ISO/IEC JTC1/SC2/WG2 N4218

Doc Type								
Title:	Proposal to add a Named UCS Sequence Identifier UYGHUR LETTERS							
Source:	China							
Action:	Review at WG2 Meeting							
Distribution: SC2/WG2								

The Unicode Technical Committee received input from Uyghur experts indicating the cultural importance of a text element referred to as vowel letters:

	Nominal	Alphabet	sequence	sequence	Isolated	Initial form	Medial	Final form	
	form	letters	characters	characters	form and	and	form and	and	
		name		code	represented	represented	represented	represented	
					code	code	code	code	
1	ئا	Uyghur	ئ+1	0626+0627	ರ FBEA			に FBEB	
	J	letter A			1 FE8D			l FE8E	
2	ئە	Uyghur	ئ+ه	0626+06D5	FBEC ئە			FBED ئە	
	2	letter AE			ه FEE9			a FEEA	
3	ئې	Uyghur	ئ+ې	0626+06D0	FBF6 ئې	FBF8 ئې	FBD1 ئې	FBF7 ئې	
	عې	letter E	Ϋ́				•		
					FBE4 ې	FBE6 ب	r FBE7	FBE5 ې	
4	ئى	Uyghur letter I	ئ+ى	0626+06D9	FBF9 ئى	FBFB ئە	FBD2 ئىد	FBFA ئى	
					FEEF	FBE8 د	▲ FBE9	FEF0 ی	
5	ئو	Uyghur	ئ+و	0626+0648	FBEE ئو			FBEF ئو	
	9	letter O	9 ' 3		و FEED			FEEE و	
6	ئۇ	Uyghur	ئ+ۇ	0626+06C7	FBF0 ئۇ			FBF0 ئۇ	
	9	letter U	9.0		FBF0 و			FBF0 و	
7	ئۆ	Uyghur	ئ+ۆ	0626+06C6	FBF2 ئۆ			FBF3 ئۆ	
	7	letter OE	9.0		FBD9 و			۶ FBDA و	
8	ئۈ	Uyghur	ئ+ۈ	0626+06C8	FBF4 ئۈ			FBF5 ئۈ	
	ア	letter OU	7		FBDB ؤ	_		FBDC و	
9	نک	Chaghatay letter NG	ن+ک	0646+06A9	FBD1 نک	نک _{FBD2}	FBD0 شک	FBCF شک	

This text element is perceived culturally to be a single character and is listed and named in "alphabet" lists. This text element has a representation in the UCS as a character sequence: <0626,0627>. And every vowel letters linker mode.

On that basis, the Unicode Consortium proposes addition of the following named UCS sequence identifier in Amendment 8 of ISO/IEC 10646:

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Uyghur letter A: Nominal form ك , sequence character < الج >, sequence code < 0626,0627 > .
                 Isolated form \( \begin{aligned} \text{...} \), sequence code <0626,0627>, represented code < FBEA >
                   Isolated form 1, sequence character <1 >, sequence code <0627 >, represented code < FE8D >
                 final form \( \psi \), sequence character \( < \psi \), sequence code \( < 0626,0627 \), represented code \( < FBEB > \)
                 final form \( \), sequence character \( < > \), sequence code \( < \)0627\( > \), represented code \( < \) FE8E \( > \)
Uyghur letter AE: Nominal form على , sequence character <ه+رځ>, sequence code <0626,06D5>.
                sequence character < وغ + «>, sequence code < 626,06D5>, represented code < FBEC >
                Isolated form a, sequence character <a>>, sequence code <06D5>, represented code < FEE9>
                final form مثر , sequence character <ه+ه>>, sequence code <0626,06D5>, represented code < FBED >
                final form 4, sequence character < >, sequence code < 06D5>, represented code < FEEA >
Uyghur letter E: Nominal form \xi, sequence character \xi, sequence code \xi, sequence code \xi, sequence code \xi.
                sequence character <رئى+ى>, sequence code<0626,06D0>, represented code < FBF6 >
                Isolated form 6, sequence character <65, sequence code<06D0>, represented code < FBE4>
                sequence code <0626,06D0>, represented code < FBF8 > ئب sequence code <0626,06D0, represented code < FBF8
                Initial form , sequence character < >, sequence code < 06D0 >, represented code < FBE6 >
                >, sequence character < ځ>, sequence code <0626,06D0>, represented code < FBD1 >
                Medial form +, sequence character <>>, sequence code<06D0>, represented code < FBE7 >
                 sequence character <ځ+ی>, sequence code <0626,06D0>, represented code < FBF7 >
                 final form _{\varsigma}, sequence character _{\varsigma} >, sequence code < 06D0>, represented code < FBE5 >
. , sequence character <ئ+ى> , sequence code <0626, 06D9> .
                Sequence character <ئى +ى>, sequence code<0626, 06D9>, represented code < FBF9 >
                Isolated form ی, sequence character < >, sequence code <06D9>,represented code < FEEF >
                Initial form &, sequence character <6+6, sequence code <0626, 06D9>, represented code <FBFB>
                Initial form _____, sequence character <_______, sequence code < 06D9>, represented code < FBE8 >
                Medial form \stackrel{\star}{\sim}, sequence character <_{(5)}+_{(5)}, sequence code < 0626, 06D9>, represented code < FBD2>
                Medial form \downarrow, sequence character <_{\circ}>, sequence code <06D9>, presented code < FBE9 >
                 sequence character <ئ+ى>, sequence code <0626, 06D9>, represented code < FBFA >
                 \label{eq:code} \textit{final form} \quad \textit{$_{\circ}$} \; , \; \textit{sequence character} \; <_{\circ}>, \; \textit{sequence code} \; <06D9>, \; \textit{represented code} \; < \; \textit{FEF0}> \; \\
. $\sequence code <0626,0648 - \frac{3}{2}+ و$\text{psquence character} - كا بي \text{sequence code} \text{sequence code} - \frac{1}{2} \text{off (626,0648)}.
                sequence character <وغ+و>, sequence code <0626,0648>, represented code < FBEE >
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Isolated form <sub>9</sub>, sequence character <<sub>9</sub> >, sequence code <0648>, represented code < FEED >
                  final form پئے , sequence character < پئے + , sequence code < 626,0648 > , represented code < FBEF >
                  final form <sub>9</sub>, sequence character <<sub>9</sub> >, sequence code <0648>, represented code < FEEE >
sequence character < وغ + في +, sequence code < 626,06C7>, represented code < FBF0 >
                   Isolated form 3, sequence character <3 >, sequence code <06C7>, represented code < FBD7 >
                  sequence character <ځ + sequence code <0626,06C7>, represented code < FBF1 > بئي final form بئي , sequence character د ا
                  final form 4, sequence character < >, sequence code < 06C7>, represented code < FBD8 >
Uyghur letter OE : Nominal form من , sequence character < إلى , sequence code <0626,06C6> .
                Isolated form پخ , sequence character <غځ>, sequence code <0626,06C6>, represented code < FBF2 >
                   Isolated form 5, sequence character < >, sequence code < 06C6>, represented code < FBD9 >
                  final form 💥 , sequence character <ځ+'>, sequence code <0626,06C6>, represented code < FBF3 >
                  final form \xi, sequence character < \xi >, sequence code <06C6>, represented code < FBDA >
. /sequence code <0626,06C8 خي + و sequence character خي + و sequence character خي + و vyghur letter OU : Nominal form
                sequence character <غ+ۈ>, sequence code <0626,06C8>, represented code < FBF4 >
                   Isolated form \frac{1}{9}, sequence character \frac{1}{9}, sequence code \frac{1}{9}, represented code \frac{1}{9}
                  sequence character < وع الم , sequence character < جى الم , sequence code < 626,06C8 > , represented code < FBF5 >
                  final form ½, sequence character <½>, sequence code <06C8>, represented code < FBDC >
Chaghatay letter NG: Nominal form کن , sequence character <ن+ک>, sequence code <0646,06A9>.
                Isolated form 'S, sequence character 'S, sequence code <0646,06A9>,represented code <FBD1 >
                Initial form \stackrel{\text{SJ}}{}, sequence character \stackrel{\text{SJ}}{}, sequence code \stackrel{\text{SO}}{}, represented code \stackrel{\text{FBD2}}{}
                Medial form \stackrel{\langle \zeta_1 \rangle}{}, sequence character \stackrel{\langle \zeta_2 \rangle}{}, sequence code <0646,06A9>, represented code < FBD0 >
                 final form \stackrel{\checkmark}{}_{\cdot}, sequence character \stackrel{\checkmark}{}_{\cdot}, sequence code \stackrel{\checkmark}{}_{\cdot}, represented code \stackrel{\checkmark}{}_{\cdot}
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Reference 1:

Table 1-2: Special vowel Scripts to Be Supplemented in ISO/IEC 10646 /Unicode for Uyghur languages

Language	Final form	Medial form	Initial form	Isolated form	Nominal form	No
Uyghur	FE8E FBEB			FE8D FBEA	ئا	1
Uyghur	م ٽ FEEA FBED			دُّم FBEC FEE9	ئہ	2
Uyghur	جْب بِ FBE5 FBF7	FBE7 FBD1	ئب ب FBE6 FBF8	ئې ې FBE4 FBF6	ئې	3
Uyghur	ئی ی FEFO FBFA	FBE9	گه ر FBE8 FBFB	نگی ی	ئى	4
Uyghur	مُو و FEEE FBEF			وً و FEED FBEE	ئو	5
Uyghur	ئۇ ۇ FBD8 FBF1			وُ وُ FBD7 FBF0	نۇ	6
Uyghur	مُوْ وُ FBDA FBF3			وُّو وُ FBD9 FBF2	ئۆ	7

Uyghur	FBDC	عُو FBF5			j FBDB	ئۇ FBF4	ئۇ	8	
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Arabic Presentation Forms-A

	FB5	FB6	FB7	FB8	FB9	FBA	FBB	FBC	FBD	FBE	FBF
0	FBISO	1 3 FB80	و:: 1870	γ	FB90	Cr	2 FBB0			9	نۇ BF0
1	Ţ		2.2	K ::	<	را	ے			d d	ئۇ
2	+B51 -	^{FB61}	FB71	<u>ج</u>	FB91	FBA1	FBB1			_{RBE1}	ا _{BF1}
3	FB52	FB62	RB72	ير ک	FB92	FBA2			اااااا غا	RBE2 ĝ	FBF2
J	FB53	FB63	FB73	FB83	FB93	FBA3			RBD3	RBE3	RBF3
4	3 1 FB54	11. 3 FB64	₹ FB74	3 FB84	5 FB94	Ď FBA4			ڭ 804	ې BE4	ئۈ #BF4
5	٠-١	3.55	<i>ү</i> -	بح	>	بط			\$	ب	ئۇ
6)	²	#B75	î Ĉ	\$	FBA5			\$\hat{\chi}	HSES 1	المجادة المجادة المجادة
7	FB56	FB66	FB76	BBB دُ	\$	FBA6			RBD6 €	RBE6	RBF6 شى
	FB57	FB67	FB77	FB87	FB97	FBA7			₁₈₀₇	FBE7	RBF7
8	7 FB58) FB68	≻: FB78	FB88	FB98	T FBA8			RBD8) FBE8	ج HBF8
9	€ FB99	FB09	<u>ب</u> 1879	ک FB89	Š 8	₹ FBA9			ۆ RBD9	ribes	ىئى FBF9
Α);;	ۋ:	چ	ڗ	گ	ھ			ۆ	t	ئى
В	FB5A	EBGA :	FBTA	FB8A	FB9A Š	FBAA As			FBDA é	RBEA	FBFA
	FBSB	FB6B	FB78	FB8B	F898	FBAB			FBDB	RBEB	FBFB
С	≱ RB5C	ۇ FB6C	Ç FB7C	ر FBac	FB9C	FBAC			و FBDC	ئہ FBEC	FBFC
D	fB5D	Å FBED	₹	وا FB80	Ä RB9D	Æ FBAD			ۇ 1800		FBRD
Ε	C.	وء	تے	S	c	_			ۋ	ئو	
F	·	FEGE	FBTE	S	FBSE	FBAE			RBO∈ ۋ	#BEE ئو	FBFE
	FBSF	FBGF	FB7F	FB8F	FB9F	FBAF	HIHI	HHHH:	FBDF	FBEF	RBFF

Reference 2: ISO/IEC JTC1/SC2/WG2 58 meeting 8 June 2011

ISO/IEC JTC1/SC2/WG2 N4113

Ad hoc report on Uyghur

SOURCE: Tero Aalto, CSC – IT Center for Science

DATE: 8 June 2011

LOCATION: Finnish Standards Association SFS, Helsinki, Finland

PARTICIPANTS:

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The ad hoc group met and discussed issues relating to three documents:

the original proposal from China ("Preliminary Proposal for Encoding Special Scripts and

Characters in UCS for Uyghur, Kazakh and Kirgiz" N3819)

comments on this proposal (N3889)

a new proposal from China ("Proposal to Encode Special Scripts and Characters in UCS for Uyghur language" N3919).

The discussion in the ad hoc group was based on the following document:

100078 N4067 – Proposal to Encode Special Scripts and Characters in UCS for Uyghur language

The eight characters proposed in N4067 can presently be produced as combinations of two existing characters. According to the proposal, these characters should, in addition, be encoded separately. An argument supporting the proposal was the fact that the characters can have different numbers of shapes in different languages. However, this is not within the scope of UCS. Instead, different glyph variants are handled by fonts. According to the principle, anything that can be represented with a sequence will not be encoded as a separate character.

The ad hoc group arrived at the following conclusions:

100078 There is to be a named UCS Sequence Identifier (USI) for each of the proposed sequences.

A USI is also to be determined for the character proposed in N4066 –
 PROPOSING TO SUPPLEMENT WITH THE SCRIPT AND CHARACTER OF Chaghatay Language.

100078 The contributor is requested to produce and submit another contribution defining the nine sequences for consideration in a future meeting.