L2/08-182

#### 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 <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</a>.

See also <a href="http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest Roadmaps.

A. Administrative			
Proposal to Encode Additional Latin and Cyrillic Characters			
2. Requester's name: Lorna A. Priest			
3. Requester type (Member body/Liaison/Individual contribution): Individual			
4. Submission date:	23 April 2008		
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:	No		
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-D and Cyrillic Extended-	В		
2. Number of characters in proposal:	4		
3. Proposed category (select one from below - see section 2.2 of P&P document):			
A-Contemporary X B.1-Specialized (small collection) B.2-Specialized (large	e collection)		
C-Major extinct D-Attested extinct E-Minor extinct			
F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable us	sage symbols		
4. Proposed Level of Implementation (1, 2 or 3) (see Annex K in P&P document):	1		
Is a rationale provided for the choice?	No		
If Yes, reference:			
5. 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		
6. Who will provide the appropriate computerized font (ordered preference: True Type, or Post publishing the standard? SIL International	tScript format) for		
If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) used:	and indicate the tools		
7. References:			
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provide	d? Yes		
b. Are published examples of use (such as samples from newspapers, magazines, or			
of proposed characters attached?	Yes		
8. 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 in	nformation)?		
Suggested character properties are included.			
9. Additional Information: Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Scrunderstanding of and correct linguistic processing of the proposed character(s) or script. Examples of such propinformation, Numeric information, Currency information, Display behaviour information such as line breaks, width behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts and other Unicode normalization related information. See the Unicode standard at <a href="http://www.unicode.org/Public/UNIDATA/UCD.html">http://www.unicode.org/Public/UNIDATA/UCD.html</a> and associated Unicode Technical Reports	erties are: Casing s etc., Combining , Compatibility equivalence ch information on other		

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<sup>&</sup>lt;sup>1</sup> Form number: N2652-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11)

### C. Technical - Justification

Has this proposal for addition of character(s) been submitted before?  If YES explain	No			
Has contact been made to members of the user community (for example: National Body,	Yes			
user groups of the script or characters, other experts, etc.)?	165			
If YES, with whom? Linguists, LIBTRALO in Liberia and Judeo-Tat experts.				
If YES, available relevant documents: Examples in document were provided by	y them.			
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?				
Reference: See comments in Section E				
4. The context of use for the proposed characters (type of use; common or rare)	common			
Reference: See examples in Section E				
5. Are the proposed characters in current use by the user community?	Yes			
If YES, where? Reference: See comments in Section E				
6. After giving due considerations to the principles in the P&P document must the proposed charact in the BMP?	ers be entirely Yes			
If YES, is a rationale provided?				
If YES, reference: If possible, should be kept with other related blocks	in the BMP.			
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	ated blocks			
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?	No			
If YES, is a rationale for its inclusion provided?				
If YES, reference:				
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 s provided?	ymbols)			
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 character(s)?	No			
If YES, is the equivalent corresponding unified ideographic character(s) identified	?			
If YES, reference:				
<u> </u>	· <del></del>			

## **D.1. Proposed Characters**

#### **D.1. Character Names**

	A78	052
0		
1		
2		
3		
4		
5		
6		ħ
7		h
8		
9		
Α		
В		
С		
D	Ч	
Ε	ŧ	
F		

A78D LATIN CAPITAL LETTER TURNED H

• lowercase is 0265 y

A78E LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT

0526 CYRILLIC CAPITAL LETTER SHHA WITH DESCENDER

0527 CYRILLIC SMALL LETTER SHHA WITH DESCENDER

#### **D.3. Unicode Character Properties**

A78D should have a general category of Lu. Other properties should match those of similar characters, such as U+0041 LATIN CAPITAL LETTER A. Lower Case Equivalent is U+0265. The properties for 0265 should change as well. See below.

A78E should have a general category of Ll. Other properties for this character should match those of similar characters, such as U+0061 LATIN SMALL LETTER A.

0526 should have a general category of Lu. Other properties should match those of similar characters, such as U+04BA CYRILLIC CAPITAL LETTER SHHA.

0527 should have a general category of Ll. Other properties for this character should match those of similar characters, such as U+04BB CYRILLIC SMALL LETTER SHHA.

```
0265;LATIN SMALL LETTER TURNED H;L1;0;L;;;;N;;;A78D;A78D

A78D;LATIN CAPITAL LETTER TURNED H;Lu;0;L;;;;N;;;0265;

A78E; LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT;L1;0;L;;;;N;;;;

0526;CYRILLIC CAPITAL LETTER SHHA WITH DESCENDER;Lu;0;L;;;;N;;;0527;

0527;CYRILLIC SMALL LETTER SHHA WITH DESCENDER;L1;0;L;;;;N;;;0526;;0526
```

#### E. Other Information

#### E.1 Latin Extended

LATIN CAPITAL LETTER TURNED H is used in the Dan/Gio ((ISO 639-3:daf) orthography in Liberia (however, it is not in the Dan/Gio orthography used in Cote d'Ivoire). There are up to 200,000 Dan/Gio speakers in Liberia. Figure 1 shows the uppercase in the Gio New Testament. In recent years the Gio have been producing books, but they have not had any fonts with the uppercase character. They have sometimes just used the lowercase letter in place of an uppercase (as in the case of Figure 2), and sometimes they have used character formatting to make the uppercase larger and raised to the baseline (see MS Publisher screenshot in Figure 3).

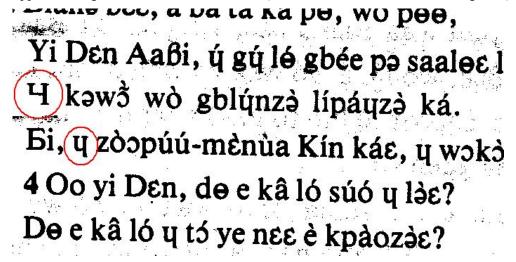


Figure 1. LATIN CAPITAL LETTER TURNED H (Gio NT, 1989, p.380).

# Dý

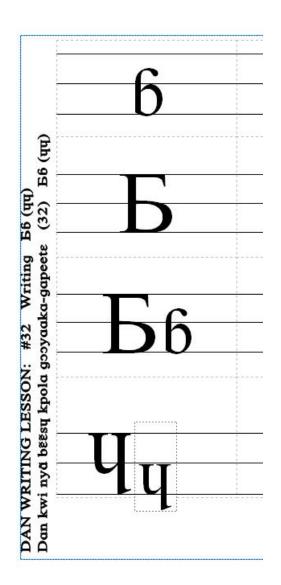
Debe e koza dý ka.

q)tó e too dee?

N to Gblowea-dý-sý, n bou too sou-kela.

A lo yi saa mu.

Figure 2. LATIN SMALL LETTER TURNED H (Dunah, 2001, p.38).



LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT is a phonetic symbol representing a voiceless lateral retroflex fricative. Lagefoged discusses *lack* of IPA coverage and ad hoc solutions in "A Course in Phonetics" (page 278). He and others (Shalev and Spajic) have used LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT to transcribe Toda (ISO 639-3:tcx). See Figures 4-6.

#### Phonemic vowel length

In languages which distinguish between short and long vowels, there appears to be no single durational ratio by which this phonological distinction is implemented phonetically. The ratio of short to long vowel durations (V/V:) "is close to 50%, but may vary a great deal" (Lehiste, 1960:34). Table 3 shows mean durations of vowels in the data set: it 'flour', kits 'link hands' ~ it 'spear'; nyts 'broken rice' ~ py: 'summer'; its 'to reach' ~ pit 'flesh', witf 'large lizard'; put 'stirring stick' ~ put 'eighteen', ut 'anthill' ~ uts 'throw away water'; et 'where' ~ æt 'to take', tet 'wrap garment around waist' ~ tæt 'to fold', pæt 'delivery'; et to climb' ~ est 'to boil'; pot 'ten', kots 'brass vessel' ~ most 'language', most 'change direction'; tot 'churning vessel' ~ pout 'cockroach'.

Figure 4. LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT (Shalev, 1993, p.93).

large fly sp. chief priet of the Ti dairy sacred dairy white pøłt beating blue-gray puič flower puif earth puimy puif eighteen puf worm fruit pum stirring stick summer DYX ршіі flesh, meat, muscle price pull nuil crevice in wall

Figure 5. LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT (Shalev, 1993, p.124).

PLACE ⇒ MANNER ↓	LAE	BIAL	DENTAL		POST- DENTAL		ALVE- OLAR		RETRO- FLEX		PALATO- ALVEOLAR		VELAR	
STOP (AND) AFFRICATE	P	b	ţ	þ	ts	dz	ţ	d	t	đ	tʃ	dz	k	g
NASAL		m						n		η				
FRICATIVE	f		θ		ş		S		ş		1	• • • •	х	<b>(Y)</b>
TRILL				5 5	0,000 PE 000	ŗ.	I		τ			**		
APPROX- IMANT				21 222		·	950					j		w
LATERAL		889			1	1			(t)	1				

Figure 2. The Toda consonant inventory

Previous accounts of the status of voicing in Toda are not completely clear. Emeneau (1984:14) divides the consonants into the following sets (using our symbols):

```
invariable voiceless consonants: 
invariable voiced consonants: 
variable voiceless consonants: 
variable voiced consonants: 
variable voiced consonants: 
variable voiced consonants: 
f \theta \times f \uparrow \downarrow s \downarrow s \downarrow s
```

Figure 6. LATIN SMALL LETTER L WITH RETROFLEX HOOK AND BELT (Spajić, 1994, p. 36).

There are three alphabets used in Tati (Muslim Tat, code TTT, pop: 26,000) and Juhuri (Judeo-Tat, code JDT, pop:101,000). Both dialects are written commonly in Cyrillic, Latin (an earlier form used in Azerbaijan for both Tats, 1921-39), and an "Azerbaijani Cyrillic" alphabet (used in Azerbaijan, 1939-1991). We are proposing the addition of the CYRILLIC CAPITAL LETTER SHHA WITH DESCENDER and CYRILLIC SMALL LETTER SHHA WITH DESCENDER which are used in the "Azerbaijani Cyrillic" alphabet. Phonetically, the character represents a voiceless gutteral plosive (like Hebrew 'ayin.'). See Figures 7-9.

хуб мәһлүм һисдиһо чәдвәл ән әлфбой ә йор ишму вәнкәнүм, ишму бәгдә и 2 чә

Аа Бб Вв Гг Дд Ее Ҹҹ 33 Ии Йй Кк Ҝҝ Лл Мм Нн Оо Пп Рр Сс Тт Һһ Ћћ ҺһУу Фф Хх Чч Шш Әә Үү

Figure 7. CYRILLIC CAPITAL LETTER SHHA WITH DESCENDER and CYRILLIC SMALL LETTER SHHA WITH DESCENDER (Gurshumov, 2006, p. 114).

Дәсә-дәс дит, әйәки шолуми сохит. Бүтүн hиломә әводу сохит. Күрпиһо дәшәнит, рәһһо дуз сохит. Инсонһорә әйәки шолуми сохит.

Figure 8. CYRILLIC SMALL LETTER SHHA WITH DESCENDER (Агаронова, 2006, р. 126).

Новунә кор нәсох, мисвојә кор сох, Ә худојтү, ә тиројтү бовор сох.

Сәр нәзәнит ә дуркунә худоһо, Данитки јәкини ә дүнјоһ Худо.

Нум худорә нәкирит ә нуһоги, Борухәшим тирозуј әну һәги.

Бурч түни һүрмәт сох, ә бәбә, дәдәј, Тә әхир һүмүртү, урә нисд тә кәј.

Figure 9. CYRILLIC CAPITAL LETTER SHHA WITH DESCENDER and CYRILLIC SMALL LETTER SHHA WITH DESCENDER (Shamayev, 2006, p. 195).

#### F. References

- Бат Һилил (Агаронова) Овгоил. 2006. *«Шолум Сохим»*, Мирвори Литературнопублицистический альманах No. 1 (© Иядательский дом «МИРВОРИ» Исраиль, 2006).
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- Dunah, Menmon Paul Z. 2001. *Ko Dan Kwi Lono: Kwi Be 1* (Dan Graded Reader Book I). Dan Literacy and Translation Association. Monrovia, Liberia.
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- Ladefoged, Peter. 1993. A Course in Phonetics, Third Edition. Fort Worth: Harcourt Brace College Publishers, pp. 275 280. These pages are found here: http://www.es.unizh.ch/jstraessler/Ladef%20pp%20275-280.pdf (accessed 30-Oct-07).
- Spajić, Siniša et al. Aug. 1994. "The rhotics of Toda". In *Fieldwork Studies of Targeted Languages II*. UCLA WPP 87, pp 35-66.
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- Trinitarian Bible Society. 1989. *Wodowo Dou* (The New Testament in the Gio Language of the Republic of Liberia). Trinitarian Bible Society. London, England.