

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

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Comments were received from Ireland, Japan, UK, and USA. The following document is the disposition of those comments. The disposition is organized per country.

Note – With some minor exceptions, 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.

Based on these dispositions, all countries have now positive votes.

## **Ireland: Negative**

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

### **Editorial comments**

#### **E1. Page 1254: Row 10C8: Old Hungarian.**

After consultation with colleagues in Hungary, Ireland recognizes that modern orthographic use of a few of the Old Hungarian letters differs somewhat from that of the primary-source manuscripts. Ireland requests the addition of the following informative notes to clarify some modern usage:

- 10CA7 OLD HUNGARIAN CAPITAL LETTER ENT
  - *also used for Ant and Int*
- 10CAC OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG UE = Ū
  - *also used for Ö*
  - *used for U with double acute in Sándor Forrai's orthography*
- 10CAD OLD HUNGARIAN CAPITAL LETTER RUDIMENTA UE = Ū, U with double acute
  - *used for Ū in Sándor Forrai's orthography*
- 10CE7 OLD HUNGARIAN SMALL LETTER ENT
  - *also used for ant and int*
- 10CEC OLD HUNGARIAN SMALL LETTER NIKOLSBURG UE = ũ
  - *also used for ö*
  - *used for u with double acute in Sándor Forrai's orthography*
- 10CED OLD HUNGARIAN SMALL LETTER RUDIMENTA UE = ü, u with double acute
  - *used for ü in Sándor Forrai's orthography:*

### **Accepted**

#### **E2. Page 1254: Row 10C8: Old Hungarian.**

Ireland believes that the glyphs of two letters (four characters) should be modified slightly. 10C8B OLD HUNGARIAN CAPITAL LETTER EE and 10CCB OLD HUNGARIAN SMALL LETTER EE are the casing forms of a modern letter, devised in the 20th century, and their glyphs should be shorter, to harmonize with the preferences of modern users. The glyph for 10C93 OLD HUNGARIAN CAPITAL LETTER EK and 10CD3 OLD HUNGARIAN SMALL LETTER EK is drawn rather shorter than other letters in the Nikolsburg and Rudimenta manuscripts (see N4268R figures 4 and 5) but in the Bologna manuscript and elsewhere in the Rudimenta it is drawn more or less the same height as other letters (see N4268R figures 2 and 3). Modern users tend to prefer the larger letter, and as this shape is attested in the primary materials as well, Ireland requests that the glyphs of the four characters be changed to the glyphs as shown below, namely:

⌚ From this set of glyphs:  to this set of glyphs: 

### **Accepted**

*A new font with these characters has been provided to the editor.*

**As a result of these dispositions, Ireland changed its vote to YES**

## **Japan: Positive with comments**

### **Technical, and Editorial comments (noted as T or E)**

#### **E1. 2.2 and many others**

First character of “Clause” is capitalized

##### Proposed change by Japan

Change to lower case character.

##### **Not accepted**

*Checking the ISO Directives Part2 ‘Rules for the structure and drafting of International Standards’ themselves, there are no clear indication of the preferred style and the text of the directives never refers to its own clauses, only sub-clauses. All references using non numeric references have title case on their names, such as ‘see Annex X’ or ‘see Example’. However the ISO Directives Part 1 text uses twice ‘see [ ] Clause x’. Therefore references to clauses will stay as it is.*

#### **T2. Sub-clause 23.2 – CJKsrc.txt file**

In CJKsrc.txt file, UCS code point is described as the format of “U+hhhh” or “U+hhhhh”. This is not consistent with other UCS code point format “hhhh” or “hhhhh”, for example, in 22.4.)

##### Proposed change by Japan

Change the format to “hhhh” or “hhhhh” in CJKsrc.txt.

##### **Not accepted**

*While it is true that this file uses a different format for UCS code point than other data file as noted by Japan, nothing prevents the usage of the U+hhhh or U+hhhhhh which is an allowed syntax per sub-clause 6.5 ‘Short Identifiers for code points (UIDs)’. In this case, the syntax choice is determined by the desire to share the same format as the Unicode Han database (Unihan). A note will be added to that effect in the Table 5 providing the format details.*

NOTE 4 – The UCS code points are using the U+ prefix for UCS short identifiers in the format included in the source reference file to be identical to the similar file included in the Unicode Standard.

#### **T3. Sub-clause 31.3 – Code Chart for CJK Extension E**

(This is to confirm the resolution IRG M41.2 from IRG meeting #41 in Tokyo.)

As described in IRG N1957, there are glyph errors in CJK Extension E code table as for U+2C0D1 and U+2C7D3.

##### Proposed change by Japan

Make sure to correct the glyphs shown as IRGN1977 with reflecting the feedback to this document if any.

##### **Accepted**

#### **E4. Annex A**

The title of A.6.12 is “312 Unicode 6.3”.

##### Proposed change by Japan

Change to “313 Unicode 6.3”.

##### **Accepted**

*This was a typo.*

#### **E5. Annex F**

“sub-clause” has a dash, although other “subclause” does not.

Proposed change by Japan

Keep them consistent.

**Accepted**

*All will be changed to ‘sub-clause’.*

## **T6. Annex S**

(This is same comment as what JP commented at CD ballot of ISO/IEC 10646 4th edition.)

The following pair taken from S.3 is for a source separation caused by T source.

媿 媿                    T  
5B0E 5B14

This figure should be taken from 2003 edition in order to preserve the original intention from the early days as follows.

媿 媿                    T  
5B0E 5B14

Here, a shape with a dot is on 5B14, and that without is on 5B0E.

Proposed change by Japan

Use the figure from 2003 edition.

**Accepted in principle**

*While historically T source for 5B14 had an extra stroke it has lost it in recent published versions of the standard (TCA-CNS 11643-1992 2<sup>nd</sup> plane) is shown below.*

*Annex S.3 was created with the original glyph with the additional stroke. The new representation shows characters that are identical (not just unifiable but de facto unified). As such it is not a good example of the source separation rule. If the glyphs had been as of now when the unification process was done for these characters it would have probably resulted in the encoding of a compatibility character.*

*The preferred solution expressed by Taiwan at this point is to change back the representative glyph for 5B14 (T-source) to a character with an extra stroke such as 媿 (this in fact the G column glyph but will be updated to a T source original glyph when available). This leaves the Big-5 glyph representation out of sync with the two others. But because Big-5 does not have an entry for 5B0E (the G-source glyphs for 5B0E/5B14 are considered identical for the Big-5 user community making use of these characters), it is acceptable to leave it as it is.*

5B0E 女 38.12	媿 G3-3D5A	媿 T3-4B5F	媿 K2-2D42
5B0F 女 38.12	媿 G5-4063	媿 HB2-E560	媿 K2-2D43
5B10 女 38.13	媿 G3-3C66	媿 HB2-E957	
5B11 女 38.13	媿 GE-273F	媿 H-964B	
5B12 女 38.13	媿 G3-3C55	媿 T3-5053	媿 K2-2D44
5B13 女 38.13	媿 GE-2740	媿 HB2-E956	媿 K2-2D45
5B14 女 38.13	媿 GE-2741	媿 HB2-E955	

## **United Kingdom: Positive with comments**

### **Editorial comments:**

#### **E1. 4.12 code unit sequence – NOTE 2,**

“Unlike previous editions of ISO/IEC 10646, this International Standard no longer uses implementation levels.”

Not all previous editions use implementation levels (2nd and 3rd eds. do not).

#### Proposed change by UK

Reword as "Unlike some previous editions of ISO/IEC 10646, this International Standard does not use implementation levels." or similar.

#### **Accepted in principle**

*This can be changed to* “Since its second edition: ISO/IEC 10646:2011, this International Standard does not use implementation levels.”

#### **E2. 16.6.3 Ideographic variation sequences – NOTE 2,**

“This International Standard incorporates by reference the variation sequences listed in version 2010-11-14 of the Ideographic Variation Database, as described at <http://www.unicode.org/ivd/data/2010-11-14/>.”

The version of the IVD referenced should be 2012-03-02.

#### Proposed change by UK

Amend to “This International Standard incorporates by reference the variation sequences listed in version 2012-03-02 of the Ideographic Variation Database, as described at <http://www.unicode.org/ivd/data/2012-03-02/>.”

#### **Accepted**

#### **E3 – 21 Normalization forms – NOTE 4,**

“Note 4” is followed by two hyphens.

#### Proposed change by UK

Remove the extra hyphen.

#### **Accepted**

#### **E4 – 24.2 Name formation**

"An entity names shall consist only of the following characters".

“entity names” should be singular.

#### Proposed change by UK

Change to "An entity name shall consist only of the following characters".

#### **Accepted**

#### **E5 – 31.3 Character names list**

"Standardized variation sequences preceded by U+2053 ~ SWUNG DASH, when this character is used as a base character in such a variation sequence."

The character given between “U+2053” and “SWUNG DASH” is U+007E ~ TILDE not U+2053 ~ SWUNG DASH. To avoid confusion a swung dash should be used here, as is the case in the code charts.

Proposed change by UK

Change to "Standardized variation sequences preceded by U+2053 ~ SWUNG DASH, when this character is used as a base character in such a variation sequence."

**Accepted**

*Note that in many fonts, the swung dash is very similar in appearance both in size and vertical alignment to the tilde. However a true swung dash (slightly wider) will be used in the future.*

**E6 – 16.6.2, 22.4, 23.2, A.4.2, Annex G, and Annex R – content linked**

These sections all specify that "The content linked to is a plain text file, using ISO/IEC 646-IRV characters with LINE FEED as end of line mark".

In fact all the linked files (Allnames.txt, CJKSrc.txt, EmojiSrc.txt, HanguSy.txt, JIExt.txt, NUSI.txt, and UCSVariants.txt) are CR/LF terminated, and one file (NUSI.txt) has a BOM.

Proposed change by UK

Ensure that all linked files are terminated with LINE FEED only and do not contain a Byte Order Mark.

**Accepted in principle**

*It is easier to change these to say CARRIAGE RETURN/LINE FEED because this is the way they are produced. The BOM will be removed from the NUSI.txt file.*

## USA: Negative

### Technical comments:

#### **TE.1. Annex A.5.9 288 Multilingual Latin Subset**

The U.S. requests a note be added to the text of A.5.9 288 MULTILINGUAL LATIN SUBSET, clarifying that the scope of this collection is limited to that defined in ISO/IEC 9995-3, and does not cover the repertoire needed for all languages using Latin-based orthographies. The 288 MLS collection covers the letters used to write some Native American languages, for example, but does not include U+0245 LATIN CAPITAL LETTER TURNED V and U+028C LATIN SMALL LETTER TURNED V, used by Oneida and Tepehuan.

#### Proposed change by US:

Add a note that this collection is limited to ISO/IEC 9995-3, and does not cover all languages using Latin-based orthographies.

#### Accepted in principle

*Having no quick access to the ISO/IEC 9995-3 itself, the editor relied on the information conveyed in <http://www.open-std.org/jtc1/sc35/wg1/docs/info1-9995-3.pdf> to determine that indeed that the 2010 edition refers to that content. The note would say:*

NOTE – The collection 288 MULTILINGUAL LATIN SUBSET does not provide an exhaustive coverage of all languages using Latin-based orthographies. It is referenced by ISO/IEC 9995-3:2010 Keyboard layouts for text and office systems -- Part 3: Complementary layouts of the alphanumeric zone of the alphanumeric section.

#### **TE.2. Cuneiform**

The U.S. requests the addition of one character to the Cuneiform block, U+12399 CUNEIFORM SIGN U U, as documented in WG2 N4493. This character was left out in error, according to a co-author of the original cuneiform proposals.

#### Proposed change by US:

Add the character.

#### Accepted

*The repertoire of the Cuneiform block: 12000.123FF was revised in Amendment 2 (not yet published).*

#### **TE.3. Latin Extended-E**

The U.S. requests the boundaries of the Latin Extended-E block be changed from 9 columns (U+AB30-U+ABBF) to 4 columns (U+AB30-U+AB6F). This requested change will result in a block of 5 contiguous columns, which would enable a set of 80 characters to be encoded in the BMP. This extended range would make it possible to include, for example, characters in a Cherokee Supplement block, so that the entire script could be located in the BMP. If this comment and te.4 are accommodated, we will change our vote to Yes.

#### Proposed change by US:

Change the end of the Latin Extended-E block from U+ABBF to U+AB6F..

#### Accepted

*The block Latin Extended-E is relatively recent (added per Amendment 1 in 2013) and only populated up to U+AB63. Furthermore, blocks are not immutable. However there is a collection 165 LATIN EXTENDED E AB30-ABBF, but it is not fixed, so it is still possible to reduce its size.*

#### **TE.4. Siddham**

The U.S. requests the 6 Siddham letter variants (U+115E0-U+115E5) be removed, since alternative approaches have been raised (such as in WG2 N4490 and N4486), and questions remain on how to best

represent these letters. For these reasons, we deem these characters not mature for encoding. If this comment and te.3 are accommodated, we will change our vote to Yes.

Proposed change by US:

Remove the 6 Siddham letter variants (U+115E0-U+115E5).

**Partially accepted**

*The 4 letters (U+115E0-U+11E53) were not controversial and can stay in the 4<sup>th</sup> edition. The vowel variant signs (11E54..11E55) need more discussion and will be included in Amendment 1 for further technical review.*

## **TE.5. Miscellaneous Symbols and Arrows**

The U.S. requests a formal name alias be added for U+2B81 UPWARDS TRIANGLE-HEADED ARROW LEFTWARDS DOWNWARDS OF TRIANGLE-HEADED ARROW.

The name alias should be: UPWARDS TRIANGLE-HEADED ARROW LEFTWARDS OF DOWNWARDS TRIANGLE-HEADED ARROW. The formal name alias will correct an error in the names list.

Proposed change by US:

Add the formal name alias for U+2B81 as noted

**Accepted in principal**

*Because the addition was very recent, it was still possible to fix the name (instead of adding a name alias).*

## **Editorial comments:**

### **E.1. Tamil**

The U.S. would prefer the Lohit Tamil font be used for Tamil in the 4th edition of ISO/IEC 10646, as requested in WG2 N4476. (The font can be seen in the Tamil and Tamil Supplements blocks in PDAM1.) The new font is more aesthetically pleasing than the current font.

Proposed change by US:

Change the font.

**Accepted**

*The US is referring to Amendment 1 to the 4<sup>th</sup> edition, not Amendment 1 to the previous edition.*

### **E.2. Latin Extended-E**

The italicized comment above U+AB60 should be modified slightly from:

“These letters were used 1917-1927 in the official IPA-based Latin orthography of that era”

to:

“These letters were used from 1917 to 1927...”

Proposed change by US:

Adjust the wording as described.

**Accepted**

### **E.3. Miscellaneous Symbols and Arrows**

Correct the spelling of “preferredd” in the italicized comment above U+2BEC in the names list.

Proposed change by US:

Correct the spelling as noted.

**Accepted**

#### **E.4. Sharada**

The first single-quote in the annotation at U+111CC (“used for writing ‘matra-vowels’”) should be turned the other direction.

Proposed change by US:

Fix the single quote as noted.

**Accepted**

#### **E.5. Musical symbols**

Remove period after annotation on U+1D1DE MUSICAL SYMBOL KIEVAL C CLEF.

Proposed change by US:

Remove the period after the annotation on U+1D1DE.

**Accepted**

#### **E.6. Siddham**

The italicized comment at the top of the names list, “The script is also known by the names ‘Siddhamatrika’ and ‘Kutila’” should have the words “and ‘Kutila’” removed, since “Kutila” is too generic a term. ‘Kutila’ means ‘curled, bent’ and is found, for example, in Nepal to refer to Rañjana.

Proposed change by US:

Remove “and Kutila” from the italicized note at the top of the names list for Siddham, and change “names” to “name”.

**Accepted**

#### **E.7. Ahom**

We recommend the font in the Ahom block be reviewed to correct clipping and winding errors.

Proposed change by US:

Review and fix the font for winding errors and clipping.

**Accepted**

#### **E.8. Early Dynastic Cuneiform**

We recommend the glyphs in the Early Dynastic Cuneiform be fixed so they do not extend outside the box area for the glyphs (cf. U+12484, U+12486, U+124AB, U+12535, etc.).

Proposed change by US:

Review and fix the font so the glyphs do not extend outside the glyph boxes in the charts.

**Accepted in principle**

*These glyphs are particularly challenging for display in a grid as done in the code charts. The project will perform best effort in that regard.*

As a result of these dispositions, the US changed its vote to YES