

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

**Doc. Type:** Disposition of comments

**Title:** Disposition of comments on SC2 N 4125 (ISO/IEC FCD 10646, Information Technology – Universal Coded Character Set (UCS))

**Source:** Michel Suignard (project editor)

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Comments were received from Armenia, Canada, China, Ireland, Japan, Korea (ROK), U.K, and U.S.A. 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 **Underlined Bold Serif text**, with explanatory text in *italicized serif*.

As a result of these dispositions all countries with negative vote have changed their vote to positive.

## Armenia: Positive with comments

### Technical comments

#### T1 Proposal to add NUMERO SIGN

ՌԺ NUMERO SIGN

The symbol is designed for the word in Armenian meaning «Number». It is composed with the capital letter «Հ» and superscript of small «ւ», over of which is placed a special horizontal stroke, which denotes ‘honor’ and a word reduction. No location proposed.

##### Out of scope

*Adding repertoire in the FCD is out of scope. This should be done through the amendment process. If added, it could be added in the Armenian block (0530-058F). It also needs to use a different name. There is already a NUMERO SIGN at 2116, consequently the proposed name would need to be changed.*

#### T2 Proposal to add DRAM SIGN

Դ DRAM SIGN

The Dram Sign is designed to denominate the Armenian monetary unit. The symbol has been shaped as a superimposition of the capital first letter of «Դրամ» (Dram) word and two horizontal strokes, which stand for ‘Scales’ and are present in majority of monetary symbols. Proposed at location 20B9.

##### Out of scope

*Adding repertoire in the FCD is out of scope. This should be done through the amendment process. If added, it could be added in the Armenian block (0530-058F). It is already proposed at location 058F in proposal WG2 N3771 as ARMENIAN DRAM SIGN.*

#### T3 Proposal to add ETERNITY SIGN

Ե ETERNITY SIGN

The symbol represents the Armenian sign for Eternity. The appearance of the Sign resembles the clockwise rotating ornament, which is composed with curves running from center of the symbol. As a rule the Sign should have eight curves, as this number stands for revival, rebirth and recurrence. However, the symbol may be represented with five and more curves and anti-clockwise as well. No location proposed.

##### Propose out of scope

*Adding repertoire in the FCD is out of scope. This should be done through the amendment process. If added, it could be added in the Armenian block (0530-058F).*

#### T4 Proposal to add MIDDLE DOT SIGN

. MIDDLE DOT SIGN

The appearance of Middle Dot resembles the Latin dot, and similarly to it has to be aligned with the bottom of text lines. However, this punctuation mark in Armenian has a meaning different from the meaning of Latin dot, and has to be used within Armenian sentences and not at the end.

##### Propose out of scope

*Adding repertoire in the FCD is out of scope. This should be done through the amendment process.*

## Canada: Positive with comments

### Editorial comments

Guideline 11 on page 2108 has the following text:

-->

In these cases the customary name reflecting the most general use is given to the character. The customary name may be followed in the list of characters of a particular standard by the name in parentheses which this character has in the script specified by this particular standard.

## EXAMPLE

⌒ UNDERTIE (Enotikon)

<--

The second sentence and the example should be changed to reflect the change away from parenthetical notation and correspond to the charts in the second edition. The chart / nameslist entry corresponding to the example at 203F has:

-->

203F ⌒ UNDERTIE

= Greek enotikon

→ 2323 ~ smile

### **Accepted**

*The last sentence of the paragraph is changed as follows:*

The customary name may be annotated in the list of characters with the script name followed by the transliterated name in that script.

## EXAMPLE

203F ⌒ UNDERTIE

= Greek enotikon

*The editor looked into any similar occurrences describing parenthetical notation to be updated in a similar fashion. The only remaining annotations in parenthesis are used for Annex R (Hangul Syllables) and are documented as such in that annex, with rules for construction described in sub-clause in 28.7 Character names and annotations for Hangul Syllables.*

## **China: Positive with comments**

### **Comments**

The fonts of Multi-column code charts of CJK Main Block should be corrected according to IRG suggestions. The suggestions are hopefully be available after IRG#34 in June, 2010.

### **Noted**

## **Ireland, Negative**

Ireland disapproves the draft with the editorial comments given below. Acceptance of these comments and appropriate changes to the text will change our vote to approval.

Our comments involve requests to replace some of the chart fonts. either because the fonts presently used are of substandard design quality (such as the Malayalam) or in order to restore a uniformity of design to Latin and common punctuation and similar characters. Over the years glyphs have been taken from several different sources, chiefly from John Fiscella, from SIL, and from Michael Everson, and this has brought about a distinct difference in the shapes of many characters. We propose to replace existing chart fonts with those given below. Note that a similar replacement for Greek and Cyrillic fonts has already been completed. Sets like General punctuation have been included here because Supplementary Punctuation uses slightly different glyphs. In general we believe that the glyphs we have proposed below should be generally acceptable, though we are willing to make modifications based on SC2 and UTC recommendations to any particular glyphs which prove problematic.

E1. Page 62, Row 008: C1 Controls and Latin-1 Supplement. Ireland recommends that a uniform Times-like font be used for the glyphs in this block.

E2. Page 67, Row 010: Latin Extended-A. Ireland recommends that a uniform Times-like font be used for the glyphs in this block.

E3. Page 72, Row 018: Latin Extended-B. Ireland recommends that a uniform Times-like font be used for the glyphs in this block.

E4. Page 78, Row 025: IPA Extensions. Ireland recommends that a uniform Times-like font be used for the glyphs in this block.

E5. Page 82, Row 02B: Spacing Modifier Letters. Ireland recommends that a uniform Timeslike font be used for the glyphs in this block.

E6. Page 86, Row 030: Combining Diacritical Marks. Ireland recommends that a uniform Times-like font be used for the glyphs in this block.

E7. Page 335, Row 037: Greek and Coptic. Ireland recommends that the updated Keft from the International Association for Coptic Studies be used for the Coptic glyphs in this block (03E2..03EF).

E8. Page 146, Row 0D0: Malayalam. Ireland recommends that the rather inconsistent font used for Malayalam be replaced with the one given in the table shown below.

E9. Page 155, Row 0E8: Lao. Ireland recommends that the rather inconsistent font used for Lao be replaced with the one given in the table shown below.

E10. Page 237, Row 1E0: Latin Extended Additional. Ireland recommends that a uniform Times-like font be used for the glyphs in this block.

E11. Page 251, Row 200: General Punctuation. Ireland recommends that a uniform Timeslike font be used for the glyphs in this block.

E12. Page 335, Row 2C8: Coptic. Ireland recommends that the updated Keft from the International Association for Coptic Studies be used for the glyphs in this block.

E13. Page 1226, Row FB0: Alphabetic Presentation Forms. Ireland recommends that a uniform Times-like font be used for the seven Latin glyphs in this block.

*(charts available in the original ballot document in SC2 N4135)*

**Partially accepted**

*E7, E9, and E12 are accepted. For the other comments, Ireland is invited to submit a new contribution for consideration in the context of future amendment to give more review time to experts.*

As a result of this disposition, Ireland changes its vote to Yes.

## **Japan, Negative**

Japan disapproves ISO/IEC CD10646 (SC2N4079) with comments below. Japan will change its vote if the comments are addressed appropriately.

### **JP.1 (Editorial): all, ISO/IEC 10646 mentions**

Change almost all "ISO/IEC 10646" to "this International Standard" (with capital "I" and "S"), except for those appearing in the introductory texts in 4 Terms and definitions.

#### Rationale

See 6.6.7.2 in ISO/IEC Directives, Part 2

#### **Accepted**

### **JP.2 (General): all, Figure title,**

Center the Figure title lines.

#### Rationale

See 6.6.5.4 in ISO/IEC Directives, Part 2

#### **Accepted**

### **JP.3 (General): Foreword, Note**

We understand that this NOTE is only for FCD text and will be disappear in FDIS text. This comment is only to make sure the change [is done].

#### Proposed change

Remove the NOTE at the end of the Foreword.

#### **Accepted**

### **JP.4 (Editorial): Clause 3, Normative references**

Change the entire introductory paragraph to following:

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

#### Rationale

See 6.2.2 in ISO/IEC Directives, Part 2

#### **Accepted**

### **JP.5 (Editorial): Clause 4, Terms and definitions, First paragraph**

Change "ISO/IEC 10646" to "this document"..

#### Rationale

See 6.3.1 and 6.6.7.2 in ISO/IEC Directives, Part 2

#### **Accepted**

### **JP.6 (Editorial): Sub-clause 6.1, Structure, Figure 1**

In 10646, its plane numbers are denoted as two hexadecimal digits. See 5 for example.

#### Proposed change

Change "plane 0", "plane 1", "plane 2" and "plane 3" to "plane 00", "plane 01", "plane 02" and "plane 03" respectively.

#### **Accepted**

### **JP.7 (Editorial): Sub-clause 9.2, UTF-16, Note**

Change "this standard" to "this International Standard".

#### Rationale

See 6.6.7.2 in ISO/IEC Directives, Part 2

#### **Accepted**

### **JP.8 (Editorial): Sub-clause 12.1, Purpose and context of identification, First paragraph**

This paragraph gives background information of the identification mechanisms. The particular sentence is a general observation on technical necessity rather than the requirement of this standard.

Also see Annex H in ISO/IEC Directives, Pat 2.

Proposed change

Change the word "must" in the second sentence to "should".

**Accepted**

### **JP.8-bis (Editorial): Sub-clause 20.7, Combining Grapheme Joiner**

Ignoring the COMBINING GRAPHEME JOINER under the said condition is a mandatory process.

Proposed change

Change the word "should" in the second sentence to "shall".

**Accepted**

### **JP.9 (Editorial): Sub-clause 23.1 List of source references, 2<sup>nd</sup> paragraph**

"0 and 23.4" should be a mistake. After the arranging the texts, the subclause this sentence refers to became the clause it belongs. We need some re-wording.

Proposed change

Change "listed in 0 and 23.4" to "listed below in this clause."

**Accepted in principle**

*See also Korean comments T6 and T7.*

*Note also that the disposition of comment JP9 in the CD10646 ballot was not fully conveyed in the FCD text. The list in this sub-clause was not update as requested. This will be done in the FDIS. In the meantime, GFHZB was changed into individual components according to FPDAM8 ballot dispositions. This results in the following table:*

| Old 23.1 | New 23.1 (FDIS)     |
|----------|---------------------|
| G_4K     | G4K                 |
| G_BK     | GBK                 |
| G_CH     | GCH                 |
| G_CY     | GCY                 |
| G_CYY    | GCYY                |
| G_FZ     | GFZ                 |
| G_GFHZB  | GCH, GZH, GXC, GIDC |
| G_GH     | GH                  |
| G_GJZ    | GJZ                 |
| G_HC     | GHC                 |
| G_HZ     | GHZ                 |
| G_IDC    | GIDC                |
| G_XC     | GXC                 |
| G_ZFY    | GZFY                |
| G_ZJW    | GZJW                |
| G_KX     | GKX                 |
| J_ARIB   | JARIB               |

### **JP.10 (Technical): Sub-clause 23.1 List of source references, second paragraph**

The name "Hanyo-Denshi Program (汎用電子情報交換環境整備プログラム)" should not be followed by a year.

[This comment is also included in those against FPDAM8]

**Accepted in principle**

*(Same text and disposition as the FPDAM8 disposition)*

*The year is changed by a range as in 2002-2009.*

### **JP.11 (Editorial): Sub-clause 23.1, Source reference presentation for CJK UNIFIED IDEOGRAPHS block,**

Although this is just an example, it should show a correct chart.

Proposed change

Remove a duplicate entry for 4E17

**Accepted**

See also Korean comment T12.

**JP.12 (Editorial): Sub-clause 23.3.2, Source reference presentation for CJK UNIFIED IDEOGRAPHS EXTENSION A, second paragraph**

The figure actually shows the entry 41DD, too.

Proposed change

Change "41CB-41CC, 41DC, and 41EE" to "41CB-41CC, 41DC-41DD, and 41EE".

**Accepted**

See also Korean comment T13

*Because the body text of the standard and the charts are produced by different process, it is quite difficult to synchronize the sub clause 23.3 until the chart content is stable. The editor will make sure that the sub-clause reflects the final state of the chart.*

**JP.13 (Editorial): Sub-clause 23.3.2, Source reference presentation for CJK UNIFIED IDEOGRAPHS EXTENSION A, Figure 3**

Although this is just an example, it should show a correct chart.

Proposed change

Replace an open square glyph on the entry for 41DC with an appropriate K-source glyph.

**Accepted**

See also Korean comment T13.

**JP.14 (Editorial): Sub-clause 24.5, Name uniqueness**

This sentence is a requirement of this standard. (See Annex H in ISO/IEC Directives part 2.)

Proposed change

Change the word "must" to "shall".

**Accepted**

**JP.15 (Editorial): Clause 25, Named UCS Sequence Identifiers, Second list item after the third paragraph**

The current format of the "NUSI.txt" file uses a different syntax from 10646 itself to represent a UCS sequence identifier (USI). It is inappropriate. We should follow the syntax that the standard itself defines. (Japan believes Unicode Consortium to revise its UAX #34 to synchronize with 10646 after this change, although this opinion is not part of its ballot comment.) (Also see comments JP31 and JP32.)

Proposed change

Replace the entire list item for the second field with "2nd UCS sequence as defined in 6.6."

**Accepted**

*Unless the Unicode Consortium changes its format, this is however a synchronization concern and the editor can only hope that the two formats are made identical.*

**JP.16 (Editorial): Clause 25, Named UCS Sequence Identifiers, Note 3**

The list defined in UAX#34 is out-of-date at this moment. Japan understand it is yet another "UCS-Unicode synchronization of publishing date" issue, and considered that it is not wise to add yet more synchronization headache.

Proposed change

Remove NOTE 3 entirely.

**Accepted in principle**

*The note will be preserved, using the same synchronization process as used for normative references. Because, the next phase is a FDIS, the actual link will be the final UAX#34 version number corresponding to Unicode 6.0.*

**JP.17 (Editorial): Clause 26, Structure of the Basic Multilingual Plane, Figure 6**

ISO/IEC Directives doesn't allow use of an asterisk to tie the note with the location in the figure to be noted.

Proposed change

Removes asterisks after "New Tai Lue" in the main figure and before "NOTE 1".

**Accepted in principle**

*In accordance with ISO/IEC Directives Part 2 6.6.5.10, the asterisk in the figure will be replaced by a <sup>a</sup> and the Note 1 rewritten as follows:*

<sup>a</sup> New Tai Lue is also known as Xishuang Banna Dai

*The 'Note 2' is renamed to 'Note' (no number).*

**JP.18 (Editorial): Clause 27, Structure of the Supplementary Multilingual Plane for scripts and symbols (SMP), First paragraph**

In 10646, its plane numbers are denoted as two hexadecimal digits. See 5 for example.

Proposed change

Change "plane 1" to "plane 01".

**Accepted**

**JP.19 (Editorial): Clause 28, Structure of the Supplementary Ideographic Plane (SIP), First paragraph**

In 10646, its plane numbers are denoted as two hexadecimal digits. See 5 for example.

Proposed change

Change "plane 2" to "plane 02".

**Accepted**

**JP.20 (Technical): A new clause between 28 and 29,**

The current FCD contains very few words on TIP. When discussing the organization of the document, it looks strange that only TIP has no clause titled "Structure of XX Plane".

It seems to be a good idea in a maintenance view points, too. We WG 2 will add Oracle Bone or other old hanzi script in TIP in a future, and the amendment that adds Oracle Bone will have some text on allocation on TIP.

Having this clause now will avoid the amendment to say "... and adjust clause numbers after it" when we add a clause on structure of TIP.

Proposed change

Insert the following text after clause 28. Renumber clauses that follow appropriately.

29 Structure of Tertiary Ideographic Plane (TIP)

The TIP (plane 03) is used for ancient ideographic scripts that are related to but not classified as CJK Unified Ideographs.

All code points in TIP are undefined.

NOTE - TIP may contain scripts such as Oracle Bone or Bronze in future editions of this International Standard.

**Accepted**

**JP.21 (Editorial ): Clause 29, Structure of the Supplementary Special-purpose Plane (SSP), NOTES**

This particular clause 29 has only one NOTE. (Another NOTE against Figure 9 should be counted separately. See 6.6.5.9 in ISO/IEC Directives part 2.)

Proposed change

Change "NOTE 2" to "NOTE".

**Accepted**

*Following the same principle, in clause 27 (SMP), it means that "NOTE 1" becomes "NOTE".*

**JP.22 (Editorial ): Clause 29, Structure of the Supplementary Special-purpose Plane (SSP), NOTE to Figure 9**

Figure 9 has only one NOTE. (NOTEs against a clause text and a figure are counted separately. See 6.6.5.9 in ISO/IEC Directives part 2.)

Proposed change

Change "NOTE 3" to "NOTE".

**Accepted**

*Following the same principle, in clause 27 (SMP), it means that "NOTE 2" and "NOTE 3" in the figure becomes "NOTE 1" and "NOTE 2" respectively.*

**JP.23 (General): All code chart for CJK Unified Ideographs (including its extension),**



The quality of the CJK ideographs' code chart included in the FCD text is low, and the IRG review work assigned by the last WG 2 meeting is going unsuccessfully. Japan is very much afraid of the possibility that the revised 10646 is published with a set of wrong code chart for CJK ideographs.

Proposed change

Revert the code chart for CJK UNIFIED IDEOGRAPHS block and its EXTENSION blocks to the ones used in the previous edition and amendments.

**Partially accepted**

*The mechanism to produce the code chart for CJK Unified Ideographs Ext C and D in the FCD was identical to the one used for the amendments where they were included. So these blocks should be ready for FDIS production.*

*By opposite, CJK Unified Ideographs Ext B multi-chart as presented in the FCD has not been reviewed by IRG members and consequently will not be included in the FDIS. The FDIS will use the single column format and font resources incorporated in the previous edition (ISO/IEC 10646:2003).*

*Concerning the remaining blocks (CJK Unified Ideograph main block and Ext A), some sources have been extensively reviewed and seen no or little changes. These sources are J, H, K, and U. Based on this, the glyphs corresponding to these sources can be incorporated in the FDIS chart with limited review. Three other sources: G, T, and V will require more extensive reviews.*

*To progress the FCD to FDIS with CJK multi-column charts, the following plan is adopted:*

*A CJK multi-column chart including all CJK blocks using most up to date fonts will be provided to IRG member before or by April 23<sup>rd</sup> 2010. In addition, a CJK single-column chart including CJK Unified Ideographs ExtB will also be provided to IRG members with the resources used for the previous edition.*

*These two sets of chart will be reviewed by IRG members by the next IRG meeting (June 2010, Japan), and a new set of corrected charts (as appropriate) will be produced for a two month review. Assuming that no major deficiency remains, the result will be sent to ITTF by end of August for FDIS process.*

**JP.24 (Editorial): Page 1343, Code chart for Kana Supplement , Code chart and the name list**

The current representative glyph is inappropriate as we discussed and concluded in the last WG 2 meeting

Proposed change

Replace the representative glyph for 1B000 (KATAKANA LETTER ARCHAIC E) with the following:



**Accepted in principle**

*The Japanese NB will work with the character submitter to determine and provide a character glyph agreeable by both parties before the FDIS is published.*

**JP.25 (Editorial): Annex C, Title,**

In 10646, its plane numbers are denoted as two hexadecimal digits. See 5 for example.

Proposed change

Change "plane 1" to "plane 01".

**Accepted**

**JP.26 ([Editorial]): Annex F.1.1, Last paragraph for SOFT HYPHEN,**

This sentence is a recommendation to implementers and not a conformance requirement.

Proposed change

Change the word "must" to "should".

**Accepted**

**JP.27 (Technical): Annex F.7.3, Cancelling tag values, First paragraph**

This "must" indicates a very high possibility, and is not a requirement, permission, or recommendation. We should use an expression that is \*not\* reserved for the standard provision.

Proposed change

Change the word "must" to "most likely".

**Accepted in principle**

*The word "must" is replaced with "should".*

**JP.28 (Editorial): Annex S.1.4.2, The last ideographs at the end of the sub-clause,**

The purpose of this presentation is to show yet another differences in actual shapes that are considered to have a same abstract shape. This particular case is taken from the difference in G and T glyphs, but the point is not there. The principle should equally be applied to any two glyphs regardless they are in a same source or different sources. Putting G, T, etc. here may mislead readers that the application of the policy depends on the source.

Proposed change

Remove G and T indication above glyphs.

**Accepted**

**JP.29 (Editorial): Annex S.1.4.2, Different of actual shapes, item i)**

Insert a middle dot between the first and second shapes.

**Accepted**

**JP.30 (Editorial): Annex S.1.6, Source separation rule, last paragraph**

Remove a redundant ズ at the end.

**Accepted**

**JP.31 (Technical): "NUSI.txt" file**

The "NUSI.txt" file lacks those named UCS sequence identifiers (NUSIs) added by amendment 7. (The proposed addition assumes the current format. Japan wants the syntax in NUSI.txt to be changed, so be these additions, too. See the comment JP13.)

Proposed change

Add the following named UCS sequence identifiers (NUSIs) to NUSI.txt:

MODIFIER LETTER EXTRA-LOW EXTRAHIGH CONTOUR TONE BAR;02E9, 02E5  
LATIN SMALL LETTER AE WITH GRAVE;00E6, 0300  
LATIN SMALL LETTER OPEN O WITH GRAVE;0254, 0300  
LATIN SMALL LETTER OPEN O WITH ACUTE;0254, 0301  
LATIN SMALL LETTER TURNED V WITH GRAVE;028C, 0300  
LATIN SMALL LETTER TURNED V WITH ACUTE;028C, 0301  
LATIN SMALL LETTER SCHWA WITH GRAVE;0259, 0300  
LATIN SMALL LETTER SCHWA WITH ACUTE;0259, 0301  
LATIN SMALL LETTER HOOKED SCHWA WITH GRAVE;025A, 0300  
LATIN SMALL LETTER HOOKED SCHWA WITH ACUTE;025A, 0301  
HIRAGANA LETTER BIDAKUON NGA;304B, 309A  
HIRAGANA LETTER BIDAKUON NGI;304D, 309A  
HIRAGANA LETTER BIDAKUON NGU;304F, 309A  
HIRAGANA LETTER BIDAKUON NGE;3051, 309A  
HIRAGANA LETTER BIDAKUON NGO;3053, 309A  
KATAKANA LETTER BIDAKUON NGA;30AB, 309A  
KATAKANA LETTER BIDAKUON NGI;30AD, 309A  
KATAKANA LETTER BIDAKUON NGU;30AF, 309A  
KATAKANA LETTER BIDAKUON NGE;30B1, 309A  
KATAKANA LETTER BIDAKUON NGO;30B3, 309A  
KATAKANA LETTER AINU CE;30BB, 309A  
KATAKANA LETTER AINU TU;30C4, 309A  
KATAKANA LETTER AINU TO;30C8, 309A

**Accepted**

**JP.32 (Editorial): "NUSI.txt" file**

An International Standard should follow the syntax defined in the International Standard itself. (See the comment JP15)

Proposed change

Update the second field of each line to use a syntax defined in 6.6 to represent a USI, e.g., "LATIN CAPITAL LETTER A WITH MACRON AND GRAVE;0100 0300" should read "LATIN CAPITAL LETTER A WITH MACRON AND GRAVE;<0100, 0300>".

**Accepted**

As a result of these dispositions, Japan changes its vote to Yes.

**Korea (ROK): Negative**

**Technical comments:**

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.

**T01 [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]

3164 HANGUL FILLER

= **chaeum**

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

Partially accepted

... The alias change is accepted.

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".

**Accepted**

**T02 [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 Hangeul 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.

**Accepted**

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

[text in 2ed CD and FCD]

321E PARENTHESES KOREAN CHARACTER O HU

≈0028 ( 110B ○ 1169 ⇄ 1112 ◌ 116E ▴ 0029 )

-->

[proposed change]

321E PARENTHESIZED KOREAN CHARACTER O HU

≈0028 ( 110B ○ 1169 ⇄ 1112 ⇄ 116E ⇄ 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.

**Accepted**

**[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.

24.6 Character names for CJK Ideographs ..... 45

24.7 Character names for Hangul syllables ..... 46

**Accepted**

### **T06. p. 39,**

1) G\_G... --> 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\_... (other than G\_G...) --> G... (underscore deleted)

G\_4K Siku Quanshu (四库全書)

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)

**Accepted in principle**

*See also comment JP9 from Japan.*

*See disposition of comment JP9 from Japan concerning the replacement for GFHZB.*

### **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)

Page 12 of 28

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)  
0FA6B;06075;;;J\_ARIB-7547;;;  
0FA6C;242EE;;;J\_ARIB-7563;;;  
0FA6D;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

#### **Accepted**

*See also comment JP9 from Japan.*

*Both data files will be updated accordingly.*

#### **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.

#### **Partially accepted**

*The note 3 is moved up before “The Hanzi G sources are” and renamed accordingly and updated as follows:*

NOTE 3 – Even if there is a new version of the source publication, the existing source reference information in the data files will not be updated. The updated source may only identify characters not previously covered by the older version.

#### **T09. 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

#### **Accepted**

*Although the linked file mentions explicitly that the radical stroke index is non normative, the text itself lacks such mention as well as a brief description of its content. The 2<sup>nd</sup> field description is updated as follows:*

2<sup>nd</sup> field: Radical Stroke index (d{1,3}'.d{1,2}). This informative field contains radical index (one to three digits), optionally followed by an apostrophe for alternate index, followed by a full stop, and ending by one or two digits for the stroke count.

NOTE – All ideographs are classified following radical/stroke indexes in various CJK dictionaries. The primary value provided in this field is the most common one, while alternate indexes provide variant values also in use. More information is available in the Unicode Standard UAX#38 Unicode Han Database at <http://www.unicode.org/reports/tr38/>.

#### **T10. p. 41, G src**

[current] [proposed text]

(GBKdddd) --> (GBKdddd) (six d's)

(GCHdddd) --> (GCHdddd) (six d's)

(GHCdddd) --> (GHCdddd) (six d's)

(GXCdddd) --> (GXCdddd) (six d's)

#### **Accepted**

**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.

-->

... Unlike K0 ~ K3 indexes, K4 and K5 indexes do not decompose in section, position values.

Rationale:

- K0 ~ K3 indexes decompose in section and position values. However, K4 and K5 indexes do not.

**Accepted in principle**

*In addition, the first sentence of Note 4 will mention K5 source as well.*

**T12. p.42, in Fig. 2, 4E17 incorrectly appears twice.**

- Fig. 2 (page 42) need to be replaced by the actual portion of CJKU table on p.506

|       |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|
| 4E16  | 世       | 世       | 世       | 世       | 世       |
| - 1.4 | G0-4A40 | T1-4560 | J0-4024 | K0-6126 | V1-4A2F |
| 4E17  | 世       | 世       | 世       |         |         |
| - 1.3 | GE-2124 | T4-2155 | J0-5242 |         |         |
| 4E17  | 世       | 世       | 世       |         |         |
| - 1.3 | GE-2124 | T4-2155 | J0-5242 |         |         |
| 4E18  | 丘       | 丘       | 丘       | 丘       | 丘       |
| - 1.4 | G0-4770 | T1-4563 | J0-3556 | K0-4E78 | V1-4A30 |

Figure 2 – Source reference presentation for CJK UNIFIED IDEOGRAPHS

|       |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|
| 4E16  | 世       | 世       | 世       | 世       | 世       |
| - 1.4 | G0-4A40 | T1-4560 | J0-4024 | K0-6126 | V1-4A2F |
| 4E17  | 世       | 世       | 世       |         |         |
| - 1.3 | GE-2124 | T4-2155 | J0-5242 |         |         |
| 4E18  | 丘       | 丘       | 丘       | 丘       | 丘       |
| - 1.4 | G0-4770 | T1-4563 | J0-3556 | K0-4E78 | V1-4A30 |

**Accepted**

*The chart pages are produced by a different process than the examples. This will be fixed when the chart pages are stable.*

**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 41F0. --> Fig. 3 need to be replaced by the actual portion of CJKU table on p. 450 [fixed by editor]

|  |   |   |
|--|---|---|
| 41CB 𪗇 𪗇 𪗇<br>立 117.6 GKX0871.06 T5-3446 JA-264A | 41DC 笱 笱 □<br>竹 118.4 G3-634F T4-2E73 K3-2E2D | 41EE 筵 筵 筵<br>竹 118.6 G5-6334 T4-3975 JA-264D |
| 41CC 竦 竦<br>立 117.7 GKX0871.17 T3-3D6F           | 41DD 笱 笱<br>竹 118.4 G3-634A T4-2E72           | 筵<br>V2-7F50                                  |

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

|  |  |   |
|--|--|---|
| 41C9 𪗇 𪗇<br>立 117.5 GHZ T3-3322                  | 41DB 筵 筵 筵<br>竹 118.4 GKX0879.12 T3-3329 V2-7F4B | 41EE 筵 筵 筵<br>竹 118.6 G5-6334 T4-3975 JA-264D |
| 41CA 𪗇 𪗇<br>立 117.5 JA-2649 H-8E55               | 筵<br>H-8EFE                                      | 筵<br>V2-7F50                                  |
| 41CB 𪗇 𪗇 𪗇<br>立 117.6 GKX0871.06 T5-3446 JA-264A | 41DC 笱 笱 笱<br>竹 118.4 G3-634F T4-2E73 K3-2E2D    | 41EF 筵 筵 筵<br>竹 118.6 G5-632E T3-3073 H-8E59  |
| 41CC 竦 竦<br>立 117.7 GKX0871.17 T3-3D6F           | 41DD 笱 笱<br>竹 118.4 G3-634A T4-2E72              | 41F0 筵 筵<br>竹 118.6 G3-6379 T4-396F           |

**Accepted**

The chart pages are produced by a different process than the examples. This will be fixed when the chart pages are stable.

**T14. p.43, in Fig. 4,**

- 1) to the right of 2000F, there should be 20022, NOT 20021.
- 2) and so on ...

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

|                          |                                       |                          |                                  |
|--------------------------|---------------------------------------|--------------------------|----------------------------------|
| 2000F 屯<br>— 1.4 TF-213E | 20021 𪗇 𪗇<br>— 1.6 GKX0078.12 T6-255F | 20032 𪗇<br>— 1.7 V0-305F | 20043 𪗇 𪗇<br>— 1.10 G_HZ T5-3323 |
| 20010 虫<br>— 1.4 TF-213F | 𪗇<br>H-9C71                           | 20033 𪗇<br>— 1.7 V2-6E25 | 20044 𪗇<br>— 1.10 V0-354B        |

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

|                                      |   |                                |  |
|--------------------------------------|---|--------------------------------|--|
| 20009<br>— 1.3<br>𠂇<br>TS-2133       | 2001C<br>— 1.5<br>𠂇<br>GHZ                  | 2002F<br>□ 31.5<br>𠂇<br>GHZ    | 20043<br>— 1.10<br>𠂇 𠂇<br>GHZ TS-3323    |
| 2000A<br>— 1.3<br>𠂇<br>GHZ           | 2001D<br>卜 25.4<br>𠂇<br>GHZ                 | 20030<br>— 1.7<br>𠂇<br>GHZ     | 20044<br>— 1.10<br>𠂇<br>VO-354B          |
| 2000B<br>— 1.3<br>𠂇 𠂇<br>GHZ T3-2144 | 2001E<br>— 1.5<br>𠂇<br>GHZ                  | 20031<br>— 1.7<br>𠂇<br>GHZ     | 20045<br>— 1.10<br>𠂇<br>GHZ              |
| 2000C<br>— 1.3<br>𠂇<br>J3-2E22       | 2001F<br>— 1.5<br>𠂇<br>GHZ                  | 20032<br>— 1.7<br>𠂇<br>VO-305F | 20046<br>— 1.11<br>𠂇 𠂇<br>TF-3932 H-9376 |
| 2000D<br>— 1.4<br>𠂇<br>GKX0077.13    | 20020<br>— 1.5<br>𠂇 𠂇<br>GHZ T6-2467        | 20033<br>— 1.7<br>𠂇<br>V2-6E25 | 20047<br>— 1.11<br>𠂇<br>TF-3933          |
| 2000E<br>— 1.4<br>𠂇<br>G4K           | 20021<br>— 1.6<br>𠂇 𠂇<br>GKX0078.12 T6-255F | 20034<br>— 1.7<br>𠂇<br>VO-354A | 20048<br>— 1.11<br>𠂇 𠂇<br>GHZ T6-472D    |
| 2000F<br>— 1.4<br>𠂇<br>TF-213E       | 20022<br>— 1.6<br>𠂇 𠂇<br>GKX0078.13 T5-232F | 20035<br>— 1.8<br>𠂇<br>TF-2922 | 20049<br>— 1.11<br>𠂇<br>JL 16.10<br>GHZ  |
| 20010<br>— 1.4<br>𠂇<br>TF-213F       | 20023<br>— 1.6<br>𠂇<br>TF-2274              | 20036<br>— 1.8<br>𠂇<br>TF-2923 | 2004A<br>— 1.11<br>𠂇<br>GHZ              |
|                                      |   | 20037<br>□ 30.6<br>𠂇<br>GHZ    | 2004B<br>— 1.11<br>𠂇<br>TF-3873          |

### Accepted

The chart pages are produced by a different process than the examples. This will be fixed when the chart pages are stable.

### 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

### Accepted

The new clause 23.5 will read as follows:

### 23.5 Source reference presentation for CJK Compatibility Ideographs

CJK Compatibility Ideographs are presented using the format used for non CJK characters described in 30.2, showing one graphic symbol per character. The following figure shows an example for characters F900-F901:

F900 𠂇 CJK COMPATIBILITY CHARACTER-F900

≡ 8c48 𠂇

F901 𠂇 CJK COMPATIBILITY CHARACTER-F901

≡ 66f4 𠂇

Figure 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 ...  
Accepted

**T16.2 p. 47,**  
 in the title of Table 5 and in the column heading of Table 5:  
 - Additional information --> Annotation

Accepted

**T17. p. 263, Liter**

U2113 ...

- the SI recommended symbol for liter is 006C: l

...

-->

U2113 ...

- the SI recommended symbol for liter is 006C l or 004C L

...

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

**Table 5 — Units used with the SI**

| Quantity    | Unit                |                    |                          |
|-------------|---------------------|--------------------|--------------------------|
|             | Name                | Symbol             | Definition               |
| time        | minute              | min                | 1 min = 60 s             |
|             | hour                | h                  | 1 h = 60 min             |
|             | day                 | d                  | 1 d = 24 h               |
| plane angle | degree              | °                  | 1° = (π/180) rad         |
|             | minute              | '                  | 1' = (1/60)°             |
|             | second              | "                  | 1" = (1/60)'             |
| volume      | litre               | l, L <sup>1)</sup> | 1 l = 1 dm <sup>3</sup>  |
| mass        | tonne <sup>2)</sup> | t                  | 1 t = 10 <sup>3</sup> kg |

1) The two symbols for the litre are on an equal footing. The CIPM will, however, make a survey on the development of the use of the two symbols in order to see if one of the two may be suppressed.

2) Also called the metric ton in the English language.

|       |                    |
|-------|--------------------|
| litre | l, L <sup>1)</sup> |
|-------|--------------------|

Accepted

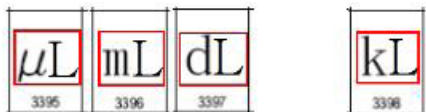
**T18. p. 380 (and p. 384): uL, mL, dL, kL**

- 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 l (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 national 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.

**Withdrawn**

*For information, the current chart uses a common Japanese font (MS Mincho) for these characters, not Korean. These characters are encoded for historic reasons to provide compatibility with common vendor set.*

**T19. p. 2067, Annex A.1**

[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.

**Accepted**

*Because collection 204 is not fixed, these two characters can be added to the collection.*

**T20. p. 2106, Annex L**

[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

**Accepted**

**T21. p. 2111, Annex M, 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)).

-->

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.

**Accepted**

**T22. p. 2129, Annex S.1.6**

[current text]

KS C 5601-1989, KS C 5657-1991

-->

[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 changed to KS X.

**Accepted in principle**

*The new text will read (updated to be synchronized with similar text in clause 23.1):*

KS X 1001:2004 (formerly KS C 5601-1987), KS X 1002:2001 (formerly KS C 5657-1991)

**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**.

**Accepted**

**T24. p. 2128, S.1.4.2, line 6 from top:**

[current text]

... the left-hand **document** going beneath ...

-->

[proposed change]

... the left-hand **component** going beneath ...

**Accepted**

**T25. p. 2129, the last line**

[current text]

-->

a CJK component after the period should be deleted.

**Accepted**

*See also comment JP30 from Japan.*

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

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

**Accepted**

**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;;;;;;

**Noted**

*This is by design. These are characters that have no correct source references. They used to have a simple GKX reference without number which was eventually found to refer to virtual KX entries. The GKX0000.00 is a mechanism to detect the anomaly. A new note will be added:*

NOTE 6 – Some characters are referenced using the value GKX0000.00 which indicates that the encoded CJK unified ideograph has no identified source reference.

**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;;

**Accepted**

*The first line will be changed to:*

line 27528 -- 09FC3;109.7;GKX0809.**02**;T4-3946;;;;;KP1-5E2B;;

**T29. annotations**

## T29.1 annotations for U31xx

[current text]

3131 ㅑ HANGUL LETTER KIYEOK

≈1100 ㅑ hangul choseong kiyeok

-->

[proposed text]

3131 ㅑ HANGUL LETTER KIYEOK

• voiceless or voiced lenis velar plosive consonant

≈1100 ㅑ 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 ㅇ HANGUL LETTER YESIEUNG

• archaic velar nasal

3186 ㅛ HANGUL LETTER YEORINHIEUH

• archaic glottal stop

--->

[proposed change]

3181 ㅇ HANGUL LETTER YESIEUNG

• velar nasal consonant

3186 ㅛ HANGUL LETTER YEORINHIEUH

• glottal stop consonant

**Withdrawn**

## 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

**Withdrawn**

## 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.

09FBC;32.14;:::;UTC00836;

09FBD;86.11;:::;UTC00835;

09FBE;107.8;:::;UTC00837;

09FBF;140.8;:::;UTC00838;

09FC0;140.18;:::;UTC00839;

09FC1;149.6;:::;UTC00840;

**T30.2 Problems and Objectives**

- 1) Since each column does not start with Uxxxx0 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 Uxxxx0 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.

| HEX             | C            | J            | K            | V | HEX             | C            | J            | K            | V | H             |
|-----------------|--------------|--------------|--------------|---|-----------------|--------------|--------------|--------------|---|---------------|
| 4E00<br>- 1.0   | →            | →            | →            | → | 4E00<br>- 1.0   | →            | →            | →            | → |               |
| 4E04<br>- 1.1   | ↓<br>GE-2121 | ↓<br>T3-2126 | ↓<br>J1-3022 |   | 4E04<br>- 1.1   | ↓<br>GE-2121 | ↓<br>T3-2126 | ↓<br>J1-3022 |   | ↓<br>H-9EB3   |
| 9FBC<br>± 32.14 |              |              |              |   | 9FBC<br>± 32.14 |              |              |              |   | 壻<br>UTC00836 |

ISO/IEC 10646, 2ed FCD, CJKU main table format  
- current format

ISO/IEC 10646, 2ed FCD, CJKU main table  
- suggested format

**Accepted in principle**

*The general direction is amenable to the editor; he will work with the contributing editor in charge of the multi-column chart production concerning details, within the constraint of FDIS publication.*

**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).*

...

### **Annex P**

(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 AC00 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 AC00 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 AC00 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.

#### **Accepted in principle**

*These Hangul transliterations for the range 1100..1112 are not part of the name of the characters list in this edition. They are maintained as annotation in following lines. So the possible notes will read:*

Note 1. The I and F strings in Syllable name elements of Table 5 correspond to the Hangul Jamo short names shown in annotations in the code chart after the names of the Hangul Jamo characters in the ranges 1100 to 1112 (except 110B) and 11A8 to 11C2. The short names are transliterations of these Hangul characters.

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 K0-6766**

- K0-6766 (sounds 'ye') <- U0F9B8 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/ISO-IR/149.pdf>)



71-70 0x6766 (=E7E6)  
예 (ye)



54-43 0x564B (=D6CB)  
례 (rye)

**T32.1 Delete 'K0-6766' entry in line 0F9B8 of CJKC\_SR.txt file.**

- It means that R.O.Korea's K0-6766 cannot be mapped to U0F9B8.

- It also means that there will be no reference for U0F9B8 and U0F9B8 char will become deprecated.

= CJKC\_SR.txt file

(current) 0F9B8;096B8;;;K0-6766;;

--->

(new) 0F9B8;096B7;;;;;

**Accepted in principle**

*Canonical mapping cannot be changed. The entry in CJKC\_SR.txt is changed as follows (K0 reference removed):*

(new) 0F9B8;096B8;;;;;

**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.)

= CJKC\_SR.txt file

xxxx1;096B7;;;K0-6766;;

**Accepted in principle**

*But not in the FDIS, for consideration in future amendment.*

**T32.3 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)

**Noted**

**T33. [CD-KR.T20, M55.19] incorrectly mapped comptb. char K0-522B**

- K0-522B (sounds 'nang') <- U0F92C in CJKC\_SR.txt

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

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

|    |   |   |   |   |   |   |   |   |   |   |    |    |    |
|----|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 행  | 열 | 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), 0x02AB, U+F92C  
 낭 NANG



|    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|    | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 53 | 纜  | 藍  | 檻  | 覽  | 拉  | 臘  | 蠟  | 郎  | 朗  | 浪  | 狼  | 琅  | 瑯  | 螂  | 郎  |

KO 0x554D, (53-45: row-col), 0x05CD, U+90DE  
 랑 RANG



**T33.1 Delete 'K0-522B' entry in line 0F92C of CJKC\_SR.txt file.**

- It means that R.O.Korea's K0-522B cannot be mapped to 0F92C.
- It also means that there will be no reference for U0F92C and U0F92C char will become deprecated.

= CJKC\_SR.txt file  
 0F92C;090CE;;;K0-522B;;  
 ---->

0F92C;090DE;;;;;;;;;

**Accepted in principle**

Canonical mapping cannot be changed. The entry in CJKC\_SR.txt is changed as follows (K0 reference removed):  
 (new) 0F92C;090CE;;;;;;;;;

**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;;

**Accepted in principle**

But not in the FDIS, for consideration in future amendment.

**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)

**Noted**

**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  
FCD10646-2733E-2A6FF.pdf  
FCD10646-3400-4DBF.pdf  
FCD10646-8456-9FFF.pdf  
FCD10646-10000-1FFFF.pdf  
FCD10646-20000-23BA5.pdf  
FCD10646-A000-FFFF.pdf  
FCD10646-E0000-10FFFF.pdf  
FCD10646-Main.pdf

-->

[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  
FCD10646-07-A000-FFFF.pdf  
FCD10646-08-10000-1FFFF.pdf  
FCD10646-09-20000-23BA5.pdf  
FCD10646-10-23BA6-2733D.pdf  
FCD10646-11-2733E-2A6FF.pdf  
FCD10646-12-2A700-2B81F.pdf  
FCD10646-13-2F800-DFFFF.pdf  
FCD10646-14-E0000-10FFFF.pdf

## Accepted

[Appendix 1 of annotations for the 50 letters in the original Korean Ballot comment]

## United Kingdom: Positive with comments

### **T.1. (Editorial) Clause 16.1 Space characters**

We suggest adding a note for 1680 OGHAM SPACE MARK indicating that Ogham fonts will typically represent this character with a visible glyph showing the central stemline, and it will only be represented by a blank glyph in a "stemless" style of font.).

#### Proposed change:

Add the following note:

The character 1680 OGHAM SPACE MARK will typically be represented with a visible glyph showing the central stemline, and it will only be represented by a blank glyph in a "stemless" style of font.

#### Accepted in principle

##### *Slightly edited:*

NOTE – The character 1680 OGHAM SPACE MARK is typically represented with a visible glyph showing the central stemline, and it is only represented by a blank glyph in a "stemless" style font.

### **T.2. (Technical) Clause 24.2 Name formation**

The rules for character name formation should prohibit the use of a digit as the first character in a word (i.e. prohibit a digit after a space), as was the case in the previous edition of the standard (see note to Annex L Rule 1) and as is currently the case in the Unicode Standard (see Unicode 5.2 section 4.8 R2).

#### Proposed change:

Change

An entity name shall not contain two or more consecutive SPACE characters or consecutive HYPHEN-MINUS characters.

to

An entity name shall not contain two or more consecutive SPACE characters or consecutive HYPHEN-MINUS characters or a Digit preceded by a SPACE character.

**Accepted in principle**

*This can only be applied to characters, NUSIs, and block names. Collection names may have digits after the space characters. So the change can be something like:*

An entity name shall not contain two or more consecutive SPACE characters or consecutive HYPHEN-MINUS characters. Furthermore, except for collection names, an entity name shall not contain a Digit (DIGIT ZERO through DIGIT NINE) preceded by a SPACE character.

**T.3. (Editorial) Clause 30.3 Pointers to code charts and list of character names**

We suggesting adding annotations explaining the usage of characters used as medieval abbreviations and characters used in phonetic transcription in the Latin Extended-D block.

**Proposed change:**

U+A741 LATIN SMALL LETTER K WITH STROKE

\* abbreviation for Latin karta, kartula, kalendas, and for Old Norse konungr

U+A743 LATIN SMALL LETTER K WITH DIAGONAL STROKE

\* abbreviation for Latin kalendas and karta

U+A745 LATIN SMALL LETTER K WITH STROKE AND DIAGONAL STROKE

\* abbreviation for Latin karta(m)

U+A749 LATIN SMALL LETTER L WITH HIGH STROKE

\* abbreviation for Latin el, ul, vel, for Norse eða, for Old English oþþe, and for Irish nó

U+A74B LATIN SMALL LETTER O WITH LONG STROKE OVERLAY

\* abbreviation for Latin obiit

U+A751 LATIN SMALL LETTER P WITH STROKE THROUGH DESCENDER

\* abbreviation for Latin per, par, por, and for Cornish pri-

U+A753 LATIN SMALL LETTER P WITH FLOURISH

\* abbreviation for Latin pro, por

U+A755 LATIN SMALL LETTER P WITH SQUIRREL TAIL

\* abbreviation for Latin prae

U+A757 LATIN SMALL LETTER Q WITH STROKE THROUGH DESCENDER

\* abbreviation for Latin quam, que, quan-, qui-, and for Irish ar

U+A759 LATIN SMALL LETTER Q WITH DIAGONAL STROKE

\* abbreviation for Latin quod, qui, que, for Middle English quopþ, and for Irish ar

U+A75F LATIN SMALL LETTER V WITH DIAGONAL STROKE

\* abbreviation for Latin uirgo, and for Portuguese ver-, etc.

U+A765 LATIN SMALL LETTER THORN WITH STROKE

\* abbreviation for Old Norse þat, þess, þor-, þæt, and for Old English þæt

\* Old Norse glyph form has a horizontal stroke, whereas the Old English glyph form has a diagonal stroke

U+A767 LATIN SMALL LETTER THORN WITH STROKE THROUGH DESCENDER

\* abbreviation for Old Norse þeim, þeir

U+A77A LATIN SMALL LETTER INSULAR D

\* voiced dental spirant in obsolete Cornish and Welsh phonetic usage

U+A77F LATIN SMALL LETTER TURNED INSULAR G

\* velar nasal in obsolete Cornish phonetic usage

U+A781 LATIN SMALL LETTER TURNED L

\* voiced lateral spirant in obsolete Welsh phonetic usage

U+A787 LATIN SMALL LETTER INSULAR T

\* voiceless dental fricative in obsolete Welsh phonetic usage

**Not accepted**

*UK is invited to submit a new contribution with fewer details.*

## **USA: Positive with comments**

The U.S. National Body is voting Yes with comments on the following SC2 ballot: SC2 N4125: FCD 10646, Information technology -- Universal Coded Character Set (UCS).

### **Technical comments:**

#### **T.1. CJK Multi-column charts**

The U.S. appreciates the difficulty of reviewing the CJK multi - column code charts, however we do not agree with resolution IRG M33.6 (third paragraph) and we do not want to revert to the single column format for any of the CJK blocks, including Extension B.

#### **Noted**

#### **T.2. CJK compatibility ideograph charts**

The U.S. requests the CJK compatibility ideographs code charts (both BMP and SIP) be presented in multi - column format. As most characters have only one or two sources, the organization adopted for Extension C would be appropriate.

#### **Not accepted**

*This will not be accommodated in the FDIS. It will be considered for a future amendment/edition. It is however possible to document the deficiency concerning the chart representation of some CJK Unified Ideographs that such a change would address. The following note will be added after the first paragraph of sub-clause 23.3.*

NOTE – The presentation of the twelve CJK Unified Ideographs included in the CJK COMPATIBILITY IDEOGRAPHS block does not follow this presentation model. They are presented according to 23.5. This may be modified in future version of this International Standard.

#### **T.3. CJK Unified ideographs source reference update**

The U.S. requests the following corrections be made to CJKU\_SR.txt, as referenced in IRG N1654:

(unless noted, ‘add’ and ‘remove’ instructions are coupled)

U+5807 add V1 - 652F

U+6176 replace V2 - 8C30 by V2 - 8C2F (unlike what IRG N1652 says, V2 - 8C2F was not part of U+8C30 source or any other char)

U+61A6 replace V2 - 8C31 by V2 - 8C30 (new)

U+61AA replace V2 - 8C32 by V2 - 8C31 (new)

U+61AE replace V2 - 8C33 by V2 - 8C32 (partially new, IRG N1652 incorrectly says that V2 - 8C33 was part of U+8C30 source)

U+61E2 replace V2 - 8C34 by V2 - 8C33

U+61E7 replace V2 - 8C35 by V2 - 8C34

U+61F2 replace V2 - 8C36 by V2 - 8C35

U+61FA replace V2 - 8C37 by V2 - 8C36

U+6258 replace V2 - 8C38 by V2 - 8C37

U+6259 replace V2 - 8C39 by V2 - 8C38

U+627A replace V2 - 8C3A by V2 - 8C39

U+627E replace V2 - 8C3B by V2 - 8C3A

U+627F replace V2 - 8C3C by V2 - 8C3B

U+6294 replace V2 - 8C3D by V2 - 8C3C

U+62A9 replace V2 - 8C3E by V2 - 8C3D

U+62B1 replace V2 - 8C3F by V2 - 8C3E

U+62B6 replace V2 - 8C40 by V2 - 8C3F

U+62C4 replace V2 - 8C41 by V2 - 8C40

U+62C5 replace V2 - 8C42 by V2 - 8C41  
U+62C6 replace V2 - 8C43 by V2 - 8C42  
U+62D0 replace V2 - 8C44 by V2 - 8C43  
U+62D1 replace V2 - 8C45 by V2 - 8C44  
U+62D4 remove V1 - 5669  
U+62DE add V2 - 8C45  
U+62E8 add V1 - 5669  
U+62FC replace V2 - 8C47 by V2 - 8C46 (V2 - 8C46 is a newly mapped V source)  
U+6303 replace V2 - 8C48 by V2 - 8C47  
U+630C replace V2 - 8C49 by V2 - 8C48  
U+6348 replace V2 - 8C4A by V2 - 8C49  
U+6350 add V2 - 8C4A  
U+6492 remove V1 - 575F  
U+6BBB add V1 - 5B47  
U+6BBC remove V1 - 5B47  
U+6BC0 remove V1 - 5B49  
U+6BC1 add V1 - 5B49  
U+7B04 add V1 - 6172  
U+7B53 remove V1 - 6172  
U+7E06 remove V3 - 3664 (not added elsewhere)  
U+837C stays at V1 - 6523 (IRG N1652 says to replace by V3 - 3739, but is not in mapping spreadsheet)  
U+83EB remove V1 - 652F  
U+8C30 unchanged (see notes for U+6176 and U+61AE)  
U+22B31 remove V2 - 7671 (not added elsewhere)  
U+26BEC remove V3 - 3739 (not added elsewhere, see note for U+837C)  
U+2ABAB add V1 - 575F

**Accepted**