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	ا+ ئ+	0626+0627	ರ FBEA			ು FBEB
	J	letter A	G		1 FE8D			l FE8E
2	ئە	Uyghur	ئ+ه	0626+06D5	FBEC ئە			FBED ئە
	~	letter AE			ه FEE9			a FEEA
3	ئې	Uyghur	ئ+ې	0626+06D0	FBF6 ئې	FBF8 ئې	FBD1 ئب	FBF7 ئې
	حې	letter E	ی کې				•	
					FBE4 ې	FBE6 ۽	₹ 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	ی او ا		, FEED			FEEE و
6	ئۇ	Uyghur	ئ+ۇ	0626+06C7	FBF0 ئۇ			FBF0 ئۇ
	7	letter U	9.0		FBF0 و			FBF0 و
7	ئۆ	Uyghur	ئ+ۆ	0626+06C6	FBF2 ئۆ			FBF3 ئۆ
	7	letter OE	9.0		۶ FBD9 و			۶ FBDA و
8	ئۈ	Uyghur	ئ+ۈ	0626+06C8	FBF4 ئۈ			FBF5 ئۈ
	ア	letter OU	7 3		FBDB ؤ			FBDC و
9	نک	Chaghatay letter NG	ن+ک	0646+06A9	FBD1 نک	نک _{FBD2}	≤ FBD0	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	ئ	1
Uyghur	م ٽ FEEA FBED			ه نگر FBEC FEE9	ئہ	2
Uyghur	منې ې FBE5 FBF7	FBE7 FBD1	FBE6 FBF8	نجې ې FBE4 FBF6	نې	3
Uyghur	بنی ی FEFO FBFA	FBE9	گه ر FBE8 FBFB	نگی ی FEEF FBF9	ئى	4
Uyghur	مُو و FEEE FBEF			بُو و FEED FBEE	ئو	5
Uyghur	ئۇ ۇ FBD8 FBF1			بُوُ وُ FBD7 FBF0	ئۇ	6
Uyghur	مُوْ وُ FBDA FBF3			وُّو وُ FBD9 FBF2	ئۆز	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	Č FBAG	2 FBB0			9	نۇ BF0
1	Ţ		22	K ::	<	ر ہ	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	ئۇ #BF4
5	>	1.5	у.	بح	>	ئم			\$	٠ <u>٠</u>	ئۇ
6)	²	FB75	÷	\$	FBA5			Å.	HSES 3	المجادة المجادة المجادة
7	F856	FB66	FB76	FB86 Å	FB96	FBA6			RBD6 €	FBE6	HBF6
	₩ FB57	FB67	FB77	FB87	FB97	FBA7			FBD7	FBE7	FBF7
8	¥ FBS8) FB68	≯: FB78	FB88	\$ FB98	(FBA8			ۇ RBD8) FBE8	FBF8
9	Ç FBISS	FB09	₹ .	ک FB89	<u>چ</u> . ه	T ∕ FBA9			ۆ RBD9	FBE9	نگی FBF9
Α	ي _	ۋ	چ	ڗ	گ	ھو			ۆ	t	ئى
В	FBSA jı	FB6A C	FBTA	FB8A	FB9A Š	FBAA As			FBDA é	RBEA	FBFA
	FBSB	FB6B	FBTB	FB8B	F898	FBAB			FBDB	RBEB	FBFB
С	;i FB5C	ۋ FB&C	Ş FB7C	ر FBac	FB9C	FBAC			و FBDC	ئہ FBEC	ى FBPC
D	CII FBSD	ž FBED	∤ ÷	ود ا	E89	£			ۇ 1800	gee };	FBRD
Ε	C.	وء	تے	S	c	_			ۋ	ئو	
F	±884 ن	FB6E	FBTE	5	FB9E	FBAE			RBO∈ ê	REEE ئو	FBFE
	FBSF	FBGF	FB7F	FB8F	FB9F	FBAF	illilli:	HHHH:	FBDF	RBEF	FBFF

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

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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.