

Doc # Korea JTC1/SC2 K1822

Korea JTC1/SC2, Committee on Character Codes

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Subject: Korea's comments on SC2 N4079, CD Ballot on ISO/IEC 10646, 2ed.

[Technical comments]

T1. p. 39, 23.1 List of source references

[current text]

The Hanja K sources are

K0 KS C 5601-1987

K1 KS C 5657-1991

K2 PKS C 5700-1 1994

K3 PKS C 5700-2 1994

K4 PKS 5700-3:1998

K5 Korean IRG Hanja Character Set 5th Edition: 2001

—>

[proposed text]

The Hanja K sources are

K0 KS X 1001:2004 (formerly KS C 5601)

K1 KS X 1002:2001 (formerly KS C 5657)

K2 PKS X 1027-1

K3 PKS X 1027-2

K4 PKS X 1027-3

K5 PKS X 1027-4

T2. p.40, 23.2, third bullet

3rd field: Hanzi G sources (G0-hhhh), (G1-hhhh), (G3-hhhh), (G5-hhhh), (G7-hhhh), (G8-hhhh), (G9-hhhh), (GE-hhhh), (G_4K), (G_BK), (G_BKdddd), (G_CH), (G_CY), (G_CYYdddd), (G_CHdddd), (G_FZ), (G_FZdddd), (G_GHdddd), (G_GFHZBddd), (G_GJZdddd), (G_HC), (G_HCdddd), (G_HZ), (G_HZdddd), (G_IDCddd), (G_XCdddd), (G_ZFYdddd), (G_ZJWdddd), or (KXdddd.dd)

[current text] KXdddd.dd

—>

[proposed text] GKXdddd.dd (or G_Kdddd.dd or G_Xdddd.dd or G_KXdddd.dd)

Rationale: Since all G sources except KX start with 'G', we propose to change KXdddd.dd to GKXdddd.dd (or G_Kdddd.dd or G_Xdddd.dd, or G_KXdddd.dd) so that all G sources start with 'G'. Furthermore, considering that all Hanja K sources starts with 'K' and and Hanja KP sources starts with 'KP', 'G_K...' or 'G_X...' look much better than 'KX...'

T3. p.41, 23.3, third para.

The code chart for the CJK UNIFIED IDEOGRAPHS block (4E00–9FFF) uses a fixed column format (i.e. source references from a given source always appear in the same column) while the code charts for the other CJK Unified blocks show graphic symbols per the following order of appearance: G, T, J, K, V, KP, H, U, and M

[current text] G, T, J, K, V, KP, H, U, and M

—>

[proposed text] G, T, J, K, KP, V, H, M, and U

Rationale:

- 1) KP precedes V (e.g., p. 388, U340C)
- 2) In CJKU main, M (in the second column) precedes U in the third column).

Note. In CJKU Extensions, there is no Hanja char having both M and U source references.

T4. p. 42, 23.3.2

23.3.2 Source reference presentation for CJK UNIFIED IDEOGRAPHS EXTENSION A

The following figure shows the presentation for the CJK UNIFIED IDEOGRAPH EXTENSION A block. Up to **four** sources per characters are represented in a single row. If more than **four** sources exist, an additional row is used.

[current text] ... four sources ...

—>

[proposed text] ... three sources ... [occurs twice]

T5. p. 43

1) There is no explanation as to which country will provide font for CJK Compatibility characters shared by more than one country. We suggest to discuss and to add an explanation to the Standard.

For your information, the sharing status is as follows:

KJ 6, KPJ 1, KH 1, PT 49, PTH 1, TH 4, 62 in total (out of 1,000 CJKC chars)

2) Rep. of Korea will provide the font for UOF900 ~ UOFA0B and requests that the font be used for printing UOF900 ~ UOFA0B.

T6. p. 53

[current text]

Decompositions, preceded by ‘≡’ , or ‘≈’ , describing various mapping between characters.

—>

[proposed change] There seems no explanation as to usage difference of these two characters ‘≡’ , ‘≈’.

1) As a result, we could not review properly lines having these characters. We need to review such lines “after” explanations are given.

2) We suggest that explanations about the usage difference be added.

T7. p. 369, left column, top

[current text]

3131 ㄱ HANGUL LETTER KIYEOK

≈1100 ㄱ hangul choseong kiyeok

--->

[proposed text]

3131 ㄱ HANGUL LETTER KIYEOK

→ 1100 ㄱ Hangul choseong kiyeok

≈ FFA1 ㄱ Halfwidth hangul letter kiyeok

Rationale: The usage of U3131 and UFFA1 is fairly similar. In contrast, the usage of U1100 is quite different from that of U3131 and UFFA1.

= Similar changes are proposed for code positions U3132 ~ U3163.

T8. p. 369, right column, bottom

[current text]

3164 HANGUL FILLER

= cae om

≈ 1160 hangul jungseong filler

--->

[proposed text]

3164 HANGUL FILLER

= chaeum

→115F hangul choseong filler

→1160 hangul jungseong filler

≈ FFA0 halfwidth hangul filler

Rationale: The usage of U3164 and UFFA0 is fairly similar. In contrast, the usage of U115F and U1160 is quite different from that of U3164 and UFFA0.

T9. p.369, right column, bottom

[current text] Archaic letters

--->

[proposed text] Old letters

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.

T10. pp. 369 ~ 370

[currently] There are annotations for code positions U3131 to U318E

—>

[proposed change] Delete all annotations.

Rationale: Since the proposed changes are too drastic, we could not review carefully. Therefore we suggest to keep as in the first edition at this point. The usages of U11xx and U31xx are quite different. We will review more carefully and propose in the future.

T11. p. 370, left column and right column

3181 ◦ HANGUL LETTER YESIEUNG

- archaic velar nasal
- ≈114C ◦ hangul choseong yesieung

3186 ◡ HANGUL LETTER YEORINHIEUH

- archaic glottal stop
- ≈1159 ◡ hangul choseong yeorinhieuh

[current text]

- archaic velar nasal
- archaic glottal stop

—>

[proposed change]

- Delete these two lines

Rationale:

- 1) The word archaic does not seem proper as mentioned earlier.
- 2) Only those two letters have more detailed information about the sound. We could add similar information to other letters. Therefore, we propose to delete these two lines.

T12. p. 376, left column, top

[current text]

3200 (ㄱ) PARENTHESESIZED HANGUL KIYEOK
≈0028 (1100 ㄱ 0029)

—>

[proposed text]

3200 (ㄱ) PARENTHESESIZED HANGUL KIYEOK
≈0028 (3131 ㄱ 0029)

Rationale: The usages of U3131 and U1100 are quite different. For U3200, U3131 seems much better than U1100. (To represent an independent ㄱ, we need to use U1100 + U1160, not U1100 alone.)

= The same comment applies to code positions U3201 ~ U320D and U3261 ~ U326D.

T13. p. 376, right column

321E PARENTHESESIZED KOREAN CHARACTER O HU
≈0028 (110B ○ 1169 ⊥ 1112 ≡ 116E ⊤ 0029)

[current text] O HU

—>

[proposed text] OHU

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

T14. p. 1259, right column

[current text]

FFA0 HALFWIDTH HANGUL FILLER
≈<narrow> 3164

—>

[proposed change] There seems no explanation about <narrow>, <circle>, <wide>, etc.

1) As a result, we could not review properly lines having these notations. We need to review such lines "after" explanations are given.

2) We suggest that explanations be added.

T15. p. 2189, right column

[current text]

KS C 5601-1992 Korean Industrial Standards Association. Jeongbo gyohwanyong buho (Code for Information Interchange).

--->

[proposed text]

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

T16. CJKU_SR.txt and CJKC_SR.txt

[current text]

- In CJKU_SR.txt, UTC is used
- In CJKC_SR.txt, U0- is used

--->

[proposed change]

- We propose to use consistently either UTC or U0- in both CJKU_SR.txt and CJKC_SR.txt.

T17. CJKC_SR.txt

[current text]

As an example, there is an entry where a UCS code position and a U0 source ref. value are the same, as shown below:

```
OFA0C;05140;;;;;U0-FA0C;
```

--->

[proposed change]

- We wonder what useful information a user/reader can get from "U0-FA0C" in this example. The code positions are the same.
- There are 21 more code positions having the same situation.
- Unless U0-xxxx can give some useful information, we suggest to delete those 22 U0- entries in CJKC_SR.txt

T18. 2ed CD2

- There is much change in 2ed CD and we have had hard time reviewing CD. For example, lots of new annotations, character database, etc.
- We could not finish reviewing 2ed CD and therefore plan to provide further comments in the (near?) future.
- Therefore, we suggest to make a CD2 so that member countries have enough time to review it. This way, we can make 2ed more stable and error-free.

T19. p. 1218, left column

T19.1 We request to change as shown below:

CURRENT (BEFORE change)

F9B8 隸 CJK COMPATIBILITY IDEOGRAPH-F9B8
IDENTICAL → 96B7 隸 cjk unified ideograph-96B7
≡ 96B8 隸 ← different from F9B8, 96B7

NEW (AFTER change)

F9B8 隸 CJK COMPATIBILITY IDEOGRAPH-F9B8
≡ 96B7 隸 cjk unified ideograph-96B7

T19.2 We request to change the following line in CJKC_SR.txt as shown below:

(current) 0F9B8;096B8;;;K0-6766;;
--->
(new) 0F9B8;096B7;;;K0-6766;;

== Rationale (Information supporting our request):

96B7 隶 171.8	隸	隸	隸	隸		
	GE-443F	T3-5349	J0-4E6C	K0-564B	KP0-FDB7	
96B8 隶 171.9	隸	隸	隸	隸		
	G1-4125	T1-7622	J0-7031	K1-5E68	KP1-83A8	

a) By checking the glyphs in 2ed CD, we can see that UF9B8 should be mapped to U96B7, not to U96B8.

b) Furthermore, duplicate Hanja characters are included in KS X 1001 (K0), but not in KS X 1002 (K1).

- Therefore, any compatibility Hanja characters (whose source is K0, including UF9B8) must be mapped to a K0 Hanja (in this case, U96B7), but not to K1 Hanja (in this case, U96B8).

c) In CJKU_SR.txt, we know that U96B7 is a K0 Hanja and U96B8 is a K1 Hanja.

096B7;GE-443F;T3-5349;J0-4E6C;**K0-564B**;;;KP0-FDB7;;
 096B8;G1-4125;T1-7622;J0-7031;K1-5E68;;;KP1-83A8;;

d) Mapping info RE: duplicate Hanja in KS X 1001 (and comp. Hanja in UCS)
 - source: Korea JTC1/SC2 documents K1645 and K1646
 (= SC2/WG2 N3420 and 3421, respectively).

ro-co KSX1001(=EUC-KR) UCS	=	ro-co KSX1001(=EUC-KR) UCS
-----		-----
71-70 0x6766 (=E7E6) U+F9B8 隸 예	=	54-43 0x564B (=D6CB) U+96B7 隸 레

e) Exact glyphs of two Hanja characters in KS C 5601 are shown below:
 - 71-70 0x6766 (=E7E6) and 54-43 0x564B (=D6CB)

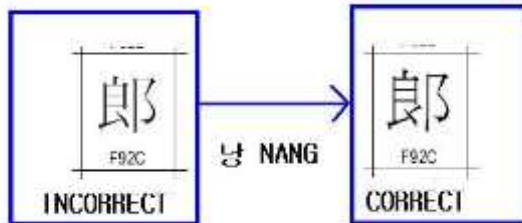
KS C 5601:1987 (= KS X 1001), International Register 149 (<http://www.itsec.lpsj.or.jp/ISO-1R/149.pdf>)

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

T20. pp. 1213 and 1215; CJKC_SR.txt

T20.1 p 1213: We request to change the glyph for U+F92C as shown below:

- We need to add one more stroke (i.e., The number of strokes need to be changed from 10 to 11).



T20.2 p. 1215; We request to change two lines as shown below:

T20.2.1) Change 90CE to 90DE

T20.2.2) Change glyphs of two Hanja characters from 10 strokes to 11 strokes.



T20.3 We request to change one line in CJKC_SR.txt file as shown below:

0F92C;090CE;;;K0-522B;;

---->

0F92C;090DE;;;K0-522B;;

= Rationale (Information supporting out request):

a) Mapping info RE: duplicate Hanja in KS X 1001 (and comp. Hanja in UCS)

- source: Korea JTC1/SC2 documents K1645 and K1646
(= SC2/WG2 N3420 and 3421, respectively).

- 낭 NANG KO 0x522B, (50-11: row-col), 0xD2AB, U+F92C
랑 RANG KO 0x554D, (53-45: row-col), 0xD5CD, U+90DE

b) Exact glyphs of two Hanja characters in KS C 5601 are shown below:

- 50-11 0x522B (=D2AB) and 53-45 0x554D (=D5CD)
- As we can see, their glyphs are exactly the same.
- source: KS C 5601-1987 (<-- International Register 149)
(<http://www.itscj.ipsj.or.jp/ISO-IR/149.pdf>)

- The number of strokes for these two characters is 8 + 3 = 11,
not 7 + 3 = 10.

(Note: The number of strokes could be 10/9 instead of 11/10. In this document, we will use 11/10).

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

TYPE: Multiple-byte Graphic Character Set	REGISTRATION NUMBER: 149 DATE OF REGISTRATION: 1st Oct.1988
ORIGIN Korean Standard KS C 5601-1987	

행	1	2	3	4	5	6	7	8	9	10	11	12
(50)	納	臘	蠟	衲	囊	娘	郎	朗	浪	狼	郎	

KO 0x522B, (50-11: row-col), 0xD2AB, U+F92C
낭 NANG



	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
(53)	纜	藍	藍	覽	拉	臘	郎	朗	浪	狼	琅	瑯	郎		

KO 0x554D, (53-45: row-col), 0xD5CD, U+90DE
랑 RANG



c) If the glyph of U+F92C (0x522B, 50-11, 낭 Nang) WERE correct (10 strokes),

- since the glyph of U+F92C (0x522B) is different from the glyph of 랑 Rang (0x554D, 53-45, 11 strokes), U+F92C (0x522B) SHOULD NOT HAVE BEEN encoded as compatibility Hanja.

- Instead, we could simply fill the "currently empty" K column for U+90CE with "KO-522B/KO-5051".

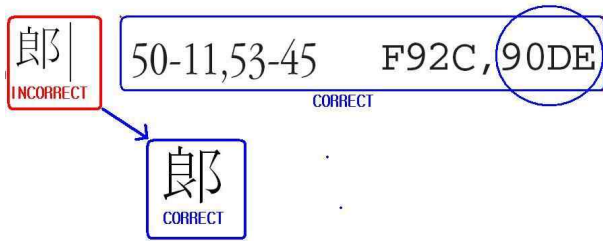
- Therefore, we can conclude that the glyphs of "낭 Nang (0x522B, 50-11)" and "랑 Rang (0x554D, 53-45)" in KS C 5601 are exactly the same and the number of their strokes is 11.

d) (This is informational)

- In Ken Lunde's book, CJKV Information Processing, UF92C is correctly mapped to U90DE, which is another evidence supporting our request of change.

- However, the glyph is incorrect. We need to add one more stroke (i.e., The number of strokes need to be changed from 10 to 11).

- He promised that he would correct the glyphs.



* * *

[Editorial comments]

E1. pp. 42, 23.3.1 and 528.

- Due to font problems, KP columns are different on pages 42 (Fig. 2) and 528.

- We expect that fonts will solve this discrepancy.

HEX	C	J	K	V
4E00	一	一	一	一
- 1.0	G0-523B T1-4421	J0-306C	K0-6C69	KP0-FCD6 V1-4A21
4E01	丁	丁	丁	丁
- 1.1	G0-3621 T1-4421	J0-437A	K0-6F4B	KP0-E8B9 V1-4A22
4E02	𠂇	𠂇	𠂇	
- 1.1	G5-3021 T4-2126	J1-3021		
4E03	七	七	七	七
- 1.1	G0-465F T1-4424	J0-3C37	K0-7652	KP0-EFA6 V1-4A23
4E04	𠂇	𠂇		
- 1.1	G0-523B T1-4421	J0-306C		
	H-9EB3			

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HEX	C	J	K	V
4E00	一	一	一	一
- 1.0	G0-523B T1-4421	J0-306C	K0-6C69	KP0-FCD6 V1-4A21
4E01	丁	丁	丁	丁
- 1.1	G0-3621 T1-4423	J0-437A	K0-6F4B	KP0-E8B9 V1-4A22
4E02	𠂇	𠂇	𠂇	
- 1.1	G5-3021 T4-2126	J1-3021		
4E03	七	七	七	七
- 1.1	G0-465F T1-4424	J0-3C37	K0-7652	KP0-EFA6 V1-4A23
4E04	𠂇	𠂇		
- 1.1	GE-2121 T3-2126	J1-3022		
	H-9EB3			

P. 528

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