# Proposal to encode Latin Capital and Small

letter I with Bowl

L2/22-118R

in ISO/IEC 10646 and The Unicode Standard

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This proposal is to add the additional Latin letter I with Bowl of Soviet languages

#### 1.Introduction

Ь ь (I with bowl) is an additional letter of the Latin alphabet. It was introduced in 1928 into the reformed Yañalif, and later into other alphabets for Soviet minority languages. The letter was designed specifically to represent the non-front close vowel sounds IPA: [i] and IPA: [ш].[1] Thus, this letter corresponds to the letter ⟨I 1⟩ in modern Turkic alphabets

The letter was originally included in the Yañalif, and later also included in the alphabets of the Kurdish, Abazin, Sami, Komi, Tsakhur, Azerbaijani and Bashkir languages, as well as in the draft reform of the Udmurt alphabet. During the project of the Latinization of the Russian language, this letter corresponded to the Cyrillic letter (Ыы).

In alphabets that used this letter, the lowercase B was replaced by a small capital  $\langle B \rangle$  so that there would be no confusion between  $\langle b \rangle$  U+0185 and  $\langle b \rangle$  U+044C.

#### 2. Use of Cyrillic-like Letterforms in Newly Designed Latin Alphabets

The concern was raised that encoding the Latin yeru would open the door to "duplicate the whole Cyrillic alphabet as Latin letters".

In fact, this is not the case.

In the late 1920s and the 1930s (in some cases even earlier, the Latin alphabet was introduced for many minority languages in the Soviet Union. A considerable part of these were extensions of the Janalif, thus containing the Latin i ith bowl to denote the sound of the Cyrillic yeru or related vowels.

While it was "natural" that the designers of the extra letters were influenced by the Cyrillic letters they know, they did copy the exact letterforms (especially doing so for both cases) only in rare instances. In preparation of a proposal to encode such letters (which will not reach a presentable state before 2011), we until now found no evidence. Alphabets of that era apparently were designed avoiding using of Cyrillic-like letterforms, while containing the Latin I with bowl whether they are derived from Janalif or not.

If examples for use of true Cyrillic letterforms are found which are used only in single alphabets for a small community, in fact it can be considered to treat them like the Zhuang tones three and five, i.e. unifying them with the resembling Cyrillic letters.

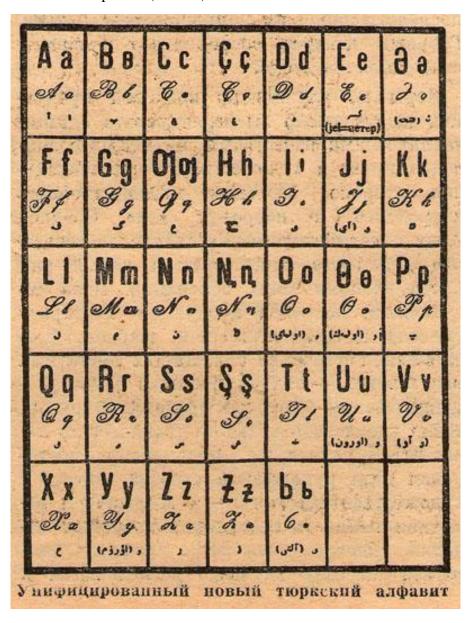
However, the Latin I with bowl is a letter used throughout the Soviet Union during the lifetime of Janalif, by

small minorities as well as by large ethnic groups like the Tatars.

Thus, it is appropriate to recognize its use as a Latin letters by giving it a separate code point, like the Latin P and the Cyrillic P have separate code points within their scripts.

### 3.Examples of use

**Figure. 1**New Turkic alphabet (Yañalif)



**Figure. 2**The Latin-based Unified Northern Alphabet

Алфавит Народов Севера Печатные формы букв											
Aa	Вв	Cc	€€	Dd	33						
33	Ee	$\Theta$	Ææ	Ff	Gg						
Hh	Ьb	Ii	Ьь	Jj	Kk						
LI	杜	Mm	Nn	Ŋo	Oo						
ΘΘ	Pp	Qq	Rr	Rf	Ss						
88	Tt	Uu	$\mathbf{V}\mathbf{v}$	Ww	$\mathbf{X}\mathbf{x}$						
Yy	Zz	Ζŧ									

**Figure. 3**Kurdish alphabet of 1929

HOB	Əlьfв ый к	aje tə ypgc			131 / 18 1847
Aada	BBBl	Cc C.	€€ <i>€</i> €	ССС Сет (кувшин)	Dd Dd
Ee & e	99 2 э мягкое А эм(мы)	FfFf	$Gg\mathscr{G}_g$	Ојој Ојој мягкое теојвек (кладыни)	Н
li Ti	<b>Ь Б Б Б Б Б Б Б Б Б Б</b>	Jjø	K k Kk	KKKK TBEPHOE IC KET(HOM)	Qq Qq qaz(rycs)
LIZI	Mm M	Nn Nn	0000	00 G & мягкое хоро (вкусно)	PpTp
PpJ/	Rr <sub>P</sub> r	SsSs	\$\$ <i>\$\$</i>	T t Tt	Т ţŢţ Т твердое ter(хурджи
UuW.	Уу Уу мягкое э фухьт (кушаю	B	W W W		X X X X x
772	77 X 2	GENERAL SECTION OF THE SECTION OF TH	se en de Maria de la composición La composición		A THE

**Figure. 4**Komi alphabet of 1934

	H	Comi	alfavit		
Aa	Вв	Cc	Çç	Ee	Dd
Aa	BG	Cc	68	$\mathcal{E}_{\epsilon}$	dd
				Gg	
d, d,	E e	80	Ff	$g_g$	Ji
Jj	Kk	LI	ĻĻ	Mm	Nn
				Mm	
Nn	Oo	Pp	Rr	Ss	Şş
, ,		~		Ss	-
88	Tt '	Ţt .	Uu	Vv	Xx
				Vo	_
Zz	Zζ	Zz	33	33	Ьь
2a	Zz	Zz	33	-33	60

Figure. 5

A Kazakh newspaper Socialist Kazakhstan (Социалды Қазағыстан) in Latin script (1937)



**Figure 6.** Bashkir textbook for primary classes in Latin, 1934

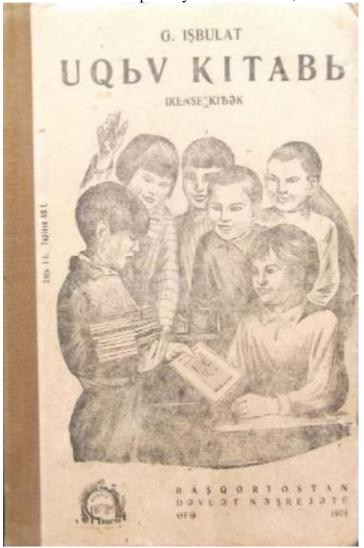


Figure 6.1.

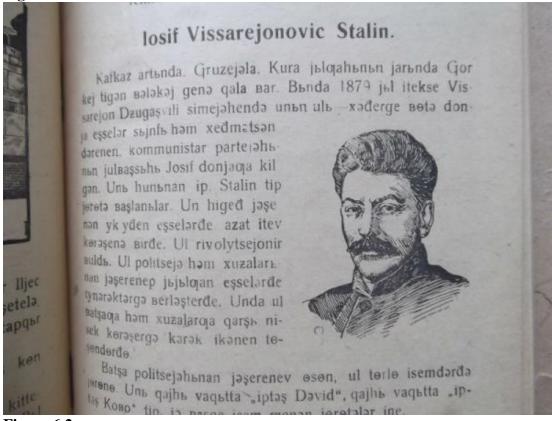


Figure 6.2.

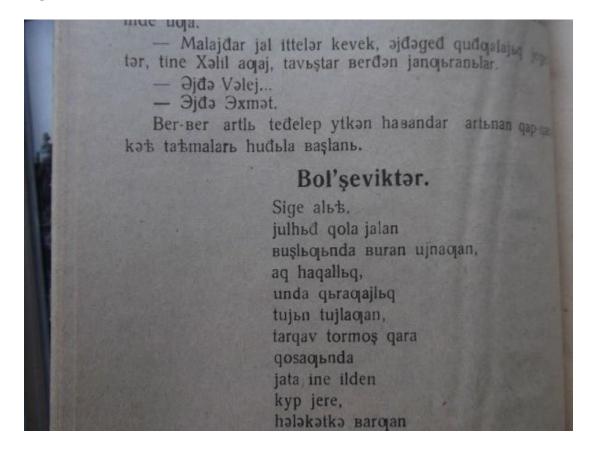


Figure 7. Advertising on Yanalif in the Uzbek magazine "Yangi Yul", 1933

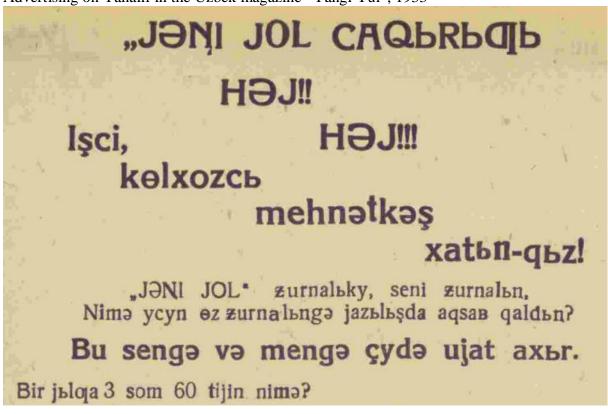
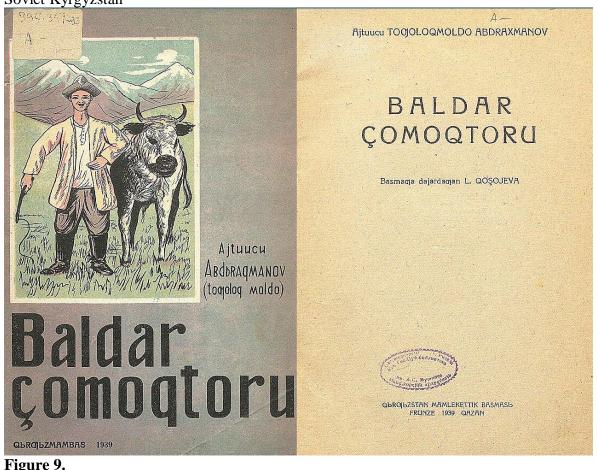


Figure 8. The frontispiece of of kid's fairies book in kyrgyz language by latin alphabet used in 1930's in Soviet Kyrgyzstan



5 kopecks of the Tuvan People 's Republic of 1934 with inscriptions in Latin



Figure 10.
Table of correspondence of alphabets in Latin (yanalif) and Cyrillic.

	янъы элифбе											
No No	Jans elifae	Eski elifae	Harlf- nin adь	Ne Ne	Jans elifae	Eski elifae	Harifnin ads					
1	Aa	A a	A	20	Пп	Pp	Пе					
2	Бб	Вв	Бе	21	Pp	Rr	Эр					
3	Вв	V v	Be	22	C c	Ss	Эс					
4	Гг	Gg	Ге	23	Тт	T t	Te					
5	ГЪ гъ	01 01	Гы	24	Уу	Uu	У					
6	Дд	D d	Де	25	Фф	Ff	Эф					
7	Ee	E e	E	26	Xx	Xx	Xa					
8	Ëë	Јо ө	Ë	27	Цц	Ts ts	Це					
9	Жж	Z z	Же	28	Чч	Сс	-Че					
10	3 3	Zz	3e	29	ДЖ дж	Çç	Дж					
11	Ии	I i	И	30	Шш	\$ s	Ша					
12	Йй	Jj	Й	31	Щщ	Sc sc	Ща					
13	Кк	Kk	Ка	32	Ъъ	ајытьсь	Айыры-					
14	Къ къ	Qq	Кы		X	ve qattь- lьq işa- reti	къатты- лыкъ иша-					
15	Лл	L1	Эл	33			ети					
16	Мм	M m	Эм	33	Ыы	Ьь	Ы					
17	Нн	Nn	Эн	34	Ьь	inçertyv işareti	инджер- тювиша-					
18	нъ нъ	Nп	Энг			是特性的	рети					
19	00	0 0	0	35	Ээ	Ee	Э					
				36	Юю	Ju jy-y	Ю					
				37	ЯЯ	Ja ja	Я					

**Figure 11.** A Azerbaijani poem written by Mehdi Huseyn-zadeh in April 1944 in Latin

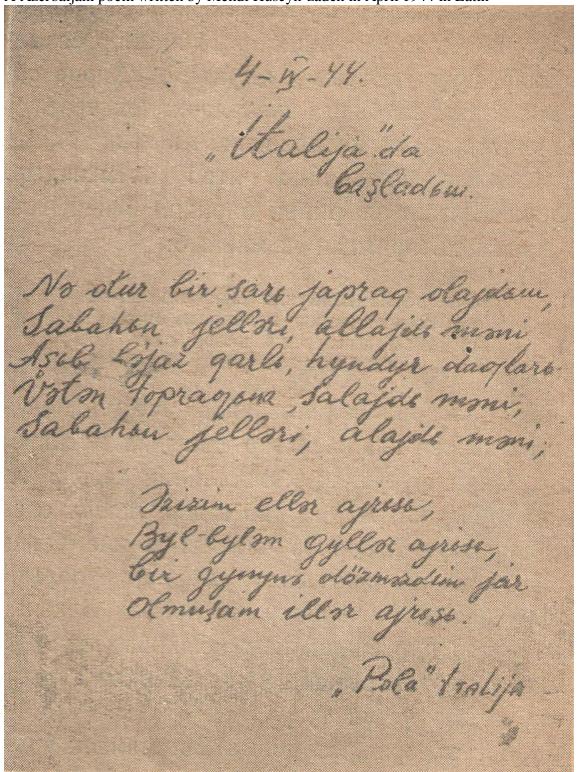


Figure 12.
Altaic Romanized Alphabet (1929-1938)

			Bicikt сно-Тюри			
Aa	Вв	C c	Ç ç	D d	Ee	Ff
G g	li u	Jj	K k	L1	Мm	N n
Nn н	O o	<b>6</b> 0	P p	Rr	Ss	Şş ш
Tt	Uu	Уу	Zz	Z z #	ь Р Р	Xx x
Vv B	jа я	ju ′ ю	j e E	ts u	șc щ	7 (34) 3 (34) 4 (37)

Figure 13.
The Kumyk alphabet on a Latin basis from the primer of 1935

	$Q_1$	umu	q ali	fba.		
A a A a	B b B b	$\begin{array}{ c c }\hline C c \\ C c \end{array}$	Çç Çç	D d Dd	E.e E è	
Ff	Gg	0101	H h Hh	l i I i	Jj	
K k Kĸ	L1 Le	M m Mm	Nn	N n	0 0	
00	Pp	Qq	Rr Ru	Ss	\$ \$ \$	
8 s 3 s	$\mathcal{T}_t$	Uu Uu	$v_v \ v_v$	$\frac{\mathbf{X}\mathbf{x}}{\mathcal{X}\mathbf{x}}$	Yy Yy	
Zz	Z z Z z	b ь 6 ь	9 ba'li			
						67

**Figure 14.** Scan form Khakas book 'Bukvar' (1934)



#### 4. Characters to be added

Block: Latin Extended-D																
	0	1	2	3	4	5	6	7	8	9	Α	В	С	D	Е	F
U+A7Cx	?	?	?	?	?	?	?	?	?	?	?				?	?

Character

Code point

Name

- Ь U+A7CE
- LATIN CAPITAL LETTER I WITH BOWL
- → Ы 042B cyrillic capital letter yeru
- → b 042C cyrillic capital letter soft sign
- $\rightarrow$  5 0184 latin capital letter tone six
  - ь U+A7CF LATIN SMALL LETTER I WITH BOWL
- → 1 0131 latin small letter dotless i

#### 5. UnicodeData.txt

A7CE; LATIN CAPITAL LETTER I WITH BOWL; Lu;0; L;;;; N;;; A7CD; A7CF; LATIN SMALL LETTER I WITH BOWL; Ll;0; L;;;; N;;; A7CC;; A7CC

#### 6. References

- $1. M.\ 3.\ 3$ акиев. Тюрко-татарское письмо. История, состояние, перспективы. Москва, «Инсан», 2005
- 2. Proposal to encode two Latin letters for Ja?alif (WG2 N3916) Karl Pentzlin, 2010
- 3. M. Temirxanov. Alifba. Mahac-Qala, 1935.
- 4. Samrin K.K. Bukvar, 1934
- 5. https://bashkort-tele.livejournal.com/79147.html#cutid1
- 6. no. Yangi Yol magazine, 1933
- 7.Baldar Çomoqtoru. Ajtuucu: Toojoloq Moldo Abdьraqmanov. 1939
- 8.по. Совет Къадынлыгъы. 1938, № 7

## ISO/IEC JTC 1/SC 2/WG 2 PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646.1

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.

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1. Title:	Proposal to enco	de Latin Capit	tal and Small letter I with	Bowl
2. Requester's na	me:	Nikit	a Manulov	
<ol><li>Requester typ</li></ol>	(Member body/Liaison/Individual	contribution):	Individual contri	bution
4. Submission da	te:		2022-05-20. revised 2	2022-07-23
5. Requester's re	ference (if applicable):			
6. Choose one o	the following:			
	complete proposal:			Yes
(or) More	information will be provided later:			
B. Technical - 0	eneral			
1. Choose one o	the following:			
a. This pro	oosal is for a new script (set of char	racters):		No
Prop	osed name of script:			
b. The prop	osal is for addition of character(s)	to an existing blo	ock:	Yes
Nam	e of the existing block:		Latin Extended-D	
2. Number of cha	racters in proposal:			2
3. Proposed cate	gory (select one from below - see s	section 2.2 of P8	&P document):	
A-Contempor				llection)
C-Major extin		,	E-Minor extinct	•
	oglyphic or Ideographic	G-(	Obscure or questionable usag	je symbols
	including character names provide	d?		Yes
	re the names in accordance with the		mina auidelines"	
	nex L of P&P document?		9 9	Yes
b. Are the	haracter shapes attached in a legil	ble form suitable	for review?	Yes
5. Who will provi	le the appropriate computerized fo	nt (ordered prefe	erence: True Type, or PostSci	ript format) for
	he standard?	(0	Nikita Manulov	
If available	now, identify source(s) for the font	(include address	s, e-mail, ftp-site, etc.) and inc	dicate the tools
used:	https://drive.google.com/file/d/1/	ICMjSxDJUwDJI	M3pjgDwr2V8r6aUJug2-/view	?usp=sharing
6. References:				
a. Are refe	ences (to other character sets, dict	tionaries, descrip	otive texts etc.) provided?	Yes
b. Are publ	shed examples of use (such as sa	mples from new	spapers, magazines, or other	sources)
	I characters attached?	•	Yes	,
7. Special encod	ng issues:			
	oposal address other aspects of c	haracter data pro	ocessing (if applicable) such a	as input,
	n, sorting, searching, indexing, trar			
,	<u>-</u> .	,		
8. Additional Info	mation:			

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 <a href="http://www.unicode.org/">http://www.unicode.org/</a> for such information on other scripts. Also see <a href="http://www.unicode.org/Public/UNIDATA/UCD.html">http://www.unicode.org/Public/UNIDATA/UCD.html</a> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

 $<sup>. \\ \</sup>text{Form number: N3152-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05)}$ 

## C. Technical - Justification

Has this proposal for addition of character(s) been submitted before?  If YES explain	YES
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.)?	NO
If YES, with whom?	770
If YES, available relevant documents:	
3. Information on the user community for the proposed characters (for example:	
size, demographics, information technology use, or publishing use) is included?	See proposal
Reference: See proposal	occ proposar
4. The context of use for the proposed characters (type of use; common or rare)	Common
Reference: See proposal	Common
	historical
5. Are the proposed characters in current use by the user community?	historical
If YES, where? Reference: See proposal	
6. After giving due considerations to the principles in the P&P document must the proposed characte	
in the BMP?	Yes
If YES, is a rationale provided?	Yes
If YES, reference: Keeping in line with other Latin characters	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered	ed)?
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:	
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?	Yes
If YES, is a rationale for its inclusion provided?	Yes
If YES, reference: See text (in short: resembles a Cyrillic character in form function)	m but not in
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) provi	ded?
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)	
ii 120, describe iii detaii (iibidde attaciiiieii ii fiecessary)	
12. Does the prepagal contain any Ideographic compatibility sharester/s/2	No
13. Does the proposal contain any Ideographic compatibility character(s)?	No
If YES, is the equivalent corresponding unified ideographic character(s) identified?	
If YES, reference:	