# ISO/IEC JTC1/SC2/WG2 N 3542

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# ISO/IEC JTC1/SC2/WG2 Coded Character Set Secretariat: Japan (JISC)

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Title: Disposition of comments on SC2 N 3989 (PDAM text for Amendment 6 to ISO/IEC

10646:2003)

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Comments were received from Canada, China, Germany, Ireland, Japan, Korea (ROK), United Kingdom, and USA. The following document is the draft disposition of those comments. The disposition is organized per country.

Note – The full content of the ballot comments have been included in this document to facilitate the reading. The dispositions are inserted in between these comments and are marked in <u>Underlined Bold Serif text</u>, with explanatory text in italicized serif.

As a result of these dispositions, China, Germany, Ireland, Korea (ROK), United Kingdom, and the USA changed their vote to YES, leaving no negative vote.

# **Canada: Positive with comments**

#### **General comments**

While Canada does not have expertise on TANGUT, we understand there is some controversy about its acceptance in the user community as is encoded in the PDAM6.2. If WG2, after due consideration of the issues that is being presented by subject matter experts, decides on postponement of TANGUT encoding to a future amendment, Canada will not have any objection.

#### Noted

# **China: Negative**

China votes NO to SC2N4028 on ISO/IEC 10646: 2003 PDAM6.2. China will change her vote to YES if the following comments accepted.

#### **Technical comments**

#### T.1 Comments for 2 characters in New Tai Lue

Glyphs of U+19D2 NEW TAI LUE DIGIT TWO and U+19D4 NEW TAI LUE DIGIT FOUR should be corrected.

- The current glyph of U+19D2 is wrong, the correct glyph is J.
- The current glyph of U+19D4 is hand writing style, the correct typography is 7.

Both current glyphs are not found in newspapers, books and other publications or information systems in use, in China, Thailand or Myanmar.

# Not applicable

These two characters are not part of this amendment. They have been part of the standard since the first amendment to ISO/IEC 10646:2003 was adopted. This should have been processed as a corrigendum and treated separately from this ballot disposition. However, they have been accepted and the changes will be incorporated into the next phase of this amendment.

Note that the current shapes for 19D2 and 19D4 are  $\mathfrak g$  and  $\mathfrak q$  respectively.

### **T.2 Comment on Tangut**

China supports the code charts of Tangut but requires to change the fonts to that provided by China which reflects the original forms of Tangut in history.

#### Accepted in principle

As a result of an ad hoc meeting between NB experts, and given ballot comments received by other countries (especially Germany, Ireland and UK) it was decided to postpone Tangut until the next amendment. See also comments from Germany (T.1), Ireland (T11, UK (T5), and US (T8).

Based on these dispositions, China changes its vote to Yes.

# **Germany: Negative**

The German National Body is voting "No with comments" on the following SC 2 ballot: SC2N2408... If T1 and T2 are accommodated, Germany will change its vote to Yes.

#### **Technical comments**

#### T.1. Tangut

While Germany appreciates the encoding of Tangut in principle, in its opinion the ongoing discussions on the Unicode mailing list show that there a consensus is not reached at this time about the experts to present an encoding which can gain broad acceptance by its user community. Therefore, Germany requires Tangut to be removed from Amendment 6.2 pending further study.

#### Accepted

See also Chinese comment T.1, Ireland (T11), UK (T5), and US (T8)

# T.2 Japanese TV Symbols

Germany requires the following changes:

26CE TRAFFIC WARNING change to: HEAVY EXCLAMATION MARK SYMBOL

26D5 ALTERNATE ONE-WAY TRAFFIC change to: ALTERNATE ONE-WAY LEFT WAY TRAFFIC

26D6 BLACK TWO WAY TRAFFIC change to: BLACK TWO WAY LEFT WAY TRAFFIC

26D7 WHITE TWO WAY TRAFFIC change to: WHITE TWO WAY LEFT WAY TRAFFIC

26D8 BLACK LANE MERGE change to: BLACK LEFT LANE MERGE

26D9 WHITE LANE MERGE change to: WHITE LEFT LANE MERGE

26DA DRIVE SLOW change to: DRIVE SLOW SIGN

26DC CLOSED ENTRY change to: LEFT CLOSED ENTRY

26E0 RESTRICTED ENTRY 1 change to: RESTRICTED LEFT ENTRY 1

26E1 RESTRICTED ENTRY 2 change to: RESTRICTED LEFT ENTRY 2

26ED FACTORY change to: GEAR WITHOUT HUB

26EF LIGHTHOUSE change to: GEAR WITH BLACK CIRCLE INSIDE

26F4 BLACK BOAT change to: FERRY

26F5 WHITE SAILBOAT change to: SAILBOAT

26FC GRAVEYARD change to: HEADSTONE GRAVEYARD SYMBOL

This is in accordance with the comment T.6 of the U.S. national body as shown in the Unicode document L2/08-330, and with the decisions of the Unicode consortium taken at their UTC #116 meeting in August 2008, with one exception:

There, 26EF LIGHTHOUSE is requested to be changed to: BEACON.

Germany strictly opposes to the name BEACON in the same way as to the original name LIGHTHOUSE. Neither does the symbol show a lighthouse or beacon to a user without preconception, nor does the symbol resemble any symbol for lighthouse or beacon used internationally like e.g. in nautical maps. Se e.g. the following links showing beacon symbols on nautical maps, which all look totally different:

http://nauticalcharts.noaa.gov/mcd/chart1/aids/O.pdf

http://mapserver.maptech.com/mapserver/nautical\_symbols/Q1.html

#### Accepted in principle

See also US comment T6. The only slight divergence concerns 26EF LIGHTHOUSE which was renamed: 26EF MAP SYMBOL FOR LIGHTHOUSE. Prior to this, the renaming was discussed among symbol experts, including German ones. In short, the renaming using the term "gear" was seen as misleading by some (the light of the lighthouse has not much to with a gear) and could require the renaming of more proposed related symbols. In this case it was determined that using an alternate name preserving the name/symbol for a future traditional lighthouse (small tower with lights coming out of it left and right) was preferable.

#### T.3. Miscellaneous Symbols

The German national body supports the addition of one character to the Miscellaneous Symbols Block: 26BD SOCCER BALL.

This character is being added in this location as it fits semantically with other such symbols, such as "baseball." To accommodate this addition, the German national body suggests that the following two characters in the amendment be moved down by one code position:

26BD BASEBALL change to: 26BE

26BE SQUARED LOCK change to: 26BF.

This is in accordance with the comment T.9 of the U.S. national body as shown in the Unicode document L2/08-330, and with the decisions of the Unicode consortium taken at their UTC #116 meeting in August 2008.

# **Accepted**

See also US comment T9.

As a result of these dispositions, it was determined that all German comments were favorably disposed and thus justify a change to Yes vote, according to their vote preamble.

# **Ireland: Negative**

Ireland **disapproves** the draft with the technical and editorial comments given below.

Acceptance of these comments and appropriate changes to the text will change our vote to approval.

#### Technical comments

#### T1. Page 4, Modifications to existing blocks and New blocks.

For "United Canadian Aboriginal Syllabics" twice here, read "Unified Canadian Aboriginal Syllabics".

#### Accepted

#### T2. Page 7, Annex B. Meetei Mayek

The Meetei Mayek combining characters should be modified in accordance with the resolution of our T6 below. **Accepted** 

#### T3. Page 8, Annex G. Tangut names

A section describing the Tangut character naming convention should have been added here. See, however, our T11 below.

#### Withdrawn

See disposition of comment T11.

### T4. Page 11, Row 090: Devanagari.

With reference to ISO/IEC JTC1/SC2/WG2 N3488R2 "Proposal to encode additional characters for Vedic in the UCS", Ireland requests that the character 0973 DEVANAGARI SIGN PUSHPIKA be moved to A8F8 and that the character 0974 DEVANAGARI CARET be moved to A8FA. Ireland also requests that the character DEVANAGARI VOWEL SIGN PRISHTHAMATRA E be added to 094E.

#### Accepted

See also US Comment T.1

#### T5. Page 17, Row 0F0: Tibetan.

In order to acknowledge the international use of these characters, Ireland requests that the following names be used: 0FD5 RIGHT-FACING SVASTI SIGN,

0FD6 LEFT-FACING SVASTI SIGN,

0FD7 RIGHT-FACING SVASTI SIGN WITH DOTS, and

0FD8 LEFT-FACING SVASTI SIGN WITH DOTS.

Ireland would not favour moving the characters to a generic symbols block or to a Vedic-specific block.

# Accepted

See also UK comment T.2 and US Comment T.2. One annotation will be added for the 0FD5 entry describing usage for Vedic (ref N3537): Symbol of good luck and well-being in India, in addition to other annotations suggested in Irish comment E1.

#### T6. Page 37, Row 1C8: Meetei Mayek.

With reference to ISO/IEC JTC1/SC2/WG2 N3473R "Proposed Encoding for Meetei Mayek Block" and to ISO/IEC JTC1/SC2/WG2 N3478R "Proposed Encoding for Meetei Mayek Extended Block", Ireland requests that the character set and code table in PDAM 6.2 be replaced by those in these two documents. This will create two separate blocks ("Meetei Mayek" beginning at ABC0 and "Meetei Mayek Extensions" beginning at AAE0), and involve the addition of one character (the new ABE2 MEETEI MAYEK LETTER I LONSUM). The names and character annotations are also changed by these two documents.

# Partially accepted

See also US comment T.3. Only the 55+1 characters from the Meetei Mayek block are included in this amendment. The other 23 historical characters are postponed.

# T7. Page 40, Row 1CD: Vedic Extensions.

With reference to ISO/IEC JTC1/SC2/WG2 N3488R2 "Proposal to encode additional characters for Vedic in the UCS", Ireland requests that the character set and code table in PDAM 6.2 be replaced by that in N3488R2. This involves the addition of characters at 1CD4, 1CE9..1CEC, moving the character at 1CF1 to 1CF2, and adding a new character at 1CF1.

# **Accepted**

See also US Comment T.1

#### T8. Page 72, Row A8E: Devanagari Extended.

With reference to ISO/IEC JTC1/SC2/WG2 N3488R2 "Proposal to encode additional characters for Vedic in the UCS", Ireland requests that the character set and code table in PDAM 6.2 be replaced by that in N3488R2. This involves the addition of characters at A8F8..A8FB.

#### **Accepted**

See also US Comment T.1

#### T9. Page 77, Row AA6: Myanmar Extended-A.

With reference to ISO/IEC JTC1/SC2/WG2 N3492 "Extended Proposal to add Khamti Shan Characters to the Myanmar Blocks", Ireland requests that the character set and code table in PDAM 6.2 be replaced by that in N3492.

# Accepted

See also UK comment T.3 and US Comment T.4

### T10. Page 80, Row 10A6: Old South Arabian.

Ireland objects to the character names which have been proposed for the Old South Arabian script. Conventional names rather than raw Latin transliterations are the usual way in which Semitic script character names are given in the UCS. There is no reason for this precedent to be overturned. Moreover, even if transliterations *were* to be used, they should be the ones most commonly used. The proposed characters include (for instance) ... T1,  $\ddot{o}$  T2, and  $\dot{\div}$  T3. But ordinary transliterations of Old South Arabian write t, t, and t—the use of digits proposed writing t1 would be contrary to common scholarly practice, as well as UCS practice. The same goes for the rest of the characters, for which a number of differing transliterations can be found, such as those of Faulmann 1880, Höfner 1943, Healey 1990, O'Connor 1996, Stein 2003, Nebes and Stein 2004, given here.

		F1880	H1943	B1962	H1990	O'C1996	S2003	NS2004	
D1	Þ	d	d	d	d	d	d	d	٦
D2	Ħ	δ	đ, <u>d</u>	₫	₫	₫	₫	₫	Ŧ
D3	H	<u>z</u>	₫, ḍ	<b>d</b>	<b>d</b>	<b>ḍ</b>	<b>ḍ</b>	<b>d</b>	ž
G1	٦	dž	g	g	g	g	g	g	λ
G2	П	Υ	ġ	$\bar{g}$	ģ	ģ	ġ	ġ	$\bar{\nu}$
H1	$\mathcal{T}_{\mathbf{I}}$	h	h	h	h	h	h	h	n
H2	$\mathbf{H}$	h'	<i>ḥ</i>	<i>ḥ</i>	<u></u>	<u></u>	<i>ḥ</i>	<u></u>	n
НЗ	r <sup>r</sup> i	Χ	b	<u>Þ</u>	b	b	b	b	ñ
S1	$^{1}$	S	S	$S^1$	š	S <sup>1</sup>	S	S <sub>1</sub>	D
S2	I	š	š	<b>S</b> <sup>2</sup>	Ś	<b>S</b> <sup>2</sup>	Š	S <sub>2</sub>	ש
S3	×	Z	Ś	<b>S</b> 3	S	<b>S</b> 3	Ś	<b>S</b> 3	$\bar{\boldsymbol{v}}$
S4	ñ	<u>s</u>	Ş	Ş	Ş	Ş	Ş	Ş	צ
T1	Χ	t	t	t	t	t	t	t	ת
T2	П	₫	ţ	ţ	ţ	ţ	ţ	ţ	v
T3	8	$\theta$	<u>t</u> , þ	<u>t</u>	<u>t</u>	<u>t</u>	<u>t</u>	<u>t</u>	ū
Z1	X	$\theta$	Z	Z	Z	Z	Z	Z	7
Z2	ĥ	δ	<b>Ż</b>	Ż.	Ż.	Ż.	Ż.	Ż.	ō

The proposal given in N3395 is not consistent with current UCS practice. The *only* letters for which superscript or subscript digits are used are three of the four *s*'s.

It has been Ireland's consistent position for many years that actual character names be used rather than transliteration names. In the case of Old South Arabian in particular, the use of transliteration character names obscures the relation of individual letters with the corresponding letters in related scripts, which works to the detriment of users of the UCS who may wish to relate the characters of different scripts.

However, Ireland does not believe that it should be difficult to resolve this issue. We note that a number of naming conventions have been proposed for Old South Arabian:

- N3309 (2007-07-30) proposed to use Arabic-based character names.
- N3296R (2007-09-10) suggested that Arabic-based character names were anachronistic and proposed reconstructed Ethiopic-based character names.
- N3395 (2008-01-28) noted that scholars were not in the practice of using Ethiopic based character names, but that in addition to Latin transliteration-based names, both North-West Semitic-based names, and Arabic-based names were in general use by scholars.

Ireland believes that, since North-West Semitic-based names are used by scholars, an acceptable compromise would be to use North-West Semitic-based character names, which are used for a number of scripts in the UCS already. Accordingly, Ireland requests that the names in the "NWSem." column in the table below be used.

OSA	Translit.	IPA	NWSem.	Ph	oenician	Н	ebrew	Ara	abic	E	thiopic
J.	h	[h]	HE	3	he	'n	he	٥	heh		hoy
1	l	[1]	LAMEDH	4	lamd	5	lamed	J	lam	٨	lawe
Ψ	<u></u>	[ħ]	HETH	M	het	n	het	7	hah	ф	<i>ḥawt</i>
Ŋ	m	[m]	MEM	y	mem	n	mem	م	meem	av	māy
ě	q	[q]	QOPH	V	qof	P	qof	ق	qaf	ф	$q\bar{a}f$
Φ	w	[w]	WAW	4	wau	١	vav	,	waw	æ	wawe
I	$\check{s}$ , $s_2$	[4]	SHIN	Ψ	shin	ש	shin	ش	sheen	w	śawt
>	r	[r]	RESH	٩	rosh	٦	resh	ر	reh	ሬ	rə's
П	b	[b]	BETH	9	bet	ב	bet	ب	beh	a	bet
Χ	t	[t]	TAW	ŀ	tau	ת	tav	ت	teh	ተ	tawe
4	$S, S_I$	[s]	SAMEKH	*<	semk	D	samekh	س	seen	ň	sāt
ń	k	[k]	KAPH	7	kaf	$\supset$	kaf	ك	kaf	h	kāf
Ч	n	[n]	NUN	5	nun	)	nun	ن	noon	7	nahās
$r_{i}^{i}$	b	[x]	KHETH	_	_	ñ	khet	خ	khah	ጎ	harm
Å	Ş	[ts']	SADHE	٣	sade	צ	tsadi	ص	sad	ጸ	şaday
×	Ś, S3	[s]	SE	_	_	$\bar{\boldsymbol{v}}$	sin	_	_	_	_
¢	f	[f]	FE	2	pe	פ	pe	ف	feh	6.	af
ň	,	[?]	ALEPH	×	alf	N	alef	1	alef	አ	'alf
0	•	[2]	AYN	•	ain	ע	ayin	ع	ain	0	'ayn
H	<i>ḍ</i>	[4']	DHADI	_	_	ż	dhadi	ض	dad	θ	ḍаṗṗā
7	g	[g]	GIMEL	$\wedge$	gaml	λ	gimel	ج	jeem	7	gaml
Þ.	d	[d]	DALETH	4	delt	٦	dalet	د	dal	ደ	dant
Π	$\dot{g}$	[ɣ]	GHAYN	_	_	$\bar{\nu}$	ghayin	غ	ghain	_	_
Ш	ţ	[t']	TETH	$\theta$	tet	v	tet	ط	tah	M	<i>ţayt</i>
X	z	[z]	ZAYN	~	zai	7	zayin	j	zain	Ħ	zay
Ħ	d	[ð]	DHALETH	_	_	Ŧ	dhalet	ذ	thal	_	_
Î	y	[j]	YODH	Ħ	yod	,	yod	ي	yeh	የ	yaman
8	<u>t</u>	$[\theta]$	THAW	_	_	ū	thav	ث	theh	_	_
ĥ	Ţ.	$[\theta]$	THET	_	_	ō	thet	ظ	zah	_	_

#### Accepted

The chart name list for Old South Arabian letters is modified as following (approximately):

(Letter names are North-West Semitic based, the Arabic names are shown as aliases and common transliterations are shown in annotation.)

are sno	wn in annotation.)		
10A60	OLD SOUTH ARABIAN LETTER HE		= sad
	= heh		* 1E63 s
	* h	10A6F	OLD SOUTH ARABIAN LETTER SIN
10A61	OLD SOUTH ARABIAN LETTER LAMEDH		* 015B ś
	= lam	10A70	OLD SOUTH ARABIAN LETTER FE
	* 1		= feh
10A62	OLD SOUTH ARABIAN LETTER HETH		*f
	= hah	10A71	OLD SOUTH ARABIAN LETTER ALEF
	* 1E25 h		= alef
10A63	OLD SOUTH ARABIAN LETTER MEM		* 02BC '
	= meem	10A72	OLD SOUTH ARABIAN LETTER AIN
	* <i>m</i>		= ain
10A64	OLD SOUTH ARABIAN LETTER QOPH		* 02BD '
	= qaf	10A73	OLD SOUTH ARABIAN LETTER DHADHE
	*q		= dad
10A65	OLD SOUTH ARABIAN LETTER WAW		* 1E0D d
	= waw	10A74	OLD SOUTH ARABIAN LETTER GIMEL
	* w		= jeem
10A66	OLD SOUTH ARABIAN LETTER SHIN		* g
	= sheen	10A75	OLD SOUTH ARABIAN LETTER DALETH
	* 0161 š		= dal
10A67	OLD SOUTH ARABIAN LETTER RESH		*d
	= reh	10A76	OLD SOUTH ARABIAN LETTER GHAYN
	* r		= ghain
10A68	OLD SOUTH ARABIAN LETTER BETH		* 0121 ġ
	= beh	10A77	OLD SOUTH ARABIAN LETTER TETH
	* <i>b</i>		= tah
10A69	OLD SOUTH ARABIAN LETTER TAW		* 1E6D t
	= teh	10A78	OLD SOUTH ARABIAN LETTER ZAYN
	* t		= zain
10A6A	OLD SOUTH ARABIAN LETTER SAMEKH		* Z
	= seen	10A79	OLD SOUTH ARABIAN LETTER DHALETH
	* S		= thal
10A6B	OLD SOUTH ARABIAN LETTER KAPH		* 1E0F <u>d</u>
	= kaf	10A7A	OLD SOUTH ARABIAN LETTER YODH
	* <i>k</i>		= yeh
10A6C	OLD SOUTH ARABIAN LETTER NUN		* y
	= noon	10A7B	OLD SOUTH ARABIAN LETTER THAW
	* n		= theh
10A6D	OLD SOUTH ARABIAN LETTER KHETH		* 1E6F <u>t</u>
	= khah	10A7C	OLD SOUTH ARABIAN LETTER THETH
	* 1E2B h		=zah
10A6E	OLD SOUTH ARABIAN LETTER SADHE		* 1E93 z

### T11. Page 88, Row 1700: Tangut.

Ireland requests the removal of Tangut from PDAM 6.2. We believe that the script is not yet mature for progression to FPDAM. There are several reasons for this.

- 11.1. A UTC document L2/08-259 was made available on 2008-07-09, after the balloting period had begun. This is a five-column comparison chart of mappings to source material. It was not made available to SC2 prior to the issuance of the ballot and there has been no opportunity either to review it or to compare it to either the ballot or the original proposal for encoding Tangut.
- 11.2. A private document "UniTangut\_20080821.pdf" was made available on 2008-08-21 by Richard Cook, evidently containing a replacement font with completely different glyphs from those used in the font on the PDAM. This has made any review of the glyphs on the PDAM to be fruitless. When Tangut is eventually put back on a ballot, it will require both PDAM and FPDAM review cycles.
- 11.3. Discussion on the Unicore list has yielded information that the proposed encoding model for Tangut follows one Tangut scholar's prescriptive unifications of Tangut characters and expects the use of Variation Selector sequences to distinguish graphically-distinct characters that are used contrastively in the same source. It turns out that this information was given as an aside in the middle of N3307 "Tangut Background" thus: "As with CJK,

issues relating to distinctive features and variant mapping can be handled by combination of variation selector (VS) and higher-level protocol (CDL)." We believe that the phrase "As with CJK" is a bit disingenuous, particularly in view of the fact that the document pretended to be unimportant, stating clearly: "No action by WG2 is requested on this document — it is only provided for information." The statement, however, is a key element regarding the encoding principles for Tangut. Ireland objects to the fact that this information was not put forward in a straight forward fashion for consensus discussion, and rejects the proposal to use Variation Selector sequences to make character distinctions in Tangut.

- 11.4. With reference to ISO/IEC JTC1/SC2/WG2 N3498 "Expert Feedback on the proposed Tangut character set in PDAM 6.2", it is clear that the user community of experts does not believe that the script is mature for encoding and does not agree that its tacit encoding conventions (including the use of Variation Selector sequences) are sufficient for their needs.
- 11.5. With reference to document N3496 "Review of Proposed Tangut Repertoire", Ireland believes that the proposed character repertoire and encoding model fails to meet the requirements of the user community. We believe that the encoded character repertoire needs to be able to represent all of the graphically-distinct characters found in all the major modern Tangut dictionaries. This is a cornerstone of Tangutology. Ireland does not support adding Tangut to a new amendment until such time as there is genuine consensus on all sides and until a revised proposal has been submitted to WG2.

#### **Accepted**

See disposition of comment T.2 from China. See also comment T.5 from UK and T.8 from US. (Note that reference to N3948 in 11.4 was changed to N3498).

# T12. Page 112, Row 1B00: Nushu.

Ireland requests the removal of Nushu from PDAM 6.2.

The script is not mature for progression to FPDAM. The font used in PDAM 6.2 is not the latest font available as it was received from Chinese experts after the PDAM had been generated for the SC2 Secretariat. Since it has not been able to review the Nushu character set and glyphs in a meaningful way, we request that Nushu be moved to a new PDAM so that it may receive both PDAM and FPDAM review cycles.

#### **Accepted**

The Nushu block is removed from this amendment based on feedback received in this ballot. It will be considered for a future amendment. See also comment T.6 from UK and T.7 from US.

#### Editorial comments

# E1. Page 20, Row 0F0: Tibetan.

Ireland suggests that that the following notes be used: 0FCC TIBETAN SYMBOL NOR BU BZHI -KHYIL

- the quadruple body symbol, a form of the svastika
- → 0FD6 left-facing svasti sign

### 0FD5 [RIGHT-FACING] SVASTI SIGN

→ 5350 cjk unified ideograph-5350

# 0FD6 LEFT-FACING SVASTI SIGN

→ 534D cjk unified ideograph-534d

# Accepted in principle

The note for OFCC will say 'Svasti sign' instead of 'svastika'. In addition an annotation will be added for Vedic usage for 0FD5.

#### E2. Page 40, Row 1CD: Vedic Extensions.

In the annotation to 1CD9 VEDIC TONE YAJURVEDIC KATHAKA INDEPENDENT SVARITA SCHROEDER, for "adho" read "adhah".

#### Accepted

#### E3. Page 45, Row 20A: Currency Symbols.

Ireland suggests that that the following notes be used:

20B6 LIVRE TOURNOIS SIGN

• "pound of Tours" used in France from 13th-18th centuries 20B7 SPESMILO SIGN

- historical international currency associated with Esperanto 20B8 TENGE SIGN
- Kazakhstan

### **Accepted in principle**

Annotation for 20B6 changed to 'used in France from 13th-18th centuries'.

# E4. Page 46, Row 215: Number Forms.

Ireland requests that the fonts for the characters under ballot be harmonized with those of the other fractions.

# Accepted

Already shown in document WG2 N3510 (10646 new WD)

# E5. Page 55, Row 260: Miscellaneous Symbols.

Ireland suggests that the glyph for 2601 CLOUD be harmonized with the glyphs 26C5 SUN BEHIND CLOUD and that the glyph for 2603 SNOWMAN be harmonized with the glyphs for 26C4 SNOWMAN WITHOUT SNOW and 26C7 BLACK SNOWMAN.

#### Accepted

E6. Page 79, Row 1090: Phoenician. Ireland suggests that annotations to 002E FULL STOP,

2E31 WORD SEPARATOR MIDDLE DOT be added to 1091F PHOENICIAN WORD

SEPARATOR, along with a new note "May be represented as a dot or a short vertical bar".

#### Partially accepted

Only the note is added.

# E7. **Page 81, Row 10B4: Inscriptional Parthian.** Ireland notes that the glyph at 10B51 does not fit in its cell. **Accepted**

Improvement based on a new glyph being provided.

#### E8. Page 86, Row 1108: Kaithi.

Ireland requests the correction of the glyphs of the combining characters 11080..11081, 110B1, 110B3..110B6, and 110B9..110BA.

#### Accepted

Improvement based on new glyphs being provided.

Code tables corresponding to our comments T4, T6, T7, T8, and T10 are attached. (*Please refer to original document SC2N4034or WG2 N3515 for these code tables*)

As a result of these dispositions, Ireland changes its vote to YES.

# Japan, Positive with comments

# **Technical comment**

#### JP T.1 Names list for Currency Symbols (20A0-20CF) on page 45.

The glyph for a new character 20B8 TENGE SIGN is similar to 3012 POSTAL MARK. It is possible that users confuse these two characters.

Add "→ 3012 POSTAL MARK" under "TENGE SIGN".

Also add " $\rightarrow$  20B8 TENGE SIGN" under the POSTAL MARK. (The name list for POSTAL MARK is not included in the current draft.)

#### Partially accepted

(Because annotation is informative, this is not strictly a technical issue. Annotations are editorial in nature.) An annotation will be added under the Tenge sign, but not for the Postal mark.

### **Editorial comments**

# JP E.1 Clause 3 Normative References

"[Date TBD]" should be filled with correct dates.

#### Noted

This is not a new issue, at the time of pdam6.2 ballot, the calendar for Unicode 5.2 was not known. Typically at PDAM time it is not possible to have a target date for the corresponding Unicode version. This will be fixed for the FPDAM.

### JP E.2 Code charts and Name lists on page 70 - 72, 76 -82, and 85

The code chars and names lists for some blocks are on a same page, as in Unicode book. In ISO/IEC 10646, the code chart and name list should be on separate page, even in case the block is small.

#### Noted

Nothing in the definition of the new chart format for ISO/IEC10646 as introduced in amendment 5 precludes the code chart and the name list to be on the same page. The only requirement is that the chart precedes the list of characters names. This makes the chart section shorter which is a preferred outcome for most experts. A clarification to that effect will be introduced in clause 34.

# Korea (ROK), Negative

#### **Technical comments**

# **T1. p. 64, left column,** Parenthesized Hangul elements

- We suggest that "Parenthesized Hangul elements" be changed to "Parenthesized Hangul letters"
- rationale: These are Hangul letters. They are not called "elements".

#### Accepted

### **T2.** p. 66, left column, Circled Hangul elements

- We suggest that "Circled Hangul elements" be changed to "Circled Hangul letters"
- rationale: These are Hangul letters. They are not called "elements".

#### Accepted

### T3. pp. 55 and 59, U26CC ~ 26E2 (23 characters)

- We suggest that those characters be moved to a separate block called "Traffic signs" (or a similar name).
- rationale: It is expected that more traffic signs would be added in the future by several countries (Republic of Korea will be one of them). Therefore it would be better to assign a separate block for traffic signs and allocate them to a single block. We expect that the number of traffic sign characters will be quite many, which justifies assigning a separate block.

# Not accepted

The block is already a miscellaneous Symbols block which is perfectly suited to include such symbols along with other category of symbols. Pre-allocating blocks for symbol category does not seem necessary. Furthermore, symbols tend to be re-used for other purpose and formal block allocation would discourage that re-use.

# **T4.** pp. 63 and 65, U3248 ~ 324F (8 characters)

- We suggest that those characters be moved to a separate block called "Traffic signs" (or a similar name). As a result 31 (= 23 + 8) characters will be moved to a new block called ""Traffic signs". - rationale: see T3.

# Not accepted

These characters are circled numbers which have many more occurrences in that block. Although their primary use as this point is for traffic sign, there is nothing that prevents their re-use for other purpose. To re-enforce the

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point made in the previous disposition, it would discourage re-use and therefore inclusion in a new traffic sign block does not seem wise.

# T5. pp. 55 and 59, U26E3 ~ 26FF (31 characters)

- We suggest that those (or some of them; see Note below) characters be moved to a separate block called "Map symbols" (or "Dictionary and map symbols" or a similar name).
- Note. We do not know whether all these symbols are used both in dictionaries and maps; or some of them in dictionaries and the others in maps.
- rationale: It is expected that more map symbols would be added in the future by several countries (Republic of Korea will be one of them). Therefore it would be better to assign a separate block for map symbols and allocate them to a single block. We expect that the number of map symbol characters will be quite many, which justifies assigning a separate block.

# Not accepted

The whole point as hinted by the note is that these new symbols have multiple uses. You can find them in dictionaries and maps, among others. This is also true for many symbols already encoded. Using non formal sub-block headers as introduced by the new chart format provides a simple hint for their source without categorizing these characters in narrow scope.

As a result of these dispositions, Korea (ROK) changes its vote to YES.

# **United Kingdom: Negative**

It is a very large amendment with some controversial additions. The two new proposed scripts (Nüshu and Tangut) are not yet mature. The UK votes to DISAPPROVE this amendment, with the following general, editorial and technical comments. Satisfactory resolution of comments T.3, T.4, T.5 and T.6 will change our vote to APPROVAL.

### **General comment**

# **G.1 Fonts for Large Character Sets**

We strongly believe that for any large set of characters, the expected final font must be used in both the PDAM and FPDAM ballots. In PDAM6.2 both Tangut and Nushu were put under ballot with a font that their proposers knew to be obsolete. This made it impossible to properly review the characters under ballot, and effectively invalidates the ballot stage for these two sets of characters. We request that in future it is ensured that the final font for any large set of characters is ready and has been made available to the project editor before the set of characters is accepted for addition to an amendment.

### **Noted**

This is clearly a desirable requirement. At the same time, repertoires under ballots do change and font styles have sometimes evolved during the various amendment phases.

#### **Technical comments:**

**T.1. Page 25, Clause 29 Named UCS Sequence Identifiers** <0B95, 0BCD, 0BB7 > TAMIL SYLLABLE KSSA A better name for this sequence (KA + VIRAMA + SSA) would be TAMIL LETTER KSSA as all the other sequences named SYLLABLE have an explicit final vowel, but this sequence is analogous to a simple Tamil letter. **Withdrawn** 

### T.2. Tibetan: Symbols used in Buddhism

0FD5 TIBETAN SYMBOL GYUNG DRUNG NANG -KHOR

0FD6 TIBETAN SYMBOL GYUNG DRUNG PHYI -KHOR

0FD7 TIBETAN SYMBOL GYUNG DRUNG NANG -KHOR BZHI MIG CAN

0FD8 TIBETAN SYMBOL GYUNG DRUNG PHYI -KHOR BZHI MIG CAN

The UK is happy with the names of these characters as they are, as they follow the established practice of using Tibetan names for characters in the Tibetan block. However, if there is consensus to change the names of these

characters to use non-Tibetan names, then we would prefer to see these four characters moved out of the Tibetan block, so as to ensure that the naming convention used for characters in the Tibetan block remains consistent.

#### Withdrawn

See also Irish comment T.5 and US comment T2.

#### T.3. Myanmar Extended-A

The UK requests that the fourteen characters at AA60..AA6D be replaced with twenty-seven characters at AA60..AA7A as documented in N3492 "Extended Proposal to add Khamti Shan Characters to the Myanmar Blocks".

#### Accepted

See also Irish comment T.9 and US Comment T.4

#### T.4. Old Turkic

A. Based on N3357 Figs. 1b, 2, 5, 6, 7 and 8 we believe that:

10C1C OLD TURKIC LETTER ORKHON OK should be named OLD TURKIC LETTER YENISEI OEK 10C2E OLD TURKIC LETTER ORKHON OP should be named OLD TURKIC LETTER ORKHON OEK and ordered before 10C1C.

We note that Fig. 1c says that 10C2E is also used for UP in manuscripts, but from all the figures given in N3357 it would seem that this character primarily represents OEK.

# Accepted in principle

10C1C OLD TURKIC LETTER ORKHON OK is moved and renamed to 10C1C OLD TURKIC LETTER YENISEI OEK. A new character located at 10C1C (previously occupied by the character just moved) named OLD TURKIC LETTER ORKHON OEK.

### **B**. Based on N3357 Fig.2 we believe that:

10C2C OLD TURKIC LETTER YENISEI ENG should be named OLD TURKIC LETTER YENISEI AENG and ordered before 10C2B.

#### Accepted

Now at 10C2E.

C. Based on N3357 Figs. 1b, 6 and 7 we believe that the following character should be added after 10C25 OLD TURKIC LETTER ORKHON ENT:

OLD TURKIC LETTER YENISEI ENT

The glyph for this character is a circle with a dot in the middle, as shown in N3357 Figs. 1b, 6 and 7.

### **Accepted**

Encoded at 10C27

**D**. It is not clear from N3357 why the following two characters are so named:

10C3D OLD TURKIC LETTER ORKHON ASH

10C3E OLD TURKIC LETTER YENISEI ASH

From Fig.2 it would seem that they are both alternate forms of Yenesei ESH, in which case they should be named OLD TURKIC LETTER YENISEI ESH FIRST ALTERNATE FORM and

OLD TURKIC LETTER YENISEI ESH SECOND ALTERNATE FORM.

We request confirmation from the appropriate experts that the names under ballot are correct.

### **Withdrawn**

#### T.5. Tangut

**A**. Because the font used for the PDAM6.2 code charts was a draft font that is to be replaced by a completely new font, we have been unable to meaningfully review the set of Tangut characters for glyph correctness. As this is a very large set of complex characters, it is essential that the correct font is used for both rounds of technical ballots, otherwise there is a strong possibility of glyph errors being overlooked. We therefore request that Tangut be removed from Amd.6.

#### Accepted

See disposition of comment G.1.

**B**. With reference to documents N3496 "Review of Proposed Tangut Repertoire" and N3498 "Expert Feedback on the proposed Tangut character set in PDAM 6.2", we believe that the currently proposed character repertoire does not adequately meet the requirements of the user community, and that the character repertoire needs to be expanded to cover all graphically distinct characters in use in all the major modern Tangut dictionaries. We would not support adding Tangut to a new amendment until there is consensus amongst all parties as to the exact set of Tangut characters to be encoded, and a revised proposal has been submitted to WG2.

# **Accepted in principle**

Some of these points require further discussion among experts. The last point, though, about not producing an amendment until there is a consensus about the exact set of Tangut to be encoded has not be used for most of the other scripts already encoded, as attested by the numerous extensions to various repertoires in the standard. The whole point of amendment balloting is to get feedback from additional experts suggesting updates to the initial proposal. What is needed is an agreement on the current set and reasonable expectation about future extension (or lack of). It is expected that Tangut will be part of PDAM7.

C. The UK affirms its opposition to the use of variation sequences to represent graphically distinct characters that are used contrastively in the same source. Since variation selectors are default ignorable there is no guarantee that a variation sequence comprising a base character plus a variation selector will be rendered any differently to the base character by itself. This means that variation sequences are not a viable solution for Tangut scholars.

# **Noted**

#### T.6. Nushu

A. Because the final font for Nushu was not available for use in the PDAM6.2 code charts, we have been unable to properly evaluate the set of characters under ballot. We therefore request that Nushu be removed from Amd.6. **Accepted** 

See disposition of Irish comment T.12.

**B**. With reference to document N3449 "Review of Nushu Proposal", we are concerned that the character repertoire is not yet stable, and that issues such as unification and how to deal with attested characters that are not proposed for encoding are not dealt with adequately in the latest proposal (N3463). Before Nushu is accepted onto a new ballot we would like to see a clear set of encoding principles defined that can be used as criteria for evaluating both the current proposed repertoire and any future proposal for additional Nüshu characters.

#### Accepted

C. The current character names are not acceptable, as the use of an appended letter A, B, C, etc. to differentiate characters with the same pronunciation is ambiguous in some cases. We suggest using a hyphen to separate the pronunciation part of the name from an appended letter or number. We request that a new list of character names is provided before Nushu is accepted onto a new ballot.

#### Noted

D. We request that the code charts note that the correct name of the script is "Nüshu", but that due to restrictions on the characters allowed for script and block names it is named "Nushu" in the standard.

#### Noted

Such annotations are typically not in the chart section but in the main body of the standard. It seems preferable to add such notes where collection and block names are listed (Plane content descriptions and Annex A). Note that N'Ko should be annotated similarly to be consistent.

#### **Editorial comments:**

# E.1 Page 25, Clause 29 Named UCS Sequence Identifiers

"Insert the additional 289 sequence identifiers"

There are in fact 290 sequence identifiers.

#### Accepted

As a result of these dispositions, UK changes its vote to YES.

# **USA: Negative**

The U.S. National Body is voting No with comments on the following SC2 ballot: SC2N3943:

Information technology -- Universal Multiple-Octet Coded Character Set (UCS) -- AMENDMENT 6.2: Javanese, Lisu, Meetei Mayek, Samaritan, and other characters. If T1, T2, T3, T5, and T7 are accommodated, the U.S. will change its vote to Yes.

### **Technical comments:**

#### T.1. Devanagari, Vedic Extensions, and Devanagari Extended

The U.S. is requesting the following new characters be <u>added</u>, with glyphs as shown in document N3488 (L2/08-273R2).

# Devanagari

094E DEVANAGARI VOWEL SIGN PRISHTHAMATRA E

Vedic

1CD4 VEDIC SIGN YAJURVEDIC KASHMIRI SVARITA

1CE9 VEDIC SIGN ANUSVARA ANTARGOMUKHA

1CEA VEDIC SIGN ANUSVARA BAHIRGOMUKHA

1CEB VEDIC SIGN ANUSVARA VAMAGOMUKHA

1CEC VEDIC SIGN ANUSVARA VAMAGOMUKHA WITH TAIL

1CF1 VEDIC SIGN ANUSVARA UBHAYATO MUKHA

Devanagari Extended

A8F9 DEVANAGARI GAP FILLER

A8FB DEVANAGARI HEADSTROKE

The U.S. requests the following characters be moved:

Devanagari

0973 DEVANAGARI SIGN PUSHPIKA move to: U+A8F8

0974 DEVANAGARI CARET move to: U+A8FA

Vedic

1CF1 VEDIC SIGN ARDHAVISARGA move to: U+1CF2

The above changes have been extensively reviewed by Vedic experts in the U.S. and India.

#### **Accepted**

See also Irish comment T.4, T.7 and T.8

# T.2. Tibetan

The U.S. requests changes in the names of the characters at code positions 0FD5-0FD8 in the amendment as follows:

**0FD5 RIGHT-FACING SVASTI SIGN** 

0FD6 LEFT-FACING SVASTI SIGN

0FD7 RIGHT-FACING SVASTI SIGN WITH DOTS

0FD8 LEFT-FACING SVASTI SIGN WITH DOTS

This request comes after consultation with India and experts in the U.S., who find the new names more meaningful.

#### Accepted

See also UK comment T.2 and US Comment T.2.

# T.3. Meetei Mayek

The U.S. requests the 78 characters in the Meetei Mayek block, now at 1C80-1CCE, be removed from the amendment at this location.

A replacement block of Meetei Mayek characters, as listed in WG2 N3473R (L2/08-232R), should be placed at ABC0-ABFF. This block of 56 characters draws on a subset of the 55 characters currently on ballot plus one additional character (below). The order and names of the characters in the new set reflect those specified by the Education Department of the Government of Manipur.

The U.S. requests the addition of one character, MEETEI MAYEK I LONSUM, at position ABE2 in the new Meetei Mayek block.

Twenty-three historical characters, including 19 historical characters presently located in positions 1CBA to 1CCE and 1CAC MEETEI MAYEK DANDA and 1CAE MEETEI MAYEK QUESTION MARK, should be removed from the amendment for future study and possible future ballot.

The listing of Meetei Mayek characters in the Annex B List of combining characters should be updated to be consistent with the revised repertoire and code positions for Meetei Mayek characters in the amendment.

# Accepted

See also Irish comment T.6.

### T.4. Myanmar Extended-A

The U.S. is in favor of adding the following characters as documented in WG2 N3492 (L2/08-276) in the Myanmar Extended-A block:

AA60 MYANMAR LETTER KHAMTI GA

AA62 MYANMAR LETTER KHAMTI CHA

AA63 MYANMAR LETTER KHAMTI JA

AA64 MYANMAR LETTER KHAMTI JHA

AA66 MYANMAR LETTER KHAMTI TTA

AA67 MYANMAR LETTER KHAMTI TTHA

AA68 MYANMAR LETTER KHAMTI DDA

AA69 MYANMAR LETTER KHAMTI DDHA

AA6A MYANMAR LETTER KHAMTI DHA

AA6E MYANMAR LETTER KHAMTI HHA

AA74 MYANMAR LOGOGRAM KHAMTI OAY

AA75 MYANMAR LOGOGRAM KHAMTI QN

AA76 MYANMAR LOGOGRAM KHAMTI HM

The U.S. is in favor of changing the following names as documented in N3492 (L2/08-276): (new codepoints)

AA61 MYANMAR LETTER KHAMTI TSA change name to: MYANMAR LETTER KHAMTI CA

AA70 MYANMAR SYMBOL KHAMTI REDUPLICATION change name to: MYANMAR MODIFIER

LETTER KHAMTI REDUPLICATION

The U.S. is in favor of moving the following characters as documented in L2/08-276:

AA60 (new name) MYANMAR LETTER KHAMTI CA to: AA61

AA61 MYANMAR LETTER KHAMTI SA to: AA6C

AA62 MYANMAR LETTER KHAMTI NYA to: AA65

AA63 MYANMAR LETTER KHAMTI NA to: AA6B

AA64 MYANMAR LETTER KHAMTI RA to: AA73

AA65 MYANMAR LETTER KHAMTI HA to: AA6D

AA66 MYANMAR LETTER KHAMTI XA to: AA71

AA67 MYANMAR LETTER KHAMTI ZA to: AA72

AA68 MYANMAR LETTER KHAMTI FA to: AA6F

AA69 (new name) MYANMAR MODIFIER LETTER KHAMTI REDUPLICATION to: AA70

AA6A MYANMAR LETTER AITON RA to: AA7A

AA6B MYANMAR SYMBOL AITON EXCLAMATION to: AA77

AA6C MYANMAR SYMBOL AITON ONE to: AA78

AA6D MYANMAR SYMBOL AITON TWO to:AA79

### Accepted

See also UK comment T.9 and US Comment T.4

### T.5. Myanmar Extended-A

Consistent with the name change for AA69 MYANMAR SYMBOL KHAMTI REDUPLICATION to AA70 MYANMAR MODIFIER LETTER KHAMTI REDUPLICATION, the U.S. requests that the entry for AA69 be removed from the Annex B List of combining characters.

### Accepted

See also UK comment T.9 and US Comment T.4

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#### T.6. Japanese TV Symbols

The U.S. is in favor of the following name changes, based on feedback:

26CE TRAFFIC WARNING change to: HEAVY EXCLAMATION MARK SYMBOL

26D5 ALTERNATE ONE-WAY TRAFFIC change to: ALTERNATE ONE-WAY LEFT WAY TRAFFIC

26D6 BLACK TWO WAY TRAFFIC change to: BLACK TWO WAY LEFT WAY TRAFFIC

26D7 WHITE TWO WAY TRAFFIC change to: WHITE TWO WAY LEFT WAY TRAFFIC

26D8 BLACK LANE MERGE change to: BLACK LEFT LANE MERGE

26D9 WHITE LANE MERGE change to: WHITE LEFT LANE MERGE

26DA DRIVE SLOW change to: DRIVE SLOW SIGN

26DC CLOSED ENTRY change to: LEFT CLOSED ENTRY

26E0 RESTRICTED ENTRY 1 change to: RESTRICTED LEFT ENTRY 1

26E1 RESTRICTED ENTRY 2 change to: RESTRICTED LEFT ENTRY 2

26ED FACTORY change to: GEAR WITHOUT HUB

26EF LIGHTHOUSE change to: BEACON

26F4 BLACK BOAT change to: FERRY

26F5 WHITE SAILBOAT change to: SAILBOAT

26FC GRAVEYARD change to: HEADSTONE GRAVEYARD SYMBOL

# Partially accepted

See also German comment T.2. The only modification concerns 26EF LIGHTHOUSE which was changed into 26EF MAP SYMBOL FOR LIGHTHOUSE as a compromise between the German and US requests.

#### T.7. Nüshu

The U.S. requests more time to evaluate Nüshu. Because the font was received after the deadline for the second PDAM, the U.S. has not had adequate time to evaluate the proposal and the font properly. The proposal needs some disambiguation in the character names. The U.S. supports moving Nüshu to a subsequent amendment, in order to provide all national bodies with the full period for technical review with the correct font.

#### Accepted

See also Irish comment T.12 and UK comment T.6.

# T.8. Tangut

The U.S. reaffirms its strong support for the inclusion of Tangut in amendment 6. A revised multi-column chart now includes data from a font from PRC. This proposal has had extensive review.

#### Withdrawn

See also Chinese comment T.2, Irish comment T.11, and UK comment T.5.

#### T.9. Miscellaneous Symbols

The U.S. request the addition of one character to the Miscellaneous Symbols block: 26BD SOCCER BALL. This character is being added in this location as it fits semantically with other such symbols, such as "baseball." To accommodate this addition, the U.S. suggests that the following two characters in the amendment be moved down by one code position:

26BD BASEBALL change to: 26BE

26BE SQUARED LOCK change to: 26BF.

### **Accepted**

#### **Editorial Comments**

### E1. Devanagari, Vedic Extensions, and Devanagari Extended

a. The U.S. requests the following changes to the annotations be made in the Devanagari block as given in document N3488:

097A: remove cross-reference to 09AF Bengali letter ya and amend the annotation from "used for an affricated glide" to "used for an affricated glide i.e., JJYA"

b. The following name aliases should be used in the Vedic Extensions and Devanagari Extensions blocks. These name aliases provide the Sanskrit names for these accents and signs, and have been requested by Vedic scholars in India to assist in identification of the characters.

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#### **Vedic Extensions**

### 1CD3 VEDIC SIGN NIHSHVASA

= vaidika saamagaana yogakaala

# 1CD6 VEDIC TONE YAJURVEDIC INDEPENDENT SVARITA

=vaidika svarita adhah konna

#### 1CD7 VEDIC TONE YAJURVEDIC KATHAKA

#### INDEPENDENT SVARITA

=vaidika svarita adho vakra rekhaa

### 1CD8 VEDIC TONE CANDRA BELOW

=vaidika svarita adho'rdha vakra

#### 1CD9 VEDIC TONE YAJURVEDIC KATHAKA INDEPENDENT SVARITA SCHROEDER

=vaidika svarita adhah samyukta rekhaa

#### 1CDA VEDIC TONE DOUBLE SVARITA

= vaidika svarita uurdhva dvi rekhaa

#### 1CDB VEDIC TONE TRIPLE SVARITA

= vaidika svarita uurdhva tri rekhaa

#### 1CDF VEDIC TONE THREE DOTS BELOW

= vaidika svarita adhas tri bindu

# 1CE0 VEDIC TONE RIGVEDIC KASHMIRI INDEPENDENT SVARITA

= vaidika uurdhva vakra rekhaa

#### 1CE1 VEDIC TONE ATHARVAVEDIC INDEPENDENT SVARITA

= vaidika svarita dvi vakra khannda

#### 1CE2 VEDIC SIGN VISARGA SVARITA

= vaidika madhyarekhaa

### 1CEC VEDIC SIGN ANUSVARA VAMAGOMUKHA WITH TAIL

= vaidika anusvaara vaamamukha sa-vakra

#### 1CEE VEDIC SIGN HEXIFORM LONG ANUSVARA

= vaidika anusvaara anugamii

#### 1CF0 VEDIC SIGN RTHANG LONG ANUSVARA

= vaidika anusvaara ttha-sadrisha

#### 1CF1 DEVANAGARI SIGN ANUSVARA UBHAYATO MUKHA

= vaidika anusvaara ubhayato mukha

#### 1CF2 VEDIC SIGN ARDHAVISARGA

= vaidika jihvaamuuliiya upadhmaaniiya

#### Devanagari Extended

# A8E1 COMBINING DEVANAGARI DIGIT ONE

= vaidika saamasvara anka eka udaatta

# A8E3 COMBINING DEVANAGARI DIGIT THREE

= vaidika saamasvara anka tri anudaatta

#### A8E6 COMBINING DEVANAGARI DIGIT SIX

= vaidika saamasvara anka shatt

#### A8F5 DEVANAGARI SIGN CANDRABINDU TWO

= vaidika anusvaara candrabindu sa-dvi

#### A8F6 DEVANAGARI SIGN CANDRABINDU

**THREE** 

= vaidika anusvaara candrabindu sa-tri

### A8F7 DEVANAGARI SIGN CANDRABINDU

AVAGRAHA

= vaidika anusvaara candrabindu sa-avagraha

# **Accepted**

----end--