Title: Proposal to include Indus Kohistani Language alphabets Action: For consideration by UTC and ISO/IEC JTC1/SC2/WG2

Rehmat Aziz Khan Chitrali Author:

Date: 04-June-2020

Introduction:

The Indus Kohistani language is spoken in Pakistan's Indus Kohistan, Khyber Pakhtunkhwa Province of Pakistan and is written in Arabic and roman scripts. Khowar Academy is a nonprofit organization working on standardizing alphabets of Indus Kohistani and other endangered languages spoken in the Pakistan.

There are 17 special characters in this language's Arabic script which are currently not supported in Unicode but the leading linguist and researcher of Indus Kohistani language Mr.Razwal Kohistani and Rehmat Aziz Chitrali (the author) of this document has invented a keyboard for Indus Kohistani language and wrote the first ever Shina Qaida (Primer Book) and used these characters in their books. In this proposal I want to present these 17 characters to Unicode teams for their inclusion. There is a regional language authority namely Khowar Academy working on the endangered languages of Pakistan and this academy supports these requests.

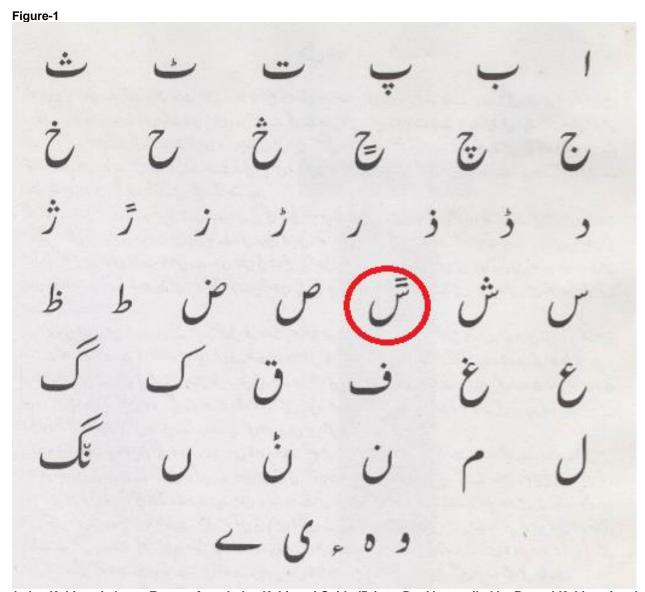
Requests:

The author requests the encoding 17 new alphabets used in Indus Kohistani language spoken in Indus Kohistan of Khyber Pakhtunkhwa Province of Pakistan.

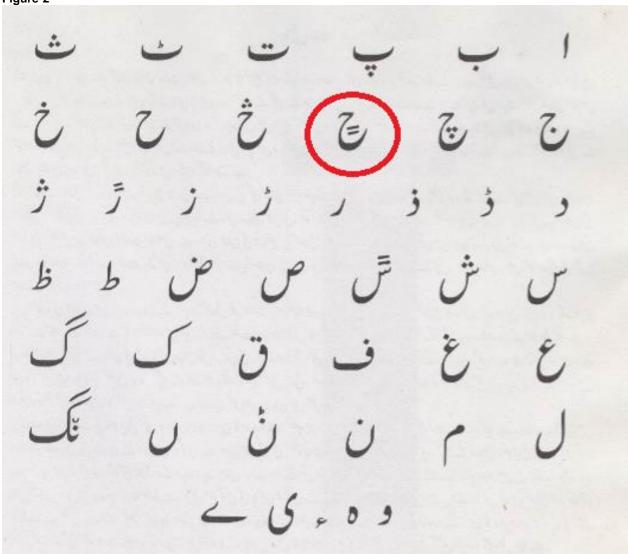
Character name and shape				
Shape	Name			
(1)	ARABIC LETTER ALEF WITH ARABIC LETTER SUPERSCRIPT ALEF			
	ARABIC LETTER ALEF WITH ARABIC INVERTED DAMMA ABOVE			
(I)	ARABIC LETTER MAMDUDAH WITH ARABIC LETTER SUPERSCRIPT ALEF			
(3)	ARABIC LETTER HAH WITH EQUALS SIGN UNDER			
(=	ARABIC LETTER REH WITH EQUALS SIGN ABOVE			

	ARABIC LETTER SEEN WITH EQUALS SIGN ABOVE
الخال	ARABIC LETTER NOON GHUNNAH WITH GAAF
95	ARABIC LETTER WAW WITH ARABIC SUKUN ABOVE
	ARABIC LETTER WAW WITH ARABIC LETTER SUPERSCRIPT ALEF
9-1	ARABIC LETTER WAW WITH ARABIC INVERTED DAMMA ABOVE
	ARABIC LETTER YEH WITH ARABIC LETTER SUPERSCRIPT ALEF
(2)	ARABIC LETTER YEH WITH ARABIC SMALL HIGH UPRIGHT RECTANGULAR ZERO JOINED WITH YEY
3	ARABIC LETTER YEH WITH ARABIC LETTER SUPERSCRIPT ALEF

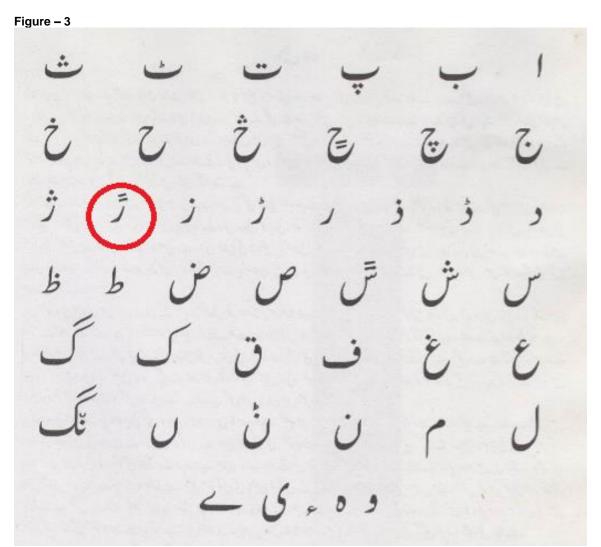
(3)	ARABIC LETTER YEH WITH ARABIC INVERTED DAMMA ABOVE
ريد	ARABIC LETTER YEH WITH ARABIC SUKUN ABOVE
ű.	ARABIC LETTER YEH BARREE WITH ARABIC INVERTED DAMMA ABOVE
(2)	ARABIC LETTER YEH BARREE WITH ARABIC INVERTED DAMMA ABOVE



Indus Kohistani sheen. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up

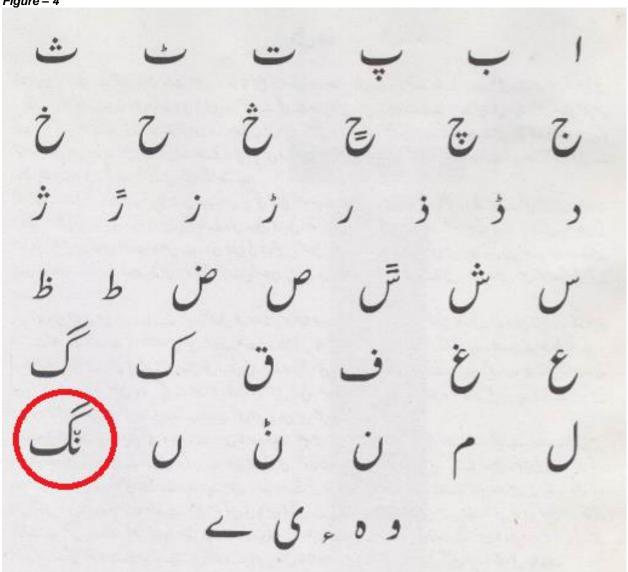


Indus Kohistani chey. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani_shina_qaida/mode/2up



Indus Kohistani zhey. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up



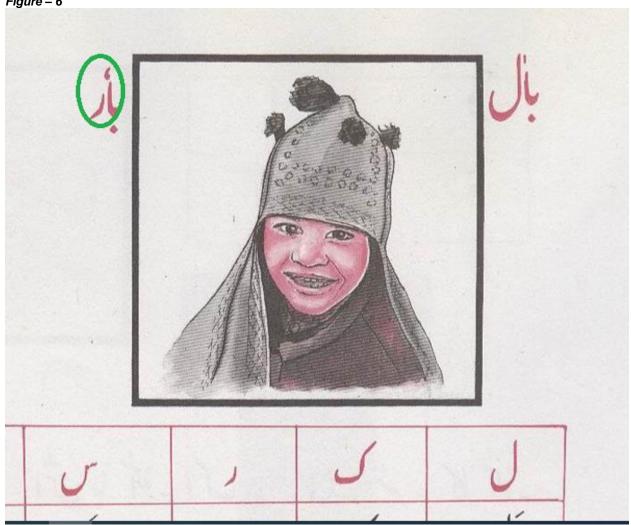


Indus Kohistani ng. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up



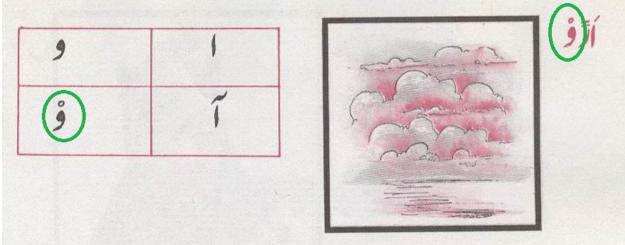
Indus Kohistani alef. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up





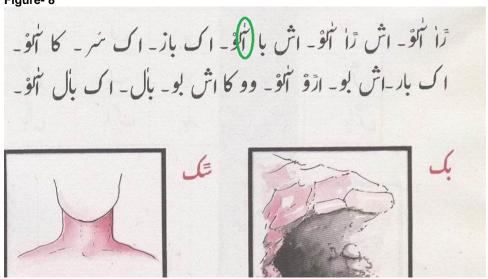
Indus Kohistani alef. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani_shina_qaida/mode/2up





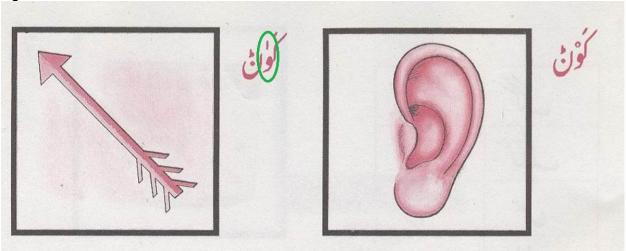
Indus Kohistani waw. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up

Figure- 8



Indus Kohistani alef maddah. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani_shina_qaida/mode/2up

Figure - 9



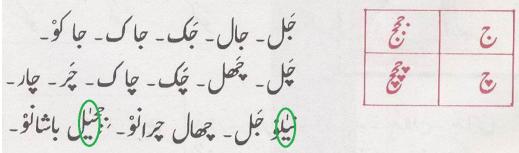
Indus Kohistani waw. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up

Figure - 10



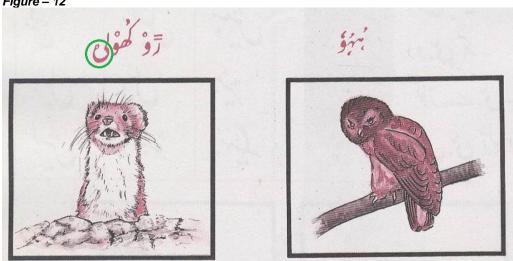
Indus Kohistani waw. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up

Figure – 11



Indus Kohistani yeh. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up

Figure – 12



Indus Kohistani yeh. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up

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Indus Kohistani yeh. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani_shina_gaida/mode/2up

Figure - 14

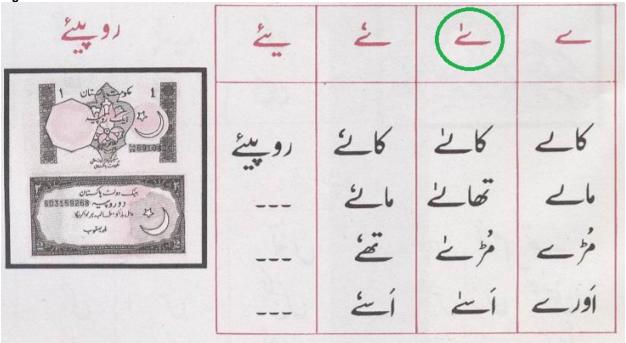
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Figure – 15				
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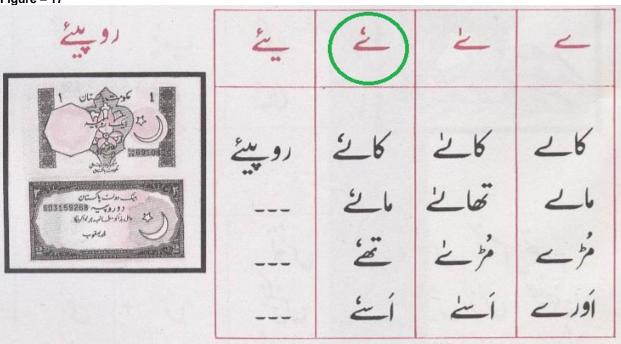
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Figure - 16



Indus Kohistani yeh. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani_shina_qaida/mode/2up

Figure - 17



Indus Kohistani yeh. Excerpt from Indus Kohistani Qaida (Primer Book) compiled by Razwal Kohistani and Ruth Laila, Himalayan Jungle Project Palas, Indus Kohistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up

Reference

- 1. Indus Kohistani Qaida (Primer Book) by Razwal Kohistani and Ruth Laila, published by Himalayan Jungle Project Palas, Indus Kohistan, Pakistan, 1996. Please see this document here https://archive.org/details/kohistani shina qaida/mode/2up
- 2. Indus Kohistani Qaida (Primer Book) Indus Kohistani-Language-Qaida-by-Rehmat-Aziz-Chitrali-Published-byKhowar-Academy-Chitral-Pakistan, 1996

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 _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/roadmaps.html _ for latest Roadmaps.

A. Administrative

1. Title: Proposal to inc	clude Indus Kohistani alphabet			
	Rehmat Aziz Khan Chitrali			
3. Requester type (Member body/Liaison/Individual contri				
4. Submission date:	04/06/2020			
5. Requester's reference (if applicable):				
6. Choose one of the following:		./		
This is a complete proposal: (or) More information will be provided later:		v		
B. Technical – General				
Choose one of the following:				
a. This proposal is for a new script (set of characters	e).			
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:		17		
3. Proposed category (select one from below - see section	n 2 2 of P&P document):			
A-Contemporary B.1-Specialized (small collect		tion)		
C-Major extinct D-Attested extinct	E-Minor extinct	,		
F-Archaic Hieroglyphic or Ideographic	G-Obscure or questionable usage sy	/mbols		
4. Is a repertoire including character names provided?		yes		
a. If YES, are the names in accordance with the "ch	aracter naming guidelines"			
in Annex L of P&P document?		yes		
 b. Are the character shapes attached in a legible for 	m suitable for review?	yes		
5. Fonts related:				
a. Who will provide the appropriate computerized fo	nt to the Project Editor of 10646 for publishir	ng the		
standard?	2	t- (
	Researcher at Khowar Academy Chitral Paki			
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.): **Rehmat Aziz Khan Chitrali Email: rachitrali@gmail.com**				
6. References:	an Email: radiilitaii Sgiriaii.56iii			
a. Are references (to other character sets, dictionari	es, descriptive texts etc.) provided?	ves		
b. Are published examples of use (such as samples				
-f	yes	,		
7. Special encoding issues:				
Does the proposal address other aspects of charact	ter data processing (if applicable) such as in	put,		
presentation, sorting, searching, indexing, translitera	ation etc. (if yes please enclose information)	? yes		
See the section titled	Character name and shape			
8. Additional Information:				
Submitters are invited to provide any additional information				
that will assist in correct understanding of and correct ling				
Examples of such properties are: Casing information, Nur				
information such as line breaks, widths etc., Combining be Collation behaviour, relevance in Mark Up contexts, Com				
related information. See the Unicode standard at http://w				
see Unicode Character Database (http://www.unicode.or				
for information needed for consideration by the Unicode T				

 $[\]begin{array}{l} 1. \ \, \text{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)} \end{array}$

C. Technical - Justification

Or recimical Guestineanen				
1. Has this proposal for addition of chara	cter(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 charact	No			
If YES, with whom?				
If YES, available relevant do	ocuments:			
3. Information on the user community for	the proposed characters (for example:			
size, demographics, information te	chnology use, or publishing use) is included?	Yes		
Reference:	Indus Kohistan, Khyber Pakhtunkhwa, Pakistan			
4. The context of use for the proposed ch		Common		
Reference: The proposed all	phabets are very common in Indus Kohistani books, Dictiona	ries, Alphabet		
	books published in Pakistan			
5. Are the proposed characters in current	t use by the user community?	Yes		
If YES, where? Reference:	Most of recent published Indus Kohistani books, text editor	ors use these		
	characters			
	principles in the P&P document must the proposed character			
in the BMP?		Yes		
If YES, is a rationale prov		Yes		
If YES, reference:	Character could be kept with their counterparts in Ara	bic block		
7. Should the proposed characters be ke	pt together in a contiguous range (rather than being scattere	d)? Yes		
	e considered a presentation form of an existing			
character or character sequence?		No		
If YES, is a rationale for it	s inclusion provided?			
If YES, reference:				
9. Can any of the proposed characters be	e encoded using a composed character sequence of either			
existing characters or other propos	The state of the s	No		
If YES, is a rationale for it	•••			
If YES, reference:	·			
) be considered to be similar (in appearance or function)			
to, or could be confused with, an e		No		
If YES, is a rationale for it				
If YES, reference:				
	nbining characters and/or use of composite sequences?	9		
If YES, is a rationale for such use p	-	<u> </u>		
If YES, is a rationale for such use p	orovided:			
	ad their acres and in a glore in a great (was his acres dela) are vis	ded? No		
	nd their corresponding glyph images (graphic symbols) provide	ied? 140		
If YES, reference:				
12. Does the proposal contain characters		No		
control function or similar semantic		IVO		
If YES, describe in detail ((include attachment if necessary)			
13. Does the proposal contain any Ideog	· · · · · · · · · · · · · · · · · · ·	No		
· · · · · · · · · · · · · · · · · · ·	onding 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 http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.

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 "Where is my Character" 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:

- Proposed category for the script or character(s), character name(s), and description of usage.
- 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 encode

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 that did not follow the Character-Glyph Model that guides the choice of appropriate characters for encoding in ISO/IEC 10646.

Note: WG 2 has resolved in Resolution M38.12 not to add any more Arabic presentation forms to the standard and suggests users to employ appropriate input methods, rendering and font technologies to meet the user requirements.

- Mappings to accepted sources, for example, other standards, dictionaries, accessible published materials.
- 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 M45.30). 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.

6. 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.

7. Equivalent glyph images:

If the submission intends using composite sequences of proposed or existing combining and non-combining 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 M45.29):

- 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
- 9. Properties that may affect the BiDi processing

Any BiDirectional algorithm related properties associated with the characters should be spelled out (see UAX#9 - http://www.unicode.org/reports/tr9/).

- 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 http://www.unicode.org/reports/tr31/.
- 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/).