>3E 3</b> £	sh	8		j i	
	Τt Uu	t	<b>t</b> 20	<b>t</b> .	t	£
	Uu	<b>u</b> . (	u	u	ou	u
	V v	<b>V</b>	¥	10	¥ (*	v ,
	ղ դ	z	CZ	8		z : zio
	Ч ų	zh	ch	tíd		c: ciò
						1

Fig. 8: Excerpt from [6]., p. 281: Text sample of the Metelko alphabet used in Slovenia in the 1820s, showing LATIN CAPITAL/SMALL LETTER ZE, the latter as a true Latin form with x-height body and typographic descender.

r. Haba ins vol.

Haba je videla vola na travneke, ine zelí nemu enaka bite. Baune tedej svojo gérbasto kózio napiheváte, ter vpráwa svoje tovarwíne: Ale nésem takó velíka kakor vol? Nése ne, ji pravijo. Le we bol se napéna, ter vprawa: Sem 3dé vender velekemu volu enáka? Spet ji odgovore, de ne. Pa ne neha; 32 vso moujó se bol ine bol napéna, ine razpoure.

**Fig. Abaza-1:** Correspondence between the historic Latin and the current Cyrillic orthography for Abaza, compiled by "Geoalex" [7]. Retrieved 2010-05-12 from:

http://ru.wikipedia.org/wiki/%D0%A4%D0%B0%D0%B9%D0%BB:Abaza\_latin\_%26\_cyrillic\_alphabets.jpg

A a	A a	հհ	Ъъ	M m	Мм	T t	Τт	33	Дз дз	Gu gu	Гв гв	Qı qı	Къь къь
Вв	Бб	Ηĥ	XI xI	N n	Нн	Ţţ	TIτI	ГГ	Жь жь	Xu xu	Хвхв	Хь хь	Хь хь
Сс	Цц	Чч	Чч	00	Οo	Uu	Уу	ŦŦ	ЧвІ чвІ	Xhu xhu		Fh fh	ΦΙφΙ
Çç	ЦIцI	Чq	ЧIчI	Рp	Пп	Vv	Вв	JJ	${\rm q}_{\rm B}{\rm q}_{\rm B}$	Xu xu	Хъв хъв	Ļh ļh	ЛІ лІ
D d	Дд		Йй	Рp	ПΙпΙ	Xx	Хx	Ҽе	Тш тш	Hu hu	ХІв хІв		
Еc	Еc	Ii	Ии	Qq	Къ къ	Xh xh			ШІшІ	Уu yu	ГІв гІв		
Ff	Фф	Jj	Жв жв	0 <b>I</b> oI	Гъгъ	Хx	Хъ хъ	Ьь	Ыы	Kı kı	Кь кь		
fF	Швшв	Kk	Кк	R r	Рр	Уу	ГІгΙ	Qu qu	Къв Къв	G1 g1	Гь гь		
Qq	Лжлж	Қķ	КІ кІ	Ss	Cc	Zz	33	0]u oju	Гъв гъв	Kı kı	КІь кІь		
<b>g</b> g	<b>Υ</b> [ <b>Μ</b> ][ <b>Μ</b> ]	Ll	Лл	Şş	Шш	<b>Z</b> z	Джв джв	Ku ku	Кв кв	Li li	Ль ль		
Gg	Γг	Γļ	Тл тл	٢ſ	Щщ	Zz	Жж	Ku ku	КІв кІв	0[ા ગ[	Гъь гъь		

Fig. Abaza-2: Title page and sample page from a book published 1933.

M. Avsianikov B. Levitan S. huşakov A. Alteksandrov.	
	Hara fiapxala iayusxiu iayderra zataxu.
OBȘESTVOVEDENIE	Gara fiqralıbyua rpnь avlast araboyakui anxaji irnaрьçar Araboyakui aқalxoz ialakuui fiqralıbyua qabayabajata iah zьmyua araboya klasi auat rқamunist parti rpafata rьbzazal вzazafa φьcla iaţarқit. Auat yazab zdbryakuu yazab idzbrya kxua afajja ahamқua bzazafa fakudbrgblit. Antagıst aqralıkua rpnь avlast akapitalistkua irnapьçar
АРЬЭ APXIARTAKUI	Auat rpunkua ibzazaua araboyakui anxaji, adgud xata zma kui akapitaliistkui ryazabmyu, jacata irgit. Gara fipungii apxala aui japsta ja'han. GanLakui fiabaya
APXIARTA KUTANEIKUI	kui reskukua adgusi xata zmakuaz afijakua reknutkua irekud refiuajuz, apatwafi ixaxexija rgamukuagii resku iangedemgua
R <b>b</b> XAZLA APXIADA.	zamangui iahan. Fiara fianjakui fiasajakui rumu ialgan nsçka adgıslxata zmakuazi akapitaliistkui iansızs:xuz zama
	ahan. Bara hanlakui haваjakui fardara dara yazaв dzrваku
ΙΑΡΧΑΧΑUΑ ΑΧUЬ.	араtwafi, adgıьl xata zmakuaz, akapitalıistkua irpwagьlat
IXPAXAUA ASKUŞ IZPXIUŞ APXIADA.	irabaқ zapst'uamca zaman lardə irgat. Aqabayabaja xuitnaya mapeçadərlara axaz iabaқkuz uyaz ilafiakuata içsrua, səsrçi amyuala katərg ddərgarnəs, axa ku itərgakuz imyuais'uan apatvafi itutanaqtarakui ixaxəxət
i	takui rpnь ipskuat. Архаla iavuskuaz ififiьrdьгьгкиьп fiara ivaydыр:
Чег Avt Obl. ONO Aқamis idrьваqiaț.	Rasei patwafisyua apns агавочі алхаді іşавақцаг, işвга
	zakuz. Auat dara yazas dzersakua işraiyaikuaz. layuskuaz fifierder uamçara fiara iyayderp: asalışavikkuz aqasayasaja apatwafi, adgielxata zmakuaz, akapitalistkua irai
IATAZKEZ PAZYRA JAGIA Z <sup>.</sup> NIPL	yaira işazbirgaz. Akapitalıist gralıbyuaka ronb ibzazakua aqabayabanakua
•	ақаmunist parti rpafata akapitahist vlasi axdruttra axazla xa çaradu rulata iaвақit.
	Nara fiqralıbyua auaça apnı ifakufisrgəl'kuaua auəsdukua pərvətnəs fiara ifaflaramku açıxua gujajamyuala itagəlakuap Qralıbyuata iahaku rpnıs akapitalıstkua fiara ifipvagəlata iyafiaisərnəs vazdrəfiazərit. Aygıaxayakui akulakkui fiara fifa
BATALPASINSK GORAD-1933. as.	srikkua, fizavodkua, heliektrostanckua, ayaçxısıtakua—aşaxta-

Fig. Abaza-4: Excerpt of the sample page shown in fig. Abaza-2. Marked red: LATIN CAPITAL LETTER X WITH TWOO HOOKS Marked green: LATIN CAPITAL LETTER TURNED WIDE H ("Latin che") Marked blue: LATIN CAPITAL LETTER S WITH DESCENDER
ΙΑΡΧΑΧΑUΑ ΑΧUЬ.
IXPAXAUA ASKUŞ IZPXIUŞ APXIADA.
Чег Avt Obl. ONO Aқamis idrьваqiaţ.
<ul> <li>Fig. Abaza-4: ibid., p. 3, excerpt of the sample page shown in fig. Abaza-2. Marked red: LATIN CAPITAL LETTER WIDE H WITH HOOK as uppercase counterpart to U+0266 LATIN SMALL LETTER H WITH HOOK. Marked green: LATIN SMALL LETTER KRA WITH DESCENDER (last line) in contrast to U+2C6A LATIN SMALL LETTER K WITH DESCENDER (second line). Marked blue: LATIN SMALL LETTER L WITH HOOK AND TURNED DESCENDER. The existence of the uppercase counterpart is deduced, as Abaza uses capital letters. Marked purple: LATIN SMALL LETTER H WITH HOOK AND TURNED DESCENDER. The existence of the uppercase counterpart is deduced, as Abaza uses capital letters. Marked purple: LATIN SMALL LETTER H WITH LEFT HOOK. Marked orange: LATIN SMALL LETTER CAUCASIAN CHE. Marked grey: LATIN SMALL LETTER S WITH DESCENDER.</li> <li>Fara fipьngii apxala aui iapşta ia han. fianLakui fiaBaja- kui rьzkukua adgıbl xata zmakuaz afijakua rьknuţkua irъkud- rьfiuajuz, apat中afi ixaxьxja rqaınukuagıi rьzku ianışbdьmçuaz zamangıi ia han. fiara fianjakui fiaBajakui rьmч ialgar- nьçқa adgıblxata zmakuazi akapitalıistkui ianьrzьnxuz zaman</li> </ul>
Fig. Abaza-5: ibid., p. 5. Marked red: LATIN SMALL LETTER REVERSED GHE WITH STROKE (here with a glyph variant without a typographical descender) Marked green: LATIN SMALL LETTER X WITH TWO HOOKS.
xatata araxu rapș inqurcun.
Fig. Abaza-6: ibid., p. 60, showing LATIN CAPITAL LETTER WIDE H WITH LEFT HOOK, LATIN SMALL LETTER H WITH LEFT HOOK.
— he-ne Авап ubjgii, — ifiuaț афдиьхи. Aui aqımala fiibrвaț. Auaha фагьşаца ixualbta, auasa iaubta iaz зьçаqаріза,
Proposal to encode Latin letters used in the Former Soviet UnionPage 27 of 502011-10-18

Fig. Abaza-7: Two sample pages from another book published using Abaza Latin orthography. Retrieved 2010-12-27 from http://fotki.yandex.ru/users/ievlampiev/album/105429/ Marked red: x-height version of U+01A3 LATIN SMALL LETTER OI (a.k.a. GHA) considered as glyph variation.

Marked green: LATIN CAPITAL LETTER TP WITH DESCENDER

Marked blue: LATIN SMALL LETTER C/S WITH DESCENDER, showing examples where the descender is applied right from the center

Marked grey: U+0265 LATIN SMALL LETTER TURNED H

Marked purple: LATIN CAPITAL/SMALL LETTER OPEN P

Marked brown: U+A7FB LATIN EPIGRAPHIC LETTER REVERSED F and LATIN SMALL LETTER REVERSED F as case pair

Marked light blue: LATIN CAPITAL LETTER REVERSED GHE WITH LEFT HOOK Marked orange: LATIN CAPITAL LETTER TURNED WIDE H WITH STROKE THROUGH DESCENDER; LATIN SMALL LETTER TURNED H WITH STROKE THROUGH DESCENDER

2000 00 1 (STA) 2000 00 10	100

#### AUƏSƏURA.

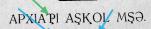
Guəronara-dəup imanfalanə inagaanə auəsəura. lkunagoun apx3-ca oyə ilçaan3a auəsəura. lkunagam hasab qaçanə aalara auəs raja z'uit ha. Nasəpəun, zegiə irəckəun, qabaala axnəqugara. Eionəuzi: anxaja dousə rxala inxozar aku,

rueidkəlanə inxozar aku?

Anxayəi auəsəuyəi reeidərkəlar izmiaaiua qalaşam.

#### EKSKURSIA.

Ekskursia qałçaxıauma? Izəqałçazi? Ekskursia łancoz łwabeizajgaei? Myas łazlacazi? Haxneiz ijbazi, ifahazi? Ekskursia zxuartouzi?



liast apxəmra. Açayja aşkolaqnə iaait. Zegiə irəzhait, rjei-rjəi irəcləeit. Ajja iast. Açayja ixu-mar'ua, iqqaua aklas iynalt. Açayja drəltagəlanə aklas dəynalt arçayə, ixə-iqə ixaqqaua. Açayja arçayə izçaaua ialagəeit: iaaxuarəuzi afqukua, zaqa tetrad aaxuarəuzi, ipsaxrəuma cəpxrəi apqara-kua fia. Arçayə atak reifieit açayıa. Arçayəi acayjei irtaxən ilarsnə açara naparkra.

Afjəmtan amərxuagakua rapxıaqa izkupxozi? Azaza apxia iababoi?

- 8 -

APLAN. Akualap akıaad iakuahçap. Akualap iakurşanə akarandafala iahqaoiuan. Akiaadaqnə lqaloit pf-da-qiak pf-kuagitak amanə. Akiaadaqnə aqaoiuasta

iqalaz iaxızəun akualap anlan.

Astol anlan oyə ispatəix'oi? Astol anian oyə ispatəixol? lahhan astol iamoun 1-santimetrk, aura, atba-ara-80 santimetr. Pf-kuagitak, adaqıakua 80-100 santimetr aura rəmanə akıaad ançara mar'iam; ubri aqnər ja-santimetr santimetrk, ha iftərx'ueit. Abas iagərxanə iqou alaga iaxı3əun amasştab; santimetrk anlanaqnə iaanagoit ja-santimetrk, iça-bərgnə. Pf-kuagitak, atbaara aa-santimetrk, atanə iqou aura iaba—ialc'ueit astol anlan

iqou, aura jaba-ialç'ueit astol anlan. Aəklas anlan tətx! Aəşkol! Aəynə!

Akompas zakuəzi? Izə zkəuzi.

#### AJƏXARA.

Pnak, apxıarta-ynə aqnə daait ahakıəm. Eizeit auaa xuugia-daugia. Ahakiam eizaz dnaralapsait. Hkuənak, ija şəibəonaz ilapş naikufeit. D'ipxieit zvəzbəonaz aukuən. Aukuən djəxo ahakıəm dna-idgəlt. Ahakıəm aukuən d'ixuapşəit. Aukuən ija

idgət, Anakıən aykuən tixuapşət, Aykuən ija pəxtən, qara-qaragiə iqapfaa iqan. "Aykuən ixuazi" ha ahakıəm dçaait. "Abarbac ixuaeit" rheit igəlaz. "Ari aykuən ixua eipş izəxuada" ha ahakıəm drazçaait igəlaz. "Sara, sara" ha jayək raqara rəbyə nadərgəeit.

Fig. Abaza-8: ibid., p.15 – Marked red: LATIN CAPITAL LETTER REVERSED GHE WITH STROKE.

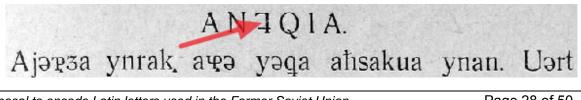


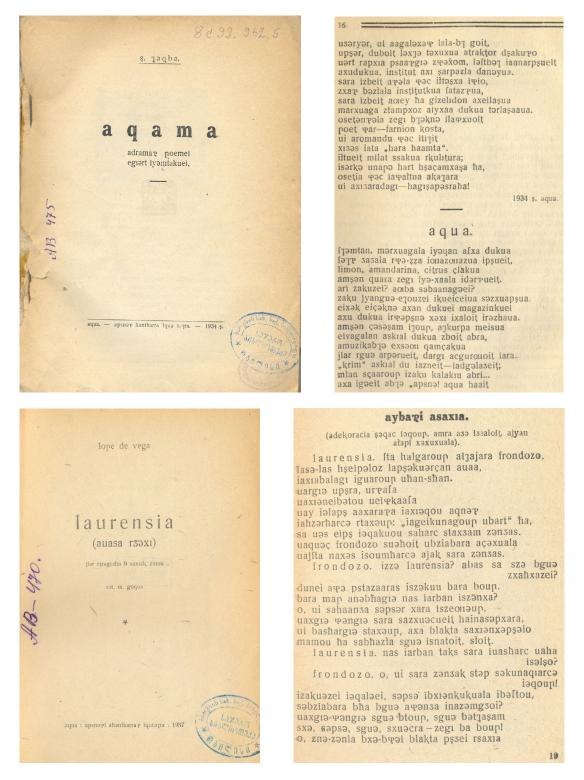
Fig. Abkhaz-1: Title page and sample page of a book published 1935. Also, an enlarged excerpt of the sample page, showing the complete (lowercase-only) Abkhaz alphabet.



ts

3

**Fig. Abkhaz-3:** Title page and sample page from two books published 1934 and 1937. The first one is a collection of poems; the second one is a translation of a work from the Spanish author Lope de Vega (1562-1635).



**Fig. Adyghe-1:** From a book published in 1927 introducing the Adyghe alphabet: Title, sample page, and the two pages showing the complete (lowercase only) alphabet. Note especially on the alphabet pages:

C WITH DESCENDER (left page, first row, 4<sup>th</sup> char) having the descender rightmost. KRA WITH DESCENDER having a right top different from K (left page, 4<sup>th</sup> and 5<sup>th</sup> row).

AD61 - 181 sixv seferbay, Rube Jeban. Peror PVABI. peroram pvable il. peroram po tyel. pom ∫xeheni qazəci iL. ti qvage səmege∫ det. Apere səmege∫əm poqabze arəLev bev perorxer LATV ket. por qabzeme səmagem qyeru. (Adəře hyelfəb) yegape қalexer yegapem yervalex. yegeni Auble. te ti qvage yegape det. yegapem sadi xati ih. naterier yegapem yenvaler P/ PV kraynachizdat - 52 -- 53 hvelfэв. ħħ tt \$ to Aa Bb CC GG UII V 2 XX xx d d 3 % ee 99 ]/ ff t gg g & ri ří đa da hh ii yy K h hh Wm kk RKKK 11. Lh Lh mm nn 1234567890 OP P/ P/ qq 1234567890 šj rz SJ 5%

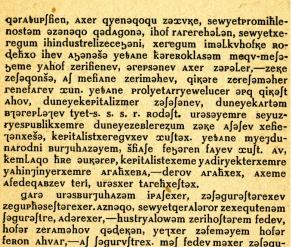
**Fig. Adyghe-2:** Correspondence between the historic Latin and the current Cyrillic orthography for Adyghe, compiled by "Geoalex" [7]. Retrieved 2010-07-23 from:

http://ru.wikipedia.org/wiki/%D0%A4%D0%B0%D0%B9%D0%BB:Adyghe\_alphabet\_cyrillic-latin.JPG

а	Α	дзу	зv	к	k	Н	n	У	u	цу	cv	ъ	
б	в	е	е	ку	kv	0	0	φ	f	ч	ħ	ы	ə
В	W	ë		кI	k∕r	п	р	φI	f	чI	վ	Ь	
Г	g	ж	J	кІу	ķv	пΙ	р	х	х	ЧЪ	đ	Э	е
гу	gv	жь	l	къ	q	пІу	pv	xy	xv	ш	ħ	ю	yu
ГЪ	Г	ЖЪ	z	къу	qv	р	r	ХЪ	x	шІ	ի	я	ya
гъу	гv	жъу	zν	л	1	с	S	хъу	xv	шІу	ђv	Ι	h
Д	d	З	Z	лI	L	Т	t	ХР	ĥ	шъ	š	Iy	hv
дж	g	И	i	лъ	L	тΙ	đ	ц	с	шъу	šv		
дз	З	й	у	м	m	тІу	ħν	цI	ç	щ	ſ		

Fig. Adyghe-3: Title page and sample page from a book published 1931.





- 5 -

hofar zeramahov qadexan, yeyxer zafemayem hofar feron ahvar,—AJ Jagurvltrex. maj fedev maxer zajagurultrexer zeguphaseltrexer, zexepxepxar, fieolayev xure. kemunistikyeski partamre sewyetwlastamre, maxer zapalarexev, guxelev yahexer, abeltrex, ajarvazev Jatarex. Altev Jatarenafi-mabemi, spyecxeme hof ararabeltre. himpyerialistzaomre xeregvroqzaomre (řrajdanskezaomre) xeregum ixezyaystwere arvadere zelareqvarev, qeralaropromihlinostam fielarvre pemaskenagom paxe, kastni terřowlemki pemaşxev kepitalistikiski haryendxemki hizan yattarev zaubrunam fit tyarare. ziguxelare zapalyxemre zeraxoxarašo qazatyezarav, av, zeke tiheperat zahten zifisapare-spyecialistxame yaguxel, zapalaxer, zerigeltrem fedeqabzev, al qadaxarovi kemmunistikiski partam, prolitaram wlastar byahten-byatarunalanar yamahev spyecialistabe zerejaheri abeltre. maj fedespyecialistxeme aznaqo-nafiabeme, ye

Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Page 32 of 50

**Fig. Adyghe-4:** Showing the cover of a book published 1932 which shows the slogan "Workers of the world, unite!" in several languages. The first line is Adyghe, showing its lowercase-only orthography. Alto, the inner title is shown (which contains the reference in Russian and Adyghe).

T.24382 2595-1 B. wolin zezaz hetgo h 4301 wsyeseyurne B Adařexekvtxalty 54395 T. 24382 в. wolin Б. ВОЛИН olyetarev tedarexeky isi za Politřramet ПОЛИТГРАМОТА учебник для PArtom ikandidatme КАНДИДАТСКИХ yayegape ∫agənev ПАРТИЙНЫХ ШКОЛ repsəretxəL 91134 Переводчик ХАТКОВ А. zezəsekərer hetgo hehmed

932

adəřexekum itxəLtyesenhofxer zəbeiL "adəřexekvtxəLtyes" kresnedar

Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Адыгейское Областное Нацио "АДЫГНАЦИЗДАТ"

Page 33 of 50

Avar: see also fig. 5

Fig. Avar-1: Title and sample page of a book published in 1935, and an enlarged excerpt of p.13. Marked red: LATIN CAPITAL LETTER L WITH DESCENDER,

LATIN CAPITAL/SMALL LETTER T WITH DESCENDER.

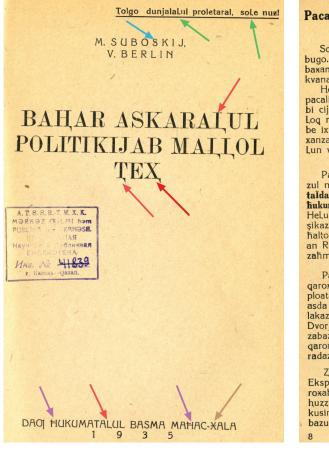
LATIN CAPITAL/SMALL LETTER X WITH DESCENDER

Marked green: LATIN SMALL LETTER L WITH DEFERRED DESCENDER

Marked orange: LATIN SMALL LETTER L WITH DEFERRED DESCENDER AND STROKE Marked blue: LATIN CAPITAL/SMALL LETTER S WITH SHORT STROKE

(showing a glyph with diagonal stroke for the capital letter, but with horizontal stroke for the small letter)

Marked purple: LATIN CAPITAL LETTER H WITH LEFT STROKE Marked brown: LATIN CAPITAL/SMALL LETTER X WITH STROKE



#### Pacajasul askar-pacajasulgi, pomeşşikazulgi kapitalistazulgi muoj çvajlun bukana.

Sovet sojuz-erkinlaral ħaltoxabazul va regaroxabazul ulka

Sovet sojuz-erkinLaral haltoxabazul va reqaroxabazul ulka bugo. 1917 ab. sunaLul oktjabr mozzalda "niLesa Rossija baxana becedazdasan miskinzabaze, zudesa cijar zahmat kvanalezdassan zahmatci xalqaLe" (Lenin). Hemer sebehanabgo bukinço niLer hanibgi hanze kapitalist pacalixazda hadinango niLer ulkadulgi reqaroxabigin haltoxa-bi cijar zahamat baxolelazul (eksploatatorazul) zulmu-inzit-Loq rukarab zaman. Basrijab Rossijalda inqilab kezehan se-be kitijaraLul botroda ççun rukana zal dahalalLun rukaral yanzabi pomessikal va tosevesav. bisungo kudijav pomessik xanzabi, pomeşşikal va tosevesav, bişungo kudijav pomeşşik-Lun vukarav pacagun sadax.

Pacajasul ħukumataLul va pomeşşikazulgun kapitalista-zul muq çvaleb bakLun bukana pacajassul askar. Hukuma-taida reLLarab bukana askargi. Pacajasul askar pacajasul hukumatalde kodob bugeb hezul beseb jaraqLun bukana HeLul kumakaldaLun zunun kkun çeze habun bukana pomeş-şikazulgun kapitalistazul ixtijar va ħukumat, inzit harola-an haltoxabigun regaroxabi, zob heçogo baxola-an va kvanalaan Rassijadul imperijalda zal inzitLog rugel million million zaħmatci xalqaLul qijn.

Pacajasul askaralda saldatLun rukola-an haltoxabigun re-garoxabi. Amma heb pacajassul askaraLul ofiserzabi eks-ploatatorazul klassaLul cahazdasan tola-an. Şivav 100 ofiser asda zanisan 54 dvorjanin vukola-an, 42 burzujazul va ku-lakazul Limal rukola-an va 4 kaşişzabazul Limal rukola-an Dvorjanazul, kupeszabazul va kaşişzabazul Limalazul-ofiserzabazul so hitinal qoqabaz nus nus azar haltoxabazul va reqaroxabazul saldatazda pomeşşikazulgun kapitalistazul mu radaze xulux habizabola-an.

Zaqgo zafimatab, kanli heçeb bukana saldatazul humru Eksploatatorazul muradaze saldatada-haltoxabazdagun rega roxabazda-xulux habizabizehololun pacajasul askaralda zanit huzzun bukula-an hassijab bakab tilazul hadlu, zzob heçet kusin va ofiserzabaz saldatal inzit hari. Pacajasul inaralza-bazul so inaralaz bazul so inaralas hadin malolaan ofiserzabazda:

sohogo xutana. So tamanabgo zamanajal heb "Patjomkin ceher raldada xvaduleb bukana singi Ruminjazul hukumatalda kodob ana. Heb "Patjomkinil" vostaneje axir muradalda sveçogo bixxanigi amma heb vostanijalul baharcijal qoial RassijaLul haltuxabazulgi regaruxabazulgi ingilabijal ragazul

Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Page 34 of 50

# Fig. Azerbaijani-1:

Məhəmmədzadə, M. G., et al: Jeni Turk Əlifbası. Baku 1923. Shown as fig. 43 on p.367 in [5]. Showing LATIN CAPITAL LETTER I WITH DESCENDER and LATIN SMALL LETTER DOTLESS I WITH DESCENDER (red); showing LATIN CAPITAL LETTER ZE (green).

Jenn rand ann naschen anzannse.							
	زولوشى.	رك الفباستيك دو	یکی تور				
A.	B b	00	C'Op	D d D d			
aT	be 🛹	چە ج	çe a	de .			
e e Ge s	ð; 7,2	F t ef u	G g	Hh Hon			
e	16		ge è	has (_) -			
l i V i	Li Li	11	K k K k	LI			
11	(داری) ای ۱	( <sup>†</sup> ی) ی eز	تى ka	elj			
M m	N n	°°°°	0 e	P p To p			
em e	ز en ن	(توز) او ٥	(سوز) او ہ	pe -			
Øq	9 9 9 9 9 9	Rr Rt	s: So	T t			
t up	ک ۹۵	ر ۹۲	س 63	ت te			
U u	V.	X i A x	y y Gy y				
(اوتو ا او ا	<b>ve</b> ,	xe ć	(اوزون) او ۷	28 j			
Z:	33 39 8	spostrol	متنوع 586°7733				
<b>8</b> .5	حن 26	1	1				

Jeni turg elifbasının duzulusu.

**Fig. Azerbaijani-2:** ibid., p. 35. Shown as fig. 45 on p.376 in [5]. Showing the letters marked in fig. Azerbaijani-1 by the same colors.

Ferec, Cefer: bir de Sefike defterlerinde zeqil çeqirdilər. Ferec dedi: "Mən dəf seqili çeqirəm; Cefer, sən fes seqili çeq! Sefike de qefqir çeqsin, qereq, qim jaxsı çeqeceq Çeqdilər, kyrtardılar. Anaları Fatma zeqillərə baxıb xozlabı.

# **Fig. Bashkir-1:** Two pages of a book printed in Bashkir Latin orthography, showing the complete alphabet containing LATIN CAPITAL LETTER D WITH RIGHT STROKE and LATIN CAPITAL/SMALL LETTER T WITH BOWL.

			State State State	
Вегеп "e" urnьna. Ikense leksla kevel "e" urnьna.	A 3. "e" ike enge i sehe: eş, enə, en the: texnika, meto thyddərdəge (inter	iem, elek, ejə, ko d, sex, Marsel', вс natsionalizm həm	l'sevik, Lenin.	BAŞQORT ƏDƏBI TELENEN OR- FOGRAFIA QAOJIDƏLƏRE. DOJOM NIGEDDƏR.
B, C, C T, S, Ş. 1 ANLATM Berens hyddərdəge I kense narkom kev ANLATM	If $\mathbf{t} \vdash \mathbf{n} \mathbf{q} \vdash \mathbf{l} \Rightarrow \mathbf{l}$ d, $\mathbf{d}$ , $\mathbf{f}$ , $\mathbf{g}$ . $\mathbf{q}$ , $\mathbf{b}$ , $\mathbf{V}$ , $\mathbf{X}$ , $\mathbf{Z}$ , $\mathbf{z}$ is $\mathbf{c}$ he value, tav, $\mathbf{v}^*$ ene be. the $-\mathbf{p}$ rovoz, vago the $-\mathbf{p}$ rovoz, vago the $\mathbf{h}$ de dard age $\mathbf{v}^*$ is telenda quilansir is telenda quilansir	h, j, k, l, m, amoja ite p albna tov, eşləv, davlav, on, velosiped, sovet, enonə. ilə urbn albn kiloz	Javi IV kevek sovxoz, Sov-	"Bed kiləsəktə milli kul'turalardı, urtaq ser tel menən (jek- mətkehe sujənsa la, şulai q formahə sujənsa la) urtaq ser kul' turalarqa quşav jaqənda torasəd, şul uq vaastta sed xəderge kendə proletariat diktaturahə osoronda milli kul'turalardan alqa kitevdəre, sə aka atavdarə jaqənda la torasıd. "Betə kul'uralardə ser tel menən urtaq kul'turaqa quşav şart tarən təvdərəv esən, milli kul'turalarqa yddərenen setə jaşeren- gən (pot nstal) kestəren etkə səqarəp ybergə həm jajelergə memkinlek sirergə kərək.
даюьтыа. Basgort d		t alfavit	e. təi den, sanıma	(STALIN) 1. Başqort telenen orfografiahına betə başqort eş seləre həm kolxozsıblarının begenge hejiləv telen həm başqort telenen betə dialekttarı bajlıqını yö esenə alqan urtaq ədəbi tel niged itep alına. 2. Başqort telenen orfografiahı, sovet barlıqında turun urtaq adalat tel niged itep alına.
$\begin{array}{c} \mathbf{A}-\mathbf{a}\\ \mathbf{B}-\mathbf{a}\\ \mathbf{C}-\mathbf{c}\\ \mathbf{D}-\mathbf{d}\\ \mathbf{B}-\mathbf{e}\\ \mathbf{D}-\mathbf{d}\\ \mathbf{E}-\mathbf{e}\\ \mathbf{\partial}-\mathbf{d}\\ \mathbf{F}-\mathbf{f}\\ \mathbf{G}-\mathbf{d}\\ \mathbf{H}-\mathbf{h}\\ \mathbf{I}-\mathbf{I}\\ \mathbf{J}-\mathbf{j}\\ \mathbf{K}-\mathbf{k}\\ \mathbf{L}-\mathbf{I}\\ \mathbf{M}-\mathbf{m} \end{array}$	$\begin{array}{c cccc} A-a & a \\ \pi-e & B \\ \sigma-e & ce \\ D-d & de \\ B-d & de \\ E-e & e \\ \partial-g & e \\ f-f & ie \\ G-g & ge \\ H-h & he \\ I-i & I \\ J-j & je \\ K-\kappa & kc \\ L-k & kc \\ M-m & em \end{array}$	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		<ul> <li>tsvep yškan saşqort adasi telenen begonge yšeş darazahen iška alsv menan serga, unan "ham for- maha ham jekmatkehe jaqanan sotsialistik sulqan kulturaqa" yšeş jynaleşen, seta memkinlektarde taj- dalansvaşa, aktivlaşterev prinsipe nigedenda tedela. Oşo prinsip nigdenda:</li> <li>a) saşqort adasi telendage morfologik momenttar (dyrt terle segeleş h. s.), nigedenda haqlana, saş- qort telenda sulqan dialekttardan serehenda gena tasala torqan ydsanlektarga ejartelmajdar. M a ta a n: Bolaj atanmaj: Bolaj atanmaj: Atlar (jurmats dialektb) attar atts keşe (qsvaqan) atts keşe ajda ten ("") Barqannar (jurmats dialekts) sarqandar.</li> </ul>

**Fig. Bashkir-2:** Specimen of text printed in Bashkir Latin orthography, retrieved 2008-10-24 from the Russian Wikipedia at <a href="http://ru.wikipedia.org/wiki/%D0%A4%D0%B0%D0%B9%D0%BB:Bashqortalifba.jpg">http://ru.wikipedia.org/wiki/%D0%A4%D0%B0%D0%B9%D0%BB:Bashqortalifba.jpg</a> Marked red: LATIN SMALL LETTER T WITH BOWL.

Şavla, jьhan, ьпtы, jəş jerək, alqa, Qotqar miljon jənde ylemdən, Kyrhen jəm.e tormoş jəş salalar, Jalqьn jərəgendən, qulьndan. Kidən əzəlgə ser nəqrə menən, Şavlahьn avıldar, qalalar. Sı jardamoja jegorop şəfqət menən Qotolhondar miljon salalar.

Вы jыldarða Bulat jarьm agitator şaqir виlьр, ваşlьsa, aslьqqa qarşь kərəş ojoştorov əsən agitatsejon şiqыr həm nəberdər jaða. Ləkin unыn, qajhь вег əbərdərendə tatar вurzьva ədəsejətenen, joqondoho urnь-urnь menən nыq qыna saqыlыр quja. Mibalqa unыn вы jыldarða jaðqan əbərdərenən Rəsəj Jəş Kommunistar Sojuzыnыn Başqortostan Elkə Komi-

**Fig. Ingush-1:** Excerpt from p.4 of: Serdalo (an Ingush magazine), № 2–(10), Vladikavkaz 1924-03-08, explaining the Ingush alphabet.

Derrig ha x	a ala araka	paš 27 b š thautt vhaška	a. Cxa adéž,	ccanéš- cxacca	<b>ј а а ра Š.</b> - váxa (жизнь), (vaxa—итти) dá (отеи), (da—есть), éса (купить, взять), éšam (кедостаток), téga (шить), lé (говорить),
alapax	qôi	čam bu 10tt jäzba	vej gl	nalgháj	о́za (тянуть), bó (сирота), dúca (гово-
	1.	ALAP		edis	рять), lú (говорю), lu (даю), dú (клят- ва), du (делаю).
		gháj. mexue.	Gházqi. Pycckie.	На́гарі. Арабекие.	Ala-ännad (сказать-сказал), láca
Képa de		Jázdéraš.		1.0	-läcar (ловить-поймал), látta-lättar
A a	1	eta	1000	2.1.64	(стоять-стоял), äla (князь), Häla (Али),
B I	)	Bb	б		khāda (мянкий), bhā (сто), tóxa— töxar (уларить—уларил), óza—özar
C	ng Q	Co	u	2	(уларить-уларыя), ога ога (тянуть-тянул), огзі (русский), özdi
D	1	Dd	л	3	(воспитанный), revolüci (революция), ба
Ei	3	E.	э	-	(ремень), ômal (привычка), 16са (корот-
FÍ		FI	ф	ف	(ремень), она (привыча), юса (корос-
G	g	g.	r	3	кии), 80 (ось), 40 (санетка), 10 (састр
1	h	Ach		٤	III. Šolx alapaš.
h l	)	3h	(Q <u>E</u> )		
Ιi	12.0	ay:	н	ای	ch — — chá (дом).
J j		9:	ñ	5	kh — khá (пшевица). ph — phärask (пятница).
	1	1200	н	L.	рh — — phārask (пятница). th — ь thom (война).
	k	N. k	ĸ		čh — — čhug (колыю).
L		21	п	J	qh — з qhu (вор).
M	m	ell m	м		gh — é ghum (necor).
N	n	A n	Н	U	
0	0	Oe	0	اوو	Šura (молоко), muš (веревка),
P	р	. I.p	'n	alotta -	máša (сувно), čič (отруби), kač
Q	q	Qu	영말 경	<u></u>	(воротник), ža (баранта), ghaž (пал-
1	r	AR.			ва), gháž (гусь), хакіт (вачальнив),
-		Si	P c		jux (вонец), ха́гат (греховный),
	5	TI		س ت	baxa (лопата).
T		U.	Т		Chá (дом), che (огонь, имя),
U	u	91 .	У	او	chow (сноп), khá (пшеница), khir
V	r	an	В	9	(известь), phelg (палец), phärask
W	w	W w	10-14	وو	(иятница), thom (война), thum
X	x	A. Yy	x	7	(мозг костный), tum (кукурузный
Y	y	94	Ы		кочан), thô (сливки—tô баран).
Z		de x	3	j	čhir (горе), čhug (вольцо). qhu (вор), dáqha часть, доля), ghalghá
		X A R A	KAŠ.		(Bop), daqua quers, dona), guargine (unrym), ghejgha (rope).
	Pyc.) A	paő. I dá (or	ш).		
A a Ä ä	a	- äla (K		San U.S	
Éé	-19-	- éca (R	упить).		TOP SHERE AND A REAL PROPERTY AND A REAL PROPE
ý ó		— о́za (т	януть).		
U ú			(говорит		
00			русский). ici (ров	олюция).	
SS	100 C 100 C 100		(молоко).		Redáktor: Redákcie Kolliegi
O Ü Š Č Ž X		e čič (o	груби).	Laster Lin	
11 1		ža (õa	forupo		And the second

**Fig. Ingush-2:** ibid., excerpts from p.2 and p.4, showing LATIN CAPITAL LETTER WIDE HENG and U+A727 LATIN SMALL LETTER HENG in different fonts.

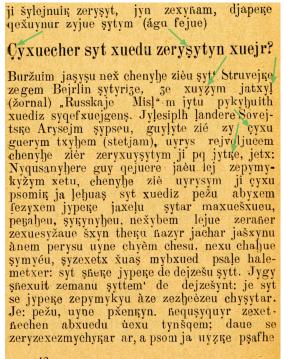
hanz ára dänna lélaž da, došon áxčax lärhä, käxata pxi sóm, qo sóm, cxa som. Tumáš (červoncaš) märé? Hana véna xinnav zhamige Dres, häržača fertáca gila lowzabež, qhära qhu xinna, dádi kôtha? Dollača hamanna bexké dar urdu

**Fig. Ingush-3:** Header of a later issue of the same magazine (1926-01-20, then renamed to "Serdælo"). also showing LATIN CAPITAL LETTER WIDE HENG.



Fig. Kabardian-1: Title page and sample page of a book printed 1926. Marked red: LATIN CAPITAL/SMALL LETTER GHE WITH MIDDLE HOOK Marked green: several letters with descender, showing all the same shape. Note that the descenders on the "I" and the "z" are centered horizontally, like for the "c" and the "s".





Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Page 38 of 50

Fig. Kabardian-2: ibid., p.6:

Marked red: showing LATIN CAPITAL LETTER KRA WITH DESCENDER (second line), also proving that the form of its right top is in fact different from U+004B LATIN CAPITAL LETTER K (second last line).

Marked blue: This small form is considered a glyph variant of U+0266 LATIN SMALL LETTER H WITH HOOK.

jyki ji èmepsymes, ja ùexu çyxuym zerypxyrahekyn àşeş. Kechu, xuezeu zyguer qyxuedmyhuetu myxuynu, aby qykelydžykynu xuejue şytym, abxuede kuedu qyquekynş. Qahelehuaş jepşy12 ne part zeùyche şyàm nyb. Stalin şyžiàue, RKSM r partyr zyhexej feb3exem (rejmejnxem) şyş zyue. syt aby şkeke, jeheşkyke

Fig. Kabardian-3: ibid., p.51:

Showing SMALL C WITH DESCENDER (green) in contrast to C WITH CEDILLA (red). The use of the C WITH CEDILLA obviously is a typo. However, the existence of different glyphs for these two letters in an original metal type font proves that the letters in fact were regarded as different by the original users of the Latin orthography of Kabardian.

xuejs, lenyquem çyxu jysym chyfi zyxuejvhechu. Ar xuezu qepsela xuaş. Detxene zy txyl zymyche lezakue fyz, jygyrik šejtan, žyn şyènyher zi fheş xuyue şyt, kemsemolyr bzegenageu zybžyr, fe chyfi qyfxuichu qyveplyn xuedizu fylezen xuejş Dextene zy ùexuym xuefiezyr lhychakuexem jaşyşu fe fyşytyn xuejş. Fe fyzeryşytyn xuejr, guyšyetyn, dyfiešxyfyn, negu zejhcuyzyfyn quydejr myxuu, jegeu lezefyn lazu jegefyn çyxuuş.

**Fig. Kazhak-1:** Title page from a Kazhak newspaper from about 1937, showing all proposed letters. Retrieved 2008-10-25 from <u>http://en.wikipedia.org/wiki/Image:Sotsijaldy\_qazaqstan.jpg</u> Shows examples of the Latin b/b which is not proposed here but discussed in the introduction.



Fig. Komi-1: Komi alphabet table, retrieved 2011-09-28 from <u>http://foto11.com/komi/docs/latin1930thfont.htm</u> (<u>http://foto11.com</u> is an internet page dedicated to Komi culture).

Denus and a share Karry sarry

<b>Aa</b> - a	Ff - ¢	<b>Nn</b> - нь	Uu - y
Вв - б	Gg - r	00-0	<b>Vv</b> - в
Cc - ц	<b>і</b> - и,і	Рр-п	Xx-x
Сс - ч	Jj-#	Rr - p	Zz - 3
€е - тш	Kk - ĸ	Ss - c	Zz - 36
<b>Dd</b> - д	L1 - л	SS - Cb	22 - *
<b>Д</b> - дь	Ц - ль	Ss - m	33 - дж
Ee - 3	Mm - M	Tt -T	33 - дз
<b>Ə</b> ə - ö	<b>Nn</b> - н	<b>Ҭt</b> - ть	Ьь - ы

Алфавит Коми языка на латинской основе был официальным в 1930–1935. Алексей Грен (1862–1932), основатель Общества изучения

**Fig. Komi-2:** Title page and excerpt from p.17 of a Komi grammar printed in 1933. The excerpt shows LATIN CAPITAL/SMALL LETTER C WITH MIDDLE TILDE.



## § 6. Sьеz 8 da E.

Zadaça 45. Luddə viştsə. Gizə sijə tetradə. Gizikas kurəvtuslə uluşan 8 supassə ətik kurələn, a  $\varepsilon$  supassə kuk kurələn.

### 8kolaə loktikə.

Misa kotərtə skolaə. Қәz vыыn pukalə kaca. Misa çagokən supkis kacasə. Kaca leszis.

Zadaça 46. Gizə viştsə. Gizikas kurəvtuslə uluşan e supassesə.

## Eakjavtən.

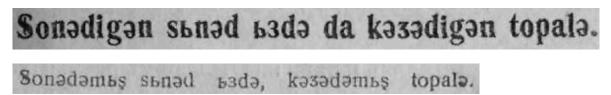
Me radejta єаkjavnь. Tən nolən vetlimə: Masa, Kaeko, Əndrej, Sura da me. Eupəta log dьnəз kajlim. Me єaksə tьr əkti dozjam.

**Fig. Komi-3:** Showing the outer and inner title page of a book printed 1933. While both pages share the same content, different fonts are used. This proves the existence of considerable glyph variation regarding the positioning and shape of the descenders and the slanting angle of the stroke of LATIN CAPITAL LETTER WITH SHORT STROKE.

On the outer title page shown left, U+0044 LATIN CAPITAL LETTER D shows a mirrored glyph variant, similar to that shown in fig. Udi-1.



**Fig. Komi-4:** Ibid., two excerpts from p.51 showing LATIN CAPITAL LETTER S WITH SHORT STROKE, having a vertical stroke in a bold font and a slanted stroke in a common font.



Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Page 41 of 50

Fig. Komi-5: Title page and sample page (p.85) of a Komi-Russian dictionary printed 1934. Note the glyph variation for LATIN CAPITAL LETTER L WITH DESCENDER on the sample page. Also, "Medeeabs" contains a LATIN SMALL LETTER C WITH MIDDLE TILDE. On the title page, the subtitle starts with LATIN CAPITAL LETTER D WITH DESCENDER.

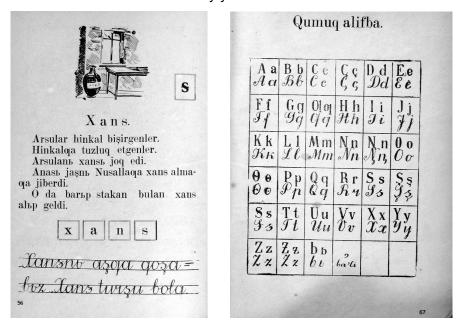
MI OBISPOLKOM BERDSA VIL ALFAVIT KOMITET		
KOMM-3 _ 81.664.2-4	Ladmstəmlun, jirşəm Ladmstəmlun panss,	Склока Склочник
Roma-3 9-8-30 81.664, 2-4 K63	jirşьş, ladmətəm Ləgaləm, ləgutəm, ləgkəskəm	Вражда
12/0002	Ləşədçəm	Договор, согла- шение
	Lotajtəm, targajtəm Lu, forma	Разбазаривание Форма
KOMI ŢERMINOLOGIJA	Lъđ	Количество
SLOVAR	Lъdavist, lъddovtas Lъdpas	Перечень Цифра
	Ludvula Boştam	Зачисление
(ŅELƏVƏJ GIZƏD KUZA)	Ludvuluş burədəm, burədəm, vestəm	Упразднение
Г.П.Б. в Лнгр.	Lыjanpas	Мишень
Ц. 1934 г.	Lujlam Ļ	Расстрел
ART NOTS	Lolakod adjas	Черепашьи темпы
5	Lotonoq odjud	rependition reality
LE3ƏMA RUKOPIŞ PRAVAƏN	Mati verkud, mati	Приблизительно
LESƏMA RUKOPIŞ PRAVAƏN	sь gəgər Medaləm	Наем
	Meda us	Наемный труд
НАЦИОНАЛЬНАЯ	Medecabş, medşa eca; med içət, med-	Минимальный
Page Barry KOMM	şa içət Med unaьş, medşa	Максимальный
13.06H	una; med gьгьş Medvoзşan, ponşan,	Сначала
Jou.	vossan, pervojsan	
Want Old	Mezdəm	Освобождение, из- бавление
Komi GIZ Sektevkar 1934		

Fig. Komi-6: showing a song text by the Komi poet Victor Savin (Нёбдінса Виттор; Nobdinsa Vittor;Виктор Алексеевич Савин; 1888–1943). Note that all descenders are placed rightmost here. Retrieved 2011-09-28 from <a href="http://foto11.com/komi/art/singing/songsavin.shtml#more">http://foto11.com/komi/art/singing/songsavin.shtml#more</a>



Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Fig. Kumyk-1: Two pages from: Temirxanov, M.: Alifba. Mahac-Qala, 1935. Note the LATIN SMALL LETTER S WITH SHORT STROKE having different orientations of the stroke within the same book Comparing with fig. Komi-4, it seems that oblique strokes in bold fonts are avoided as they yield in a too "closed" or "8-like" look of the "S".



**Fig. Kurdish-1:** Title page and sample page of a book printed 1931 in Jerevan (now Armenia), showing the Kurdish alphabet on the sample page.

1931	əva dy məhə əz kyrmançi dxunım.
I. Marogolov, R. Drambjan	Caqe bave men ez bereme mektebe, men qe
	təştək nəzan bu. Əz mətəl dınam cəwa zare də-
	ne dxunbn.
	Nha əz xwə dxunьm, dkarьm həmu təşti
	bъnvisъm. Əz həmu hərfe kyrmançi naz dkъm.
A91,57-8	Hərfe kyrmançi si u şəş həvən.
	Hərfe kyrmança əvanaльп: 1) hərfe basmə:
RONAL	Aa, Bb, Cc, Cc, Cç, Dd, Ee, Əə, Ff, Gg, Oloy, Hn.
қтева əlbfbaja қyrmançı	li, ьь, Jj, Kk, Kk, Qq, Ll, Mm, Nn, Oo, Pp, Pp
	Rr. Ss, Şş, Tt, Tt, Uu, Yy, Vv, Ww, Xx, Zz, Zz-
	Hħ, ðð.
Têmûrê Xelli Mûradov	
2 - cy Persulok Füçîka dom 7, kv. 8 êsêvan - 375078 - USSR	2) Hərfe dəst nyis:
Tel. 35.10.20 (mai) - 52.97.41 (kar)	Regema:
382-72	I 2 3 4 5 6 7 8 9 IO II I2 I3 I4
	15 16 17 18 19 20 30 40 50 60 70 80
	90 100
E Ə V A N Noșireta Hykmote. 1 9 3 1 S.	54

Fig. Kurdish-2: ibid., enlarged excerpt from p.54 (see fig. Kurdish-1). Marked red: LATIN CAPITAL/SMALL LETTER P WITH APPENDAGE. Marked green: LATIN CAPITAL LETTER H WITH VERTICAL STROKE. Aa, Bb, £c, £c, Çç, Dd, Ee, Əə, Ff, Gg, Oloq, Hn. Ii, bb, Jj, Kk, Kk, Qq, LI, Mm, Nn, Oo, Pp, Pp Rr. Ss, Şş, Tt, Ţt, Uu, Yy, Vv, Ww, Xx, Zz, Zz-Hħ, Áð.

Fig. Kurdish-3: ibid., enlarged excerpt from p.36. Marked green: LATIN CAPITAL LETTER H WITH VERTICAL STROKE occurring as uppercase counterpart of U+0127 LATIN SMALL LETTER H WITH STROKE.

#### əv labrikəjə.

Sər we bəjraqə. Bəjraqeda aliki nəqьşandjə tura hykməta Şewre: Də́ş u cakuc. Pəj wi nvisinə; Т. Ş. Ç. S.

> Wəzir şьkle dəas u cakuc nəqьşand. Вьп wana nvisi: əv tura Hykmata Şewrejə.

Fig. Kurdish-4: ibid., enlarged excerpt from p.39. Marked red: LATIN CAPITAL/SMALL LETTER P WITH APPENDAGE.

→Pşika mə.

Р şikəkə mə həjə Əm pşika xwə zə́f hьz dkьn. Əm pe şa dbьn u dlizьn. Pşika mə mьşka dьgrə u pe dlizə. Мьşk nav ləpe pşikeda tьrsa xwə drьçьfə.

Lak: see also fig. 5

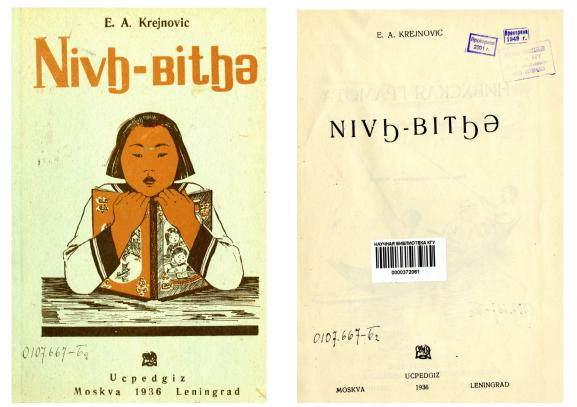
**Fig. Lak-1:** Excerpt from a report on the Soviet constitution, printed 1937. Marked red: LATIN SMALL LETTER P WITH APPENDAGE.

ttul bijaldaralussa za baqanukkar". (Taxəssa xəxavu pəq kunni, halakssa xatrişşavu.) Ttun qakulli, bijal xunssa qaxunssa germannal ofisioz-

Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Page 44 of 50

**Fig. Nivkh-1:** showing the outer and inner title of a primer published in 1936. The capitalized title on the inner page shows a glyph variant of LATIN CAPITAL LETTER WIDE HENG.



**Fig. Shughni-1:** Title page, p.83, and p.105 from a book printed 1931 in Tashkent, containing: LATIN CAPITAL/SMALL LETTER SHUGHNI GHE (marked red, common "g" marked blue) LATIN CAPITAL/SMALL LETTER T WITH BOWL (marked green)



Proposal to encode Latin letters used in the Former Soviet Union 2011-10-18

Page 45 of 50

Fig. Tshakur-1: p.12 and p.16 of: Genqo A.: Sax əlifвазь və jazь qajdalarь. Bakь (Baku), 1934. The alphabet on the bottom of p.16 shows e.g. LATIN CAPITAL/SMALL LETTER GHA WITH STROKE THROUGH DESCENDER, LATIN CAPITAL/SMALL LETTER Z WITH STROKE AND DESCENDER.

(Regarding the CYRILLIC-SHA-like letter, see fig. Tshakur-2 below.)

- Z za-od, jiza-tojlo, zit-cegirgo, zəxij-zaxur, zedənjeni, gjaze — doldur, kazaj — aqac həvəngi, Gəlmez-Gilməz.
- zer-tyk, zin-birə, zinzərna xiv-Çinçar kəndi, zirzi- man-turş, vaze-jajma (kaşa), muzru-saqqal, zov-sojyt aqaçı, mized-səhər,
- b—bxaj—olmaq, bkar-xəstəlik, gbrgbn—həpsi, xbdbl—nəvə, fbçva-yzyk, mbk—tans, xblj—qol, mbssbra aç, gbzgale-qojun pejini.

Ш—*шxna*—jara, *шт*-həlqə, *вшl хәda*́r-avarlь, *sшvə* tylky, *jшq*-көргу, *jшq*-bel, *jшx*-kyl.

— ma',--pij, ze',--keci, he'e-ejlə, sə'ət--saat, ja'sus-arь şahь, saa'a--jьqa, хь'ь--qajrьb, maa'as--orada, de'eş-joq.

Sax dilində sadə x. q. x, q, q, h və i. a. samit hərflərlə barabar juqarada gestərildiği kibi buna ujqun boqaz (damáq) samitləri dəxi vardər. Bunlar dilin və damaqan qaldıralma vəzlijətində denildigindən myəjjən səslərə Aysusijjət verir. Bu boqaz samitləri sax dilində xysusi səslərə — fanemalara malik ləs də, onlarıs jazada ifadə ycyn ajraça işarətlər tə'jin etmək lazam gəlməjir, ona gerə ki, onun qonşuluqunda olan boqaz satitləri ejni surətlə boqaz xysusijiətini alər. Bir sadə samitə ni boqaz samitəsi kibi işlətmək ycyn onun janana (əvvəlinə, jaxud sonuna) bir boqaz satitsini qojmaq kifajət edir. Məsələn: kəlmədə x səsini boqazdan vermək ycvn. xəzı"—

Məsələn: kəlmədə x səsini boqazdan vermək ycyn, xəv geg, jazmaq bəs olur (xav — ev, xev — jyk, myqajəsə et) boqaz **q** sənb lşlətmək ycyn qoça, səcan, iki kəlmələri coq myvaliqdir. qəsda — qoca (qasına xiv — qas kəndi ilə myqajəsə et) qev əscan (qov—bocqa kəlməsilə tutuşdur), qəlle—iki qulj—ucurum...) Boqaz .**x**<sup>\*</sup> sənə kyl kəlməsində idadə ycyn jəx jazmaq olar (ibxes — saxlar ilə tutuşdur), kepy kəlməsində boqaz .**qq**<sup>\*</sup> sənə ifadə ycyn .juq' jazmaq kifajətdir (jsq — gyn ilə myqajəsə et), mahni kəlməsində ' apostrofu boqazdan vermək yeyn mə'ni jazələr (Ma'ae — orada ilə), indi kəlməsində **h** səsini boqazdan almaq ycyn *həşdə* jazmaq bəsdir (*hasre* — buraq ilə) myqajəsə ediniz və i. a...

Sax dilində olan sadə (d, t, ;, z, x, ş, g, k, k, n, l, r,) samitələrilə barabar incə samit səslər də mevcuddur ki, jazıda

12

Xəmde nike habkınındə mihmanee dugulj hav'ini cigeence qaz alebtı, çuni qozeexa kepcı, mized xıxa mihman əəni vaxtalj xaani ijessilışa azar alja'asdimee uvhuvod mihman qaz bəg kunkum qaleence qoze qaleexa kocmiş eexena vaxt vakle vaazanane?"

Xaana ijessi matxa uvhojn: "vaxad nimeen jeş sxdij vodьn. Zakle mana xaвar qavuҳҳьпаçав deş, jiç mani vaxtalj oju nimeenani vorna?

Mihmanee uvhojn "zь ҳаҳвь ha'ana uşaxıı vorna" manjce mihman salamatlamiş ьҳа аjkan.

Adamee ejhi "ҳunaşşe nəhyd şi mihmanьkin hь'ijn, jeera qaz xavale ооҳanas"

Xunaşşe harkьnj ileekkana kunkumee qaz mideşoв, ejhen; "adamij qaz авқьпјов"

Hamanjke adamij alirxıli ejhi "vaj qurumsax, nəhduni şaki hığını Şanqvee ablja'ana masala manjcina exbij vobna, qaz beg kunkum qala qoze qalava uvhu qaz exbij xəəxy».

#### Sax basma əlifbasb

Aa, Bb, Cc, Çç, Dd, Ee, Əə, Ff, Gg, IJoj, IJoj, Hh, li, Jj, Kk, Kk, Ll, Mm. Nn, Oo, Əe, Pp, Гр Qq, Qq, Rr, Ss, Ss, Şş, Tt, Tt, Uu, Yv, Xx, Xx, Xx, Yy, Zz, Zz, Zz, Zz, bb, Шш, '.

**Fig. Tshakur-2:** ibid., excerpts of p.9, 11, and 12. – The second excerpt shows LATIN LETTER S WITH SHORT STROKE here with a glyph variant showing a horizontal stroke.

The examples given for the CYRILLIC-SHA-like letter in the last excerpt show that it seems to be a vowel. Therefore, we consider it as a glyph variant of U+019C/U+026F LATIN CAPITAL/SMALL LETTER TURNED M, rather than proposing it as a new LATIN CAPITAL/SMALL LETTER SHA. The italic form is compatible with this assumption.

•↓-	-qali- aqbz, qadbr- komyr, vijqbrij-doqmaq (hejvan- lara maxsus), qarqar- horumbul, qadj-daxaldan tev-
5-	- sisij—qurcaq, suma—bəg (tojda), jas—okyz, mbs—kylək; korsani—fbrlaqan, xersag—palas nəv'i, soraj—padval.
	— <i>шхпа</i> —jara, <i>шт</i> —həlqə, <i>вшl жәdar</i> —avarlь, <i>sшvә</i> — tylky, <i>jшq</i> —kөрry, <i>jшq</i> —bel, <i>jшх</i> —kyl.

**Fig. Udi-1:** Title and sample pages (59, 48/49) from a book printed 1934. (The title page shows a mirrored glyph variant of U+0044 LATIN CAPITAL LETTER D.)

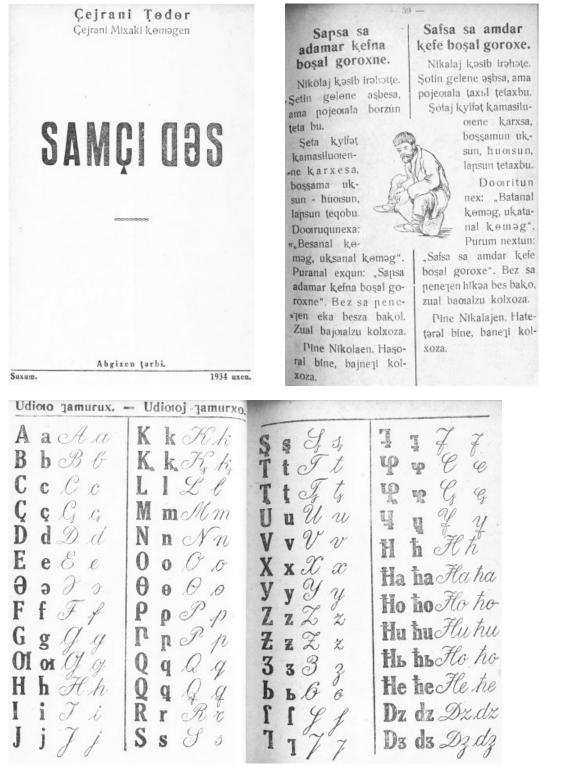
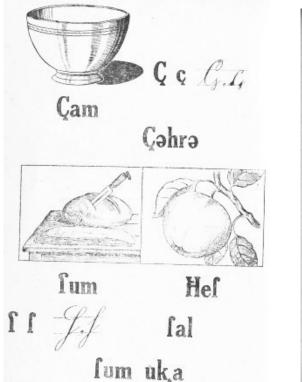


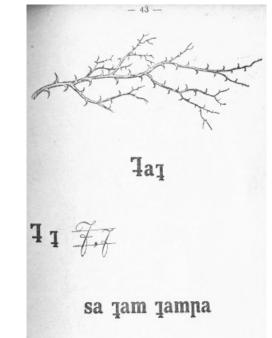
Fig. Udi-2: ibid., p.36 and p.43.

Top of p.36, introducing the letter LATIN CAPITAL/SMALL C WITH DESCENDER, using glyphs which show the descender clearly right from the center line. Bottom of p.36, introducing LATIN CAPITAL LETTER LONG S together with U+017F

LATINSMALL LETTER LONG S.

Also, showing LATIN CAPITAL LETTER H WITH VERTICAL STROKE. p.43, introducing LATIN CAPITAL/SMALL LETTER REVERSED GHE WITH STROKE.





# sa araba jaj eya

ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646 <sup>1</sup>
Please fill all the sections A, B and C below.
Please read Principles and Procedures Document (P & P) from <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/principles.html</a> for guidelines and details before filling this form.
Please ensure you are using the latest Form from http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.
See also http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html_for latest Roadmaps.
A. Administrative
1. Title: Proposal to encode Latin letters used in the Former Soviet Union
2. Requester's name: Nurlan Joomagueldinov, Karl Pentzlin, Ilya Yevlampiev
3. Requester type (Member body/Liaison/Individual contribution): Expert Contribution
4. Submission date: 2011-10-18
5. Requester's reference (if applicable):
6. Choose one of the following:
This is a complete proposal: Yes
(or) More information will be provided later:
B. Technical – General
1. Choose one of the following:
a. This proposal is for a new script (set of characters): No
Proposed name of script:
b. The proposal is for addition of character(s) to an existing block: Yes
Name of the existing block: Latin Extended-E; Alphabetic Presentation Forms
2. Number of characters in proposal: 76
3. Proposed category (select one from below - see section 2.2 of P&P document):
A-Contemporary B.1-Specialized (small collection) X B.2-Specialized (large collection)
C-Major extinct D-Attested extinct E-Minor extinct
F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usage symbols
4. Is a repertoire including character names provided? Yes
a. If YES, are the names in accordance with the "character naming guidelines"
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 publishing the
standard?
The co-author Karl Pentzlin (on request)
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):
The co-author Karl Pentzlin
6. References:
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? Yes
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?
7. Special encoding issues:
Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? Yes
Special casing issues (see text)
8. Additional Information:
Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script
that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour
information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default
Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization
related information. See the Unicode standard at <u>http://www.unicode.org</u> for such information on other scripts. Also
see Unicode Character Database ( http://www.unicode.org/reports/tr44/ ) and associated Unicode Technical Reports
for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.
<sup>1</sup> Form number: N3902-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)

#### C. Technical - Justification

C. Technical - Justification	
1. Has this proposal for addition of character(s) been submitted before?	No
If YES explain	
2. Has contact been made to members of the user community (for example: National Body,	
user groups of the script or characters, other experts, etc.)?	Yes
If YES, with whom? Linguists, Librarians	
If YES, available relevant documents: see text	
3. Information on the user community for the proposed characters (for example:	
size, demographics, information technology use, or publishing use) is included?	Yes
Reference: once used by several millions of people (see text)	
4. The context of use for the proposed characters (type of use; common or rare) History	ically common
Reference: see text	
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference: see text (e.g. historians, librarians, linguists	)
6. After giving due considerations to the principles in the P&P document must the proposed character	ers be entirely
in the BMP?	Yes
If YES, is a rationale provided?	Yes
If YES, reference: To keep them in line with already encoded chara	
7. Should the proposed characters be kept together in a contiguous range (rather than being scatter	ed)? Yes
8. Can any of the proposed characters be considered a presentation form of an existing	
character or character sequence?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference: (the block "Alphabetic Presentation Forms" is used for o see text)	ther reasons,
9. Can any of the proposed characters be encoded using a composed character sequence of either	
existing characters or other proposed characters?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
10. Can any of the proposed character(s) be considered to be similar (in appearance or function)	
to an existing character?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference: (besides the long-standing fact that there are Cyrillic let Latin ones)	ters similar to
11. Does the proposal include use of combining characters and/or use of composite sequences?	No
If YES, is a rationale for such use provided?	
If YES, reference:	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) prov	ided?
If YES, reference:	
12. Does the proposal contain characters with any special properties such as	
control function or similar semantics?	No
If YES, describe in detail (include attachment if necessary)	
	•
13. Does the proposal contain any Ideographic compatibility characters?	No
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference:	••••••