Korea JTC1/SC2, Committee on Character Codes

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Author: KIM, Kyongsok (GIM, Gyeongseog), Chairperson of Korea JTC1/SC2 Date: 2010.04.08 Status: National Body Position, Rep. of KOREA Subject: Korea's comments on SC2 N4125, FCD Ballot on ISO/IEC 10646, 2ed. Note to T01 to T03: These comments were accepted in disposition of comment for 2ed CD [SC2 N4079]; however, these changes have not been reflected in 2ed FCD. - ROK requests that these changes be reflected this time. - For example, [CD-KR.T8] indicates that the comment number was T8 in ROK comments for 2ed CD. TO1 [CD-KR.T8]. p. 368, right column, near bottom [text in 2ed CD] 3164 HANGUL FILLER = cae om [text in 2ed FCD] 3164 HANGUL FILLER = chae um ---> [proposed text] HANGUL FILLER 3164 = chaeum [WG2 N3716, 2009-10-29, Disp . of Comments on SC2 N4079 (2ed CD) Partially accepted

... The alias change is accepted.

[Technical comments]

Rationale: The alias change was accepted; however, the new alias in 2ed FCD (N4125) is "chae um" (two words), NOT "chaeum" (one word).

Rep. of Korea suggested (and still suggests) a one-word alias "chaeum", since chaeum is one word in Korean and written without a space between "chae" and "um". TO2 [CD-KR.T9] p.368, right column, near bottom

[text in 2ed CD and FCD] Archaic letters

---> [proposed text] Old letters

[WG2 N3716, 2009-10-29, Disp . of Comments on SC2 N4079 (2ed CD) Accepted

Rationale: Since Hangul was invented in the 15th century, "old" seems better than "archaic". In Rep. of Korea, we use "old", not "archaic" to refer to these letters.

T03 [CD-KR.T13] p. 376, right column

[text in 2ed CD and FCD] 321E PARENTHESIZED KOREAN CHARACTER 0 HU \approx 0028 (110B \circ 1169 \perp 1112 \doteqdot 116E \top 0029)

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[proposed change] 321E PARENTHESIZED KOREAN CHARACTER 0 HU \approx 0028 (110B \circ 1169 \perp 1112 \Rightarrow 116E \pm 0029) * preferred spelling for the name is ohu

[WG2 N3716, 2009-10-29, Disp . of Comments on SC2 N4079 (2ed CD) A new annotation will be added: * preferred spelling for the name is ohu

Rationale: It is a one word as in the case of U321D.

[There is no T4]

T05 p. 20, 6.4 Naming of characters [current text] c) follows the rule given in 24.5 for Chinese /Japanese/Korean (CJK) ideographs, or d) follows the rule given in 24.6 for Hangul syllables. --> [proposed text] c) follows the rule given in 24.6 for Chinese /Japanese/Korean (CJK) ideographs, or d) follows the rule given in 24.7 for Hangul syllables. Rationale: Section numbers 24.5 and 24.6 on p. 20 are wrong. T06. p. 39, 1) G G... \rightarrow G... (underscore deleted) G_GFHZB ZhongHua ZiHai (中华c字海), XianDai HanYu CiDian

(现]代汉c语]词c典), or Ci-Hai (辞海) G_GH Gudai Hanyu Cidian (古代汉语词典)

G_GJZ Commercial Press Ideographs (商务印书馆用字)

- 2) G_{\ldots} (other than G_{\ldots})) $\rightarrow G_{\ldots}$ (underscore deleted)
- G_4K Siku Quanshu (四庫全書)
- G_BK Chinese Encyclopedia (中國大百科全書)
- G_CH Ci Hai (辞海)
- G_CY Ci Yuan ₍辭源)
- G_CYY Chinese Academy of Surveying and Mapping Ideographs (中国测]绘c科学院用字)
- G_FZ Founder Press System (方正排版系统c)
- G_HC Hanyu Dacidian (漢語大詞典)
- G_HZ Hanyu Dazidian ideographs (漢語大字典)
- G_IDC ID system of the Ministry of Public Security of China, 2009
- G_KX Kangxi Dictionary ideographs、康熙字典,9th edition (1958)
- including the addendum ₍康熙字典)補遺
- G_XC Xiandai Hanyu Cidian (现代汉语词典)
- G_ZFY Hanyu Fangyan Dacidian (汉语方言大辞典)
- G_ZJW Yinzhou Jinwen Jicheng Yinde (殷周金文集成引得)
- T07. pp. 40, 41 and 43; CJKU_SR.txt and CJKC_SR.txt - Both J_ARIB and JARIB are used. Need to use only one form.

Rationale: Examples showing J_ARIB and JARIB:

1) CJKU_SR.txt: 3 lines with JARIB (not J_ARIB)

09FC4;75.6;;;JARIB-754F;;;;; 09FC5;113.13;;;JARIB-7621;;;;; 09FC6;113.4;;;JARIB-757D;;;;;;

2) CJKC_SR.txt: 3 lines with J_ARIB (not JARIB)

OFA6B:06075;;;J_ARIB-7547;;; OFA6C:242EE:;;J_ARIB-7563;;; OFA6D:08218;;;J_ARIB-762B;;;

- 3) p. 40 (23.1): J_ARIB
- 4) p. 41 (23.2): JARIB-hhhh
- 5) p. 43 (23.4): JARIB-hhhh

T08. p. 40, right before 23.2 [current text] NOTE 3 - Even if source references get updated, the source reference information is not updated. The updated source references may only identify characters not previously covered by the older version. [suggested change] 1) Note 3 seems intended to apply only to UTC. - However, in general, this note can be applied to other source references too. Will it be better to modify this note somehow to reflect it? 2) The wording could be improved: Even if source references get updated, the source reference information is not updated. --> Even if source references get updated, the source reference information covered by the older version is not updated.

TO9. p. 40, 23.2, radical, alternate radical

1) There seems no table (or definition) showing the actual radical for radical index #.

2) There seems no definition of alternate radical.

- Is an alternate radical a simplified radical corresponding to a traditional radical?

3) There seems no table (or definition) showing the alternate radical corresponding to regular (traditional?) radical.

T10. p. 41, G src

[current]		[proposed te	ext]
(GBKddddd)	\rightarrow	(GBKddddd)	(six d's)
(GCHddddd)	\rightarrow	(GCHdddddd)	(six d's)
(GHCddddd)	\rightarrow	(GHCdddddd)	(six d's)
(GXCddddd)	\rightarrow	(GXCddddd)	(six d's)

T11. p. 41, Note 4. right above 23.3

[current text]

NOTE 4 - The original source references in the Hanja K4 source (PKS 5700-3:1998) are described using a single decimal index without section or position values. For better consistency with the other sources, those indexes have been converted into hexadecimal values in the source reference file. Unlike the other hexadecimal values, they do not decompose in section, position values.

 \rightarrow

... Unlike KO ~ K3 indexes, K4 and K5 indexes do not decompose in section, position values.

Rationale:

- KO $\,\widetilde{}$ K3 indexes decompose in section and position values. However, K4 and K5 indexes do not.

T12. p.42, in Fig. 2, 4E17 incorrectly appears twice. - Fig. 2 need to be replaced by the actual portion of CJKU table on p. 506

4E16	世	世	世	世	世
- 1.4	G0-4A40	⊺1-4560	J0-4024	K0-6126	V1-4A2F
4E17	世	<u>III</u>	丗		
- 1.3	GE-2124	T4-2155	J0-5242		
4E17	Ш	₩.	丗		
- 1.3	GE-2124	T4-2155	J0-5242		
4E18	Е	E.	ff.	fr.	Ĺ
- 1.4	G0-4770	T1-4563	J0-3556	K0-4E78	V1-4A30

p. 42

Figure 2 – Source reference presentation for CJK UNIFIED IDEOGRAPHS

4E16 - 14	世	世	世	世	世	
	G0-4A40	T1-4560	J0-4024	K0-6126	V1-4A2F	
4E17 - 13	∰ GE-2124	∰ 14-2155	₩ J0-5242			
4E18 - 14	₩ G0-4770	<u></u> т14563	后 		<u></u>	p. 506

T13. p. 42, in Fig. 3,

1) a glyph for K3-2E2D is a square which is wrong;

2) to the right of 41DC, there should be 41EF, NOT 41EE. to the right of 41DD, there should be 41FO.

41CB	姼	姼	姼	41DC	茨	筊		41EE	쫕	笩	笓
立 117.6 41CC	ы GKX0871.06	i T5-3448 诮	JA-254A	竹 118.4 41DD	63-834F 笅	T4-2E73 笅	K3-2E2D	竹 118.6	^{G5-6334} 在	T4-3975	JA-254D
立 117.7	GKX0871.17	T3-3D6F		竹 118.4	G3-634A	T4-2E72		0	V2-7F50		

Figure 3 – Source reference presentation for CJK UNIFIED IDEOGRAPHS EXTENSION A

41C9 立 117.5 41CA 立 117.5	站 412 549	近 T3-3322 站		41DB	GKX0879.12 なた H-8EFE	休休 止 13-3329	ケチ 止 V2-7F48	41EE 竹 118.6	往65.6334 V2.7750	쫕 T4-3975	쫕 JA2540		
41CB	这 GKX0871.06 可 GKX0871.17	这 15-3446	这 JA-254A	41DC 1118.4 41DD 1118.4	交 G3634F G3634A	茨 74	<u> </u>	41EF 竹 118.6 41F0 竹 118.6	笛 65-632E 公 6379	笛 T3 3073 ジン T4 396F	笛 H-8E59	p.	450

- T14. p. 43, in Fig. 4,
 - 1) to the right of 2000F, there should be 20022, NOT 20021.
 - 2) and so on \ldots

--> Fig. 4 need to be replaced by the actual portion of CJKU table on p. 1416.

2000F <u>屯</u>	20021	死 20032] 多	20043 棄 棄
- 1.4 TF-213E	- 1.6 GKX0078.12	T6-255F - 1.7 V0-305F	- 1.10 G_HZ T5-3323
20010 中	死	20033 长	20044 侖下
— 1.4 TF-213F	H-9C71	- 1.7 V2-6E25	- 1.10 V0-354B

Figure 4 – Source reference presentation for CJK UNIFIED IDEOGRAPHS EXTENSION B, C, and D



[actual table on p. 1416]

T15. p. 43

- ROK suggests that section "23.5 Source reference presentation for CJK Compatibility Ideographs" be added so that the overall structure is well organized.

- 23.5 may have statements such as

. Although there may be more than one source reference for each glyph, only one representative glyph is shown for each code position.

. etc. ...

23 Source references for CJK Ideographs
23.1 List of source references
23.2 Source references for CJK Unified Ideographs
23.3 Source reference presentation for CJK Unified Ideographs
23.4 Source references for CJK Compatibility Ideographs

23.5 Source reference presentation for CJK Compatibility Ideographs

T16. pp. 46 ~ 47

T16.1 p. 46,

6) For each Hangul syllable, character short additional information is ... This additional information consists ...

-->

6) For each Hangul syllable character, a short annotation is ... This annotation consists of ...

T16.2 p. 47, in the title of Table 5 and in the column heading of Table 5:

- Additional information --> Annotation

T17. p. 263, Liter
U2113 ...
• the SI recommended symbol for liter is 006C |
...
-->
U2113 ...
• the SI recommended symbol for liter is 006C | or 004C L

. . .

Rationale: ISO 1000 mentions that the two symbols for the litre (note: I and L) are on an equal footing.



T18. p. 380 (and p. 384): uL, mL, dL, kL

- ROK suggests that the script small L in glyphs of code positions U3395, U3396, U3397, and U3398 be changed to Latin capital L (U004C).

[current glyphs]



[proposed glyphs]



Rationale:

1) As mentioned in T17, SI recommended symbol is L (U0041) or I (U006C), NOT script small L (U2113).

2) Japan said that their national standards do not contain any of these four characters.

3) China and Taiwan said that their nationals standards probably do not contain any of these four characters.

4) These four characters are included in KS X 1001 (formerly KS C 5601) and it is explicitly mentioned that they stand for micro-liter, mili-liter, deci-liter, and kilo-liter, respectively.

5) Based on 1), 2), 3) and 4), when these four characters were included in ISO/IEC 10646-1:1993, it is quite certain that they came from KS X 1001.

6) ROK decided to change the glyphs of these four characters in KS X 1001:2010 so that they conform to SI. ROK decided to use capital L since small L could be easily confused with digit 1.

7) Considering these, ROK suggests that the glyphs of these four characters be changed as suggested above so that they conform to SI.

T19. p. 2067

[current text] 204 HANGUL FILL CHARACTERS 3164, FFA0

- ROK wonders why U115F HANGUL CHOSEONG FILLER and U1160 HANGUL JUNGSEONG FILLER are excluded from collection 204.

T20. p. 2106

[current text] These guidelines do not apply to the names of CJK Ideographs and Hangul syllables which are formed using rules specified in clause 24.5 and 24.6 respectively.

-->

[proposed text] These guidelines do not apply to the names of CJK Ideographs and Hangul syllables which are formed using rules specified in clause 24.6 and 24.7 respectively.

Rationale: Section numbers 24.5 and 24.6 on p. 20 are wrong.

24.6 Character	names	for CJK Ideographs	45
24.7 Character	names	for Hangul syllables	46

T21. p. 2111, the first two lines

KS X 1001:2004 (formerly KSC 5601-1992) Korean Industrial Standards Association. Jeongbo gyohwan-yong buho (Code for Information Interchange(Hangeul and Hanja)).

 \rightarrow

KS X 1001:2004 (formerly KS C 5601-1992) Korean Industrial Standards Association. Code for Information Interchange (Hangeul and Hanja) (Jeongbo gyohwanyong buhogye).

Rationale: ROK suggests this change to reflect the transliteration of the title of KS X 1001.

T22. p. 2129

[current text] KS C 5601-1989, KS C 5657-1991

 \rightarrow

[proposed change] KS X 1001:2004 (previously KS C 5601-1989), KS X 1002:2001 (previously KS C 5657-1991)

Rationale: KS C has been changd to KS X.

T23. p. 2075, A. 4. 1 370 IICORE

4th field: Kanji J usage identifier (J1A), in-formative.
5th field: Hanzi H usage identifier (H1a), in-formative.
-->
4th field: Kanji J usage identifier (J1A), informative.

• 5th field: Hanzi H usage identifier (H1a), informative.

T24. p. 2128, S. 1. 4. 2, line 6 from top:

[current text] ... the left-hand document going beneath ...

 \rightarrow

[proposed change]
... the left-hand component going beneath ...

T25. p. 2129, the last line

[current text] Basic Multilingual Plane.え

 \rightarrow

a CJK component after the period should be deleted.

T26. p. 2135, the last row, third column, 670F 80D0

- "non-cognate" should be moved to the right of two CJK chars.

T27. CJKU_SR.txt - five (5) duplicate src. refs. GKX0000.00 line 29940 -- 20957;22.11;GKX0000.00;;;;;;;;

line 36233 -- 221EC;53. 4;GKX0000. 00;;;;;;;; line 39802 -- 22FDD;66. 11;GKX0000. 00;;;;;;;; line 47958 -- 24FB9;106. 16;GKX0000. 00;;;;;;;; line 68823 -- 2A13A;196. 11;GKX0000. 00;;;;;;;;;

T28. CJKU_SR.txt - two (2) duplicate src. refs. GKX0809.20 line 27528 -- 09FC3;109.7;GKX0809.20;T4-3946;;;;;KP1-5E2B;; line 48450 -- 251A5;109.7;GKX0809.20;T5-3A45;;;;;KP1-5E2C;; T29. annotations T29.1 annotations for U31xx [current text] 3131 ¬ HANGUL LETTER KIYEOK \approx 1100 \neg hangul choseong kiyeok --> [proposed text] 3131 ¬ HANGUL LETTER KIYEOK voiceless or voiced lenis velar plosive consonant \approx 1100 \neg hangul choseong kiyeok Rationale: As with U3181 or U3186, ROK suggests that annotations about the characteristics of phonemes for 50 letters in the range of U3131 ~ U318E be added. - For a full list of 50 suggested annotations, see Appendix 1. - Note. Annotations for U3181 and U3186 have been slightly changed to be consistent with annotations for other letters. [text in 2ed CD and FCD] 3181 ↔ HANGUL LETTER YESIEUNG • archaic velar nasal • archaic glottal stop ---> [proposed change] 3181 ↔ HANGUL LETTER YESIEUNG • velar nasal consonant • glottal stop consonant

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T29.2 annotations for tone marks: U302E and U302F
302E . HANGUL SINGLE DOT TONE MARK
= single dot Bangjeom
302F : HANGUL DOUBLE DOT TONE MARK
= double dot Bangjeom
-->
302E . HANGUL SINGLE DOT TONE MARK
• high level tone
= single dot Bangjeom
302F : HANGUL DOUBLE DOT TONE MARK
• low-rising tone
= double dot Bangjeom
```

* * *

T30. A suggested presentation format for CJKU main table

T30.1 Background

1) Currently CJKU main table can have up to six glyphs for each row.

2) Since KP did not supply fonts, KP glyphs will not be printed in ISO/IEC 10646:2010, 2ed.

3) There are no MACau characters in CJKU main table.

4) There are only seven UTC characters in CJKU main table. Furthermore, there is no characters (glyphs) other than UTC's for these seven UCS code positions.

T30.2 Problems and Objectives

1) Since each column does not start with UxxxxO or end with UxxxxF, in reviewing CJKU tables, we found that it is very inconvenient to find a specific code position in the table. Therefore, we have come to suggest a new format for CJKU main table.

2) Since many users will see the tables on display screen, a slight increase in number of pages due to this change seems tolerable.

3) For each sub-column (currently CJKU main table has two sub-columns), the starting code position is UxxxxO and the ending code position is UxxxxF as with ISO/IEC 10646:2003, 1st ed.

T30.3 A suggested presentation format for CJKU main table

1) For each sub-column, the starting code position is Uxxxx0 and the ending code position is UxxxxF as with $ISO/IEC \ 10646$:2003, 1st ed.

2) As with 2ed CD, we put six characters in each row in the order of (G T J K V H).

- The order can be finalized by WG2.

3) UTC characters (glyphs) will be printed in the third position (T position) as with 2ed. FCD.

- Note that there are no characters (glyphs) other than UTC's for the seven UCS code positions where UTC glyph appears.

- The position of UTC glyph can be finalized by WG2.



* * *

T31. p. 47, transliteration of Hangul

T31.1 A relevant portion of ISO/IEC 10646:2003, 1st ed. is shown below:

// start of ISO/IEC 10646:2003, 1st ed.

28.3 Character names and annotations for Hangul syllables The corresponding Latin character strings are:

P, WI, BS.

The syllable-name is PWIBS, and the character name is:

HANGUL SYLLABLE PWIBS

For each Hangul syllable character a short annotation is defined. This annotation consists of an alternative transliteration of the Hangul syllable into Latin characters.

The corresponding Latin character strings are: ph, wi, ps, and the annotation is (phwips).

. . .

<mark>Annex P</mark> (informative) Additional information on characters

1100 HANGUL CHOSEONG KIYEOK ... 1112 HANGUL CHOSEONG HIEUH

The Latin letters shown in parenthesis after the names of the characters in the range 1100 to 1112 (except 110B) are transliterations of these Hangul characters. These transliterations are used in the construction of the names of the Hangul syllables that are allocated in code positions ACOO to D7A3 in this International Standard.

11A8 HANGUL JONGSEONG KIYEOK ... 11C2 HANGUL JONGSEONG HIEUH

The Latin letters shown in parenthesis after the

names of the characters in the range 11A8 to 11C2 are transliterations of these Hangul characters. These transliterations are used in the construction of the names of the Hangul syllables that are allocated in code positions ACOO to D7A3 in this International Standard.

// end of ISO/IEC 10646:2003, 1st ed.

T31.2 The information about Hangul transliteration in Annex P in ISO/IEC 10646:2003 (1st ed) is missing in 2ed. FCD.

T31.3 ROK suggests to insert the following notes between the bottom of Table 5 and the title of Section 25 on p. 47:

Note 1. The Latin letters shown in parenthesis after the names of the characters in the ranges 1100 to 1112 (except 110B) and 11A8 to 11C2 are transliterations of these Hangul characters. These Latin letters are the same as I and F strings in Syllable name elements of Table 5.

These transliterations are used in the construction of the names of the Hangul syllables that are allocated in code positions ACOO to D7A3 in this International Standard.

Note 2. I and F strings in Syllable name elements are based on Method I of ISO/TR 11941:1996 Information and documentation -- Transliteration of Korean script into Latin characters. I and F strings in Annotation elements are based on Method II of ISO/TR 11941. P strings in Syllable name elements and in Annotation elements are based on ISO/TR 11941.

ISO/TR 11941 is different from Revised Romanization of Korean script released on 4 July 2000 by the Ministry of Culture and Tourism, Republic of Korea.

* * *

T32. [CD-KR.T19, M55.19] incorrectly mapped comptb. char KO-6766 - KO-6766 (sounds 'ye') <- UOF9B8 in CJKC_SR.txt - R.O.Korea's requests: T32.1 and T32.2

KS C 5601:1987 (= KS X 1001), International Register 149 (http://www.itscj.ipsj.or.jp/is0-IR/149.pdf)



71-70 0x6766 (=E7E6) 54-43 0x564B (=D6CB) 예 (ye) 례 (rye)

T32.1 Delete 'KO-6766' entry in line OF9B8 of CJKC_SR.txt file.

- It means that R.O.Korea's KO-6766 cannot be mapped to UOF9B8.

- It also means that there will be no reference for UOF9B8 and UOF9B8 char will become deprecated.
- = CJKC_SR.txt file
 (current) 0F9B8;096B8;;;;K0-6766;;
 --->
 (new) 0F9B8;096B7;;;;;;

T32.2 Add a new compability character to UCS and

- add one line to CJKC_SR.txt:
- (Let's assume that the code position of newly added char is Uxxxx1.)

T33.3 For detailed information, see WG2 N3747 (= IRG N1651, ROK K1847) A solution proposed by R.O.Korea for incorrectly mapped comptb. chars (RE: T19 and T20)

T33. [CD-KR.T20, M55.19] incorrectly mapped comptb. char KO-522B - KO-522B (sounds 'nang') <- UOF92C in CJKC_SR.txt

- R.O.Korea's requests: T33.1 and T33.2

http://www.itscj.ipsj.or.jp/ISO-IR/149.pdf



- T33.1 Delete 'KO-522B' entry in line OF92C of CJKC_SR.txt file.
 - It means that R.O. Korea's KO-522B cannot be mapped to OF92C.
 - It also means that there will be no reference for UOF92C and UOF92C char will become deprecated.
- T33.2 Add a new compability character to UCS and
 - add one line to CJKC_SR.txt:
 - (Let's assume that the code position of newly added char is Uxxxx2.)

= CJKC_SR.txt file xxxx2;090DE;;;;K0-522B;;

T33.3 For detailed information, see WG2 N3747 (= IRG N1651, ROK K1847) A solution proposed by R.O.Korea for incorrectly mapped comptb. chars (RE: T19 and T20)

* * *

[editorial comments]

E01. ROK suggests that PDF file names be changed so that the file names are sorted according to the order of code positions.

[current file names]

FCD10646-0000-33FF, pdf
 FCD10646-2A700-2B81F, pdf
 FCD10646-2F800-DFFFF, pdf
 FCD10646-4DC0-4DFF, pdf
 FCD10646-4E00-695E, pdf
 FCD10646-23BA6-2733D, pdf
 FCD10646-695F-8455, pdf
 FCD10646-3400-4DBF, pdf
 FCD10646-3400-4DBF, pdf
 FCD10646-8456-9FFF, pdf
 FCD10646-10000-1FFFF, pdf
 FCD10646-20000-23BA5, pdf
 FCD10646-A000-FFFF, pdf
 FCD10646-A000-FFFF, pdf
 FCD10646-A000-FFFF, pdf
 FCD10646-A000-10FFFF, pdf
 FCD10646-Main, pdf

 \longrightarrow

[proposed change]

FCD10646-00-Main.pdf
 FCD10646-01-0000-33FF.pdf
 FCD10646-02-3400-04DBF.pdf
 FCD10646-03-04DC0-04DFF.pdf
 FCD10646-04-4E00-695E.pdf
 FCD10646-05-695F-8455.pdf
 FCD10646-06-8456-9FFF.pdf
 FCD10646-08-10000-1FFFF.pdf
 FCD10646-09-20000-23BA5.pdf
 FCD10646-10-23BA6-2733D.pdf
 FCD10646-12-2A700-2B81F.pdf
 FCD10646-13-2F800-DFFFF.pdf
 FCD10646-14-E0000-10FFFF.pdf

Appendix 1. A full list of suggested annotations for 50 letters in the range of U3131 $^{\sim}$ U318E

- 3131 ¬ HANGUL LETTER KIYEOK
 voiceless or voiced lenis velar plosive consonant
- 3132 ¬¬ HANGUL LETTER SSANGKIYEOK
 voiceless unaspirated glottalized velar plosive consonant
- 3134 ∟ HANGUL LETTER NIEUN • alveolar nasal consonant
- 3137 ⊏ HANGUL LETTER TIKEUT
 voiceless or voiced lenis alveolar plosive consonant
- 3138 □ HANGUL LETTER SSANGTIKEUT

 voiceless unaspirated glottalized alveolar plosive consonant
- 3139 ≥ HANGUL LETTER RIEULL
 alveolar lateral approximant or alveolar tap or flap consonant
- 3141 □ HANGUL LETTER MIEUM • bilabial nasal consonant
- 3142 ⊨ HANGUL LETTER PIEUP • voiceless or voiced lenis bilabial plosive consonant
- 3143 ⊎ HANGUL LETTER SSANGPIEUP
 voiceless unaspirated glottalized bilabial plosive consonant
- 3145 ∧ HANGUL LETTER SIOS
 voiceless lenis alveolar fricative consonant
- 3146 A HANGUL LETTER SSANGSIOS
 voiceless unaspirated glottalized alveolar fricative consonant
- 3147 HANGUL LETTER IEUNG
 null sound as initial or velar nasal consonant as final

- 314A [₹] HANGUL LETTER CHIEUCH
 - voiceless aspirated alveolar affricate consonant
- 314B ⇒ HANGUL LETTER KHIEUKH • voiceless aspirated velar plosive consonant
- 314C ⊨ HANGUL LETTER THIEUTH • voiceless aspirated alveolar plosive consonant
- 314D = HANGUL LETTER PHIEUPH
 voiceless aspirated bilabial plosive consonant
- 314F ⊢ HANGUL LETTER A • unrounded open front/back vowel
- 3150 ∦ HANGUL LETTER AE • unrounded open-mid front vowel

- 3153 + HANGUL LETTER EO • unrounded open-mid back vowel
- 3154 || HANGUL LETTER E • unrounded close-mid front vowel
- 3156 || HANGUL LETTER YE
 palatal approximant plus unrounded close-mid front vowel diphthong
- 3157 ⊥ HANGUL LETTER 0 • rounded close-mid back vowel
- 3158 ⊥ HANGUL LETTER WA

- voiced labial-velar approximant plus unrounded open front/back vowel
- 3159 ⊥ HANGUL LETTER WAE

• voiced labial-velar approximant plus unrounded open-mid front vowel

315A ⊥| HANGUL LETTER OE

• voiced labial-velar approximant plus unrounded close-mid front vowel diphthong or rounded close-mid front vowel

315B 4 HANGUL LETTER YO

• palatal approximant plus rounded close-mid back vowel diphthong

315C - HANGUL LETTER U

rounded close back vowel

315D 거 HANGUL LETTER WEO

voiced labial-velar approximant plus unrounded open-mid back vowel diphthong

315E 궤 HANGUL LETTER WE

• voiced labial-velar approximant plus unrounded close-mid front vowel diphthong

315F *¬*∣ HANGUL LETTER WI

• voiced labial-palatal approximant or voiced labial-velar approximant plus unrounded close front vowel diphthong or rounded close front vowel

3160 THANGUL LETTER YU

palatal approximant plus rounded close back vowel diphthong

3161 — HANGUL LETTER EU

• unrounded close central or back vowel

3162 – HANGUL LETTER YI

• unrounded velar approximant plus unrounded close front vowel diphthong

- 3163 | HANGUL LETTER I
 - unrounded close front vowel
- 3171 ☐ HANGUL LETTER KAPYEOUNMIEUM • voiced labial-velar approximant

3178 넝 HANGUL LETTER KAPYEOUNPIEUP

- voiced bilabial fricative consonant
- 3179 ≝ HANGUL LETTER KAPYEOUNSSANGPIEUP • voiceless labial-velar fricative consonant
- 317F △ HANGUL LETTER PANSIOS • voiced alveolar fricative consonant
- 3180 •• HANGUL LETTER SSANGIEUNG • glottal tense before some approximants or vowels
- 3181 HANGUL LETTER YESIEUNG • velar nasal consonant
- 3184 풍 HANGUL LETTER KAPYEOUNPHIEUPH • voiceless bilabial fricative consonant
- 3185 ₅₅ HANGUL LETTER SSANGHIEUH • voiceless glottalized velar fricative consonant
- 3186 ☐ HANGUL LETTER YEORINHIEUH • glottal stop consonant
- 318D HANGUL LETTER ARAEArounded open-mid back vowel

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