Title:	Proposal to include Kalasha Language alphabets
Action:	For consideration by UTC and ISO/IEC JTC1/SC2/WG2
Author:	Rehmat Aziz Khan Chitrali
Date:	15-February-2020

Introduction:

Kalasha language is spoken in Pakistan's Kalash Valleys, Biri, Rumbur and Bumburet Valley of Chitral, Khyber Pakhtunkhwa, Pakistan and is written in Arabic and roman scripts. Khowar Academy is a nonprofit organization working on standardizing alphabets of Kalasha and other languages spoken in the Pakistan.

There are 9 special characters in this language's Arabic script which are currently not supported in Unicode but linguist and researcher Rehmat Aziz Chitrali (the author) of this document has invented a keyboard for Kalasha language and wrote the first ever Kalash Qaida (Primer Book) and used these characters in his books. In this proposal I want to present these 9 characters to Unicode teams for their inclusion.

Requests:

The author requests the encoding 9 new alphabets used in Kalasha language.

Character name and shape

Shape	Code point	Name
	\u0627\u0615	ARABIC LETTER ALIF WITH SMALL
		TUEY ABOVE
2	\u0686\u0615	ARABIC LETTER CHEY WITH SMALL
		TUEY ABOVE
ڹ	\u0646\u0658	ARABIC LETTER NOON WITH
		ARABIC MARK NOON GHUNNAH ABOVE
5	\u062c\u0615	ARABIC LETTER JEEM WITH SMALL
		TUEY ABOVE
ش	\u0634\u0615	ARABIC LETTER SHEEN WITH SMALL
		TUEY ABOVE
Ĵ	\u0698\u0615	ARABIC LETTER ZHEY WITH SMALL
		TUEY ABOVE
ť	\u0644\u0615	ARABIC LETTER LAAM WITH SMALL
		TUEY ABOVE
ۅ۠	\u0648\u0615	ARABIC LETTER WAW WITH SMALL
		TUEY ABOVE
ؿ	\u06cc\u0615	ARABIC LETTER YEY WITH SMALL
		TUEY ABOVE

Figures

Kalasha Keyboard Unshifted Version

Rachitrali-Kalasha						* 0 ?×
$\begin{pmatrix} 1 \\ 1 \end{pmatrix}$ $\begin{pmatrix} 1 \\ 1 \end{pmatrix}$ $\begin{pmatrix} 2 \\ T \end{pmatrix}$	³ 7 ⁴ 4	5Δ 6 ε	⁷ V ⁸ Λ	⁹ q ⁰ •	- =	
وٌ قُ ا≎	E E J	۲ ے T	ی ء	0 P پ 6) چ	ج (با
Caps A S	ف د س	ح گ ہ	ى ج	s J ;		Ŷ
د RAC ر	چ ش	v ب ط	م v	· · ·	1	ŵ
Ctrl Alt				Alt	0	Ctrl
KeymanWeb						li.

Kalasha Keyboard shifted Version

Rachitrali-Kalasha			* 0 🕐 🖈
¹ 1 ² 2 څ	³ 3 ⁴ 4 ⁵ 5 ⁶ 6 ⁷ 7 ⁸ 8 ⁹ 9	°0 _	+ 🗶
ش ځ 🕅	ة ⁰ _ ¹ ك ⁺ ڑ	ి ్	ا <u>خ</u> ا
Caps A Ĩ	ے ^۲ م ^۲ غ ؤ ڈ م ^۲	ا : ال	" (4
د RAC د	ۇ × ^C ن ^B ۋ ظ ث ژ	؟ `, `	¢
Ctrl Alt	Kalasha (Rachitrali-Kalasha)	Alt	Ctrl
KeymanWeb			li,

Kalasha Keyboard Ctl Alt Version

Rachitrali	-Kalasha											,	× 🛯 🔿 1
	¹ !	@	³ #	⁴ ో	5%	⁶ ∧	⁷ &	⁸ *	⁹ (•)	്		
ج>	a d	W Ç	E a	R.J	T	, ^Y .	ឹ	T	0	Р] ¹	1]	1
Caps	طله	l S		ؤ ال) G	s Ha			₽, L				Ŷ
Ŷ	RAC	z B	× 	С	V 	BI	N O	м	، ه		1		ŵ
Ctrl		Alt		Ka	ilasha (I	Rachitral	i-Kalash	a)		Alt		Ctr	
KeymanWel	b												14

Reference

1. Kalasha Keyboard Software <u>https://keymanweb.com/?#kls-arab,Keyboard_rac_kalasha</u> 2. Kalasha Qaider (Primer Book) Kalasha-Language-Qaida-by-Rehmat-Aziz-Chitrali-Published-byKhowar-Academy-Chitral-Pakistan

Please fill all the sections A, B and C below. Please read Principles and Procedures Document (P & P) from http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form. Please ensure you are using the latest Form from http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html . See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html . See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html . See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html . See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps. A. Administrative 1. Title: Proposal to include Kalasha alphabet 2. Requester's name: Rehmat Aziz Khan Chitrali					
Please ensure you are using the latest Form from http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html . See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html . See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps. A. Administrative Proposal to include Kalasha alphabet 2. Requester's name: Rehmat Aziz Khan Chitrali					
See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps. A. Administrative Proposal to include Kalasha alphabet 1. Title: Proposal to include Kalasha alphabet 2. Requester's name: Rehmat Aziz Khan Chitrali					
A. Administrative 1. Title: Proposal to include Kalasha alphabet 2. Requester's name: Rehmat Aziz Khan Chitrali					
2. Requester's name: Rehmat Aziz Khan Chitrali					
2. Requester's name: Rehmat Aziz Khan Chitrali					
3. Requester type (Member body/Liaison/Individual contribution): Individual					
4. Submission date: 15/02/2020					
5. Requester's reference (if applicable):					
6. Choose one of the following:					
This is a complete proposal:					
(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):					
Proposed name of script:					
b. The proposal is for addition of character(s) to an existing block:					
Name of the existing block: Arabic extended-A					
2. Number of characters in proposal: 9					
3. Proposed category (select one from below - see section 2.2 of P&P document):					
A-Contemporary B.1-Specialized (small collection) B.2-Specialized (large collection)					
C-Major extinct D-Attested extinct E-Minor extinct					
F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable 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?					
b. Are the character shapes attached in a legible form suitable for review? <u>yes</u>					
5. Fonts related:					
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?					
standard? Rehmat Aziz Khan Chitrali, Linguist and Researcher at Khowar Academy Chitral Pakistan					
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):					
Rehmat Aziz Chitrali Email: rachitrali@gmail.com					
6. References:					
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?					
b. Are published examples of use (such as samples from newspapers, magazines, or other sources)					
of proposed characters attached?yes					
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)? <u>yes</u>					
See the section titled Character name and shape					
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.					

¹ Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

C. Technical - Justification

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,	N/ -
user groups of the script or characters, other experts, etc.)?	No
If YES, with whom?	
If YES, available relevant documents:	
Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?	Yes
Reference: Birir, Rumbur and Bumburet, Chitral District, Khyber Pakhtunkhwa,	
4. The context of use for the proposed characters (type of use; common or rare)	Common
Reference: The proposed alphabets are very common in Kalasha books, Dictionaries,	
published in Pakistan	
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference: Most of recent published Kalasha books, text editor	
characters for example please see the first ever Kalas Software here <u>https://keymanweb.com/?#k</u>	
arab,Keyboard_rac_kalasha	<u> </u>
6. After giving due considerations to the principles in the P&P document must the proposed charac	ters be entirely
in the BMP?	Yes
If YES, is a rationale provided?	Yes
If YES, reference: Character could be kept with their counterparts in A	Arabic block
7. Should the proposed characters be kept together in a contiguous range (rather than being scatter	ered)? 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:	
9. Can any of the proposed characters be encoded using a composed character sequence of eithe	
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)	No
to, or could be confused with, an existing character?	700
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?	9
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) pro	vided? No
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:	

(Detach the following pages from the filled summary form before submitting).

Information accompanying submissions

The process of deciding which characters should be included in the repertoire of the standard by WG 2 depends on the availability of accurate and comprehensive information about any proposed additions. WG 2, at its San Francisco meeting 26, designed a form (template) that will assist the submitters in gathering and providing the relevant information, and will assist WG 2 in making more informed decisions.

This form is part of the <u>WG 2 Principles and Procedures document</u> and is available on line at <u>http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html</u>.

A duly completed proposal summary form must accompany each new submission. The latest version of this form must be used in submissions. Such a form will assist WG 2 to better evaluate the proposal, and progress the proposal towards a speedier acceptance and inclusion in the standard. Submitters are also requested to ensure that a proposed character does not already exist in the standard.

Submitters are encouraged to visit the "<u>Where is my Character</u>" page on the Unicode web site for more information on checking if their proposed character or script is already encoded in the standard, or a similar proposal has already been made by someone else. There are also several electronic discussion lists maintained by the Unicode consortium that one could use to discuss with other experts internationally on various subjects related to the standard. Submitters are also encouraged to familiarize themselves with ISO/IEC TR15285 – Character Glyph Model. The latest version of ISO/IEC 10646 as well as ISO/IEC TR15285 are available on line under 'Freely Available Standards' at: http://standards.iso.org/ittf/PubliclyAvailableStandards/.

National bodies should take note of the guidelines in section C.4 Some guidelines on proposing new material as ballot comments in the <u>P&P document</u>.

In addition to text extracted from the standard in *Annex L: Character-naming guidelines* in the <u>P&P</u> <u>document</u>, the following definitions from the standard are also referenced in the proposal summary form:

Clause 4.12 Combining character:

A member of an identified subset of the coded character set of ISO/IEC 10646 intended for combination with the preceding non-combining graphic character, or with a sequence of combining characters preceded by a non-combining character (see also 4.14). NOTE – ISO/IEC 10646 specifies several subset collections, which include combining characters.

Clause 4.14 Composite sequence:

A sequence of graphic characters consisting of a non-combining character followed by one or more combining characters (see also 4.12).

NOTE 1 – A graphic symbol for a composite sequence generally consists of the combination of the graphic symbols of each character in the sequence.

NOTE 2 – A composite sequence is not a character and therefore is not a member of the repertoire of ISO/IEC 10646.

Submitter's responsibilities

The national body or liaison organization (or any other organization or an individual) proposing new character(s) or a new script shall provide:

- 1. Proposed category for the script or character(s), character name(s), and description of usage.
- 2. Justification for the category and name(s).
- 3. A representative glyph(s) image on paper:
 - If the proposed glyph image is similar to a glyph image of a previously encoded ISO/IEC 10646 character, then additional justification for encoding the new character shall be provided. **Note:** Any proposal that suggests that one or more of such variant forms is actually a <u>distinct</u> character requiring separate encoding should provide detailed, printed evidence that there is actual, contrastive use of the variant form(s). It is insufficient for a proposal to claim a requirement to encode <u>as characters</u> in the Standard, glyphic forms which happen to occur in another character encoding in ISO/IEC 10646. **Note:** WG 2 has resolved in Resolution <u>M38.12</u> not to add any more Arabic presentation forms to the standard and
- 4. Mappings to accepted sources, for example, other standards, dictionaries, accessible published
- 5. Font resource:

A font must be provided to the Editor promptly after the characters have been approved by WG2 for use in printing the charts. If a font is not provided, the Editor cannot include the glyphs in the charts and, as a result, the repertoire of characters corresponding to these glyphs will not be included in draft amendments. Fonts must be in one of the following formats (in preferential order): OpenType, TrueType, Postscript Type 1.

Fonts submitted must have no license restrictions that prevent embedding into PDF documents. Because of synchronization between ISO/IEC 10646 and The Unicode Standard, any grant of license must cover use in publishing both standards and related documents (see resolution <u>M45.30</u>). For technical reasons, the editors must be able under that license to freely modify or replace glyph outlines in their copies of the fonts. The submitter should be prepared to provide fonts of suitable quality and license conditions, unless equivalent fonts are already available to the editors.

 List of all the parties consulted: Towards ensuring that all significant stakeholders have been consulted, WG 2 requests that submitters solicit feedback from other groups who use the proposed characters, and list these contacts. Submitters are encouraged to provide the email id-s of the submitters as well as other experts who have been consulted to facilitate any clarification queries.
 Equivalent glyph images:

If the submission intends using composite sequences of proposed or existing combining and noncombining characters, a list consisting of each composite sequence and its corresponding glyph image shall be provided to better understand the intended use.

8. Compatibility equivalents:

If the submission includes compatibility ideographic characters, identify (per resolution <u>M45.29</u>):

- the source, which contains two distinct code positions that correspond to a single unified CJK Ideograph character of ISO/IEC 10646

- the ISO 10646 unified CJK Ideograph
- the code position in the source for the unified CJK ideograph
- the code position in the source for the proposed compatibility ideograph
- Properties that may affect the BiDi processing Any BiDirectional algorithm related properties associated with the characters should be spelled out (see UAX#9 - <u>http://www.unicode.org/reports/tr9/</u>).
- 10. Any additional information that will assist in correct understanding of the different characteristics and linguistic processing of the proposed character(s) or script.
- 11. If any of the proposed characters are suitable as *syntax* characters please take note of guideline D.2.5 (on page 24 and of Unicode Standard Annex 31 at <u>http://www.unicode.org/reports/tr31/</u>.
- 12. If the proposal is for a new script, identify the standardized characters that are commonly used directly in the script, or proposed to be unified with the characters of the script, in particular standardized characters allocated in different blocks. Examples include punctuation marks and combining marks. Such information will assist in assigning properties for characters shared across multiple scripts or in identifying character repertoires needed to support particular languages.
- 13. If you are aware of already standardized characters that are visually close to any of the proposed characters, you are invited to list them in the proposal. This will assist in the analysis of the script for 'visually confusables', towards providing additional guidance on use of the standard from a security perspective (see UTR#36 Unicode Security Considerations at http://www.unicode.org/reports/tr36/).