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Coded Character Set
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Comments were received from Germany, Japan, Mongolia, 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***.**

Germany: Negative

Technical comment

T1. Page 1571: Row 1F3: Miscellaneous Symbols and Pictographs

The CD contains the following character in the block “Miscellaneous Symbols and Pictographs”:
1F5A4 BLACK HEART
However, “BLACK“ as part of a Unicode character name uses to mean “filled” (usually in contrast to WHITE meaning “hollow”).
As the discussion of the character 1F5A4 showed that in this case in fact the color “black” is to be denoted, Proposed change by Germany
Germany requests the character to be named unmistakable, e.g. 1F5A4 BLACK-COLORED HEART which states explicitly that the color is referenced.

WG2 discussion

There are many encoded characters with names in which BLACK can mean either “filled” or black. The WHITE situation is quite different because the usual background to represent the code chart is white, so a purely white glyph is not possible. Starting to use BLACK-COLORED and/or BLACK-COLORED to differentiate the usage cases seems extreme. It should also be noted that the proposed addition for 1F5A4 has the following annotation that clarifies the intent:

- Unequivocally represented as black in all variants.

Japan: Positive with comments

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

Technical comments

T1. Page 31, Sub-clause 23.1 List of source references.

Out of CJK J source characters having JIS X0212 source and JA source, the source reference of the characters also encoded in JIS X0213 are changed. In order to represent the meaning of source reference clearly, JNB would like to change the “index” of each source reference. For example, from “J3B” to “J13” as follows.
J3B JIS X 0213:2004 level-3 characters replacing J1 characters
to
J13 JIS X 0213:2004 level-3 characters replacing J1 characters
Here, “1” of “J13” above means it was originally J1 source character and “3” of “J13” means it is encoded in J3 source afterward.
Proposed change by Japan.
Please change as follows.
J3B JIS X 0213:2004 level-3 characters replacing J1 characters
change to
J13: JIS X 0213:2004 level-3 characters replacing J1 characters

J3C JIS X 0213:2004 level-3 characters replacing JA characters
change to
JA3: JIS X 0213:2004 level-3 characters replacing JA characters

J4B JIS X 0213:2004 level-3 characters replacing J1 characters
change to
J14: JIS X 0213:2004 level-4 characters replacing J1 characters

J4C JIS X 0213:2004 level-3 characters replacing JA characters
change to
JA4 JIS X 0213:2004 level-4 characters replacing JA characters

Newly add
J13A: JIS X 0213:2004 level-3 character addendum from JIS X 0213:2000 level-3 replacing J1 characters"
Propose acceptance
The only change that requires clarification is for the newly added J13A. It is the understanding of the editor that this new source only concerns two characters: U+7626 and U+7E6B which would see their source go from a J3A type to a J13A type. The other 8 characters having now J3A sources (U+4FF1, U+525D, U+541E, U+5653, U+59F8, U+5C5B, U+5E77, and U+20B9F) keep that value.

T2. Page 33, Table 5 Format details of the tags used in the source reference file for CJK ideographs

As commented above on subclause 23.1, the source reference information in “Third field format” column should be changed.
Proposed change by Japan.
Please replace
“(J0-hhhh), (J1-hhhh), (J3-hhhh), (J3A-hhhh), (J3B-hhhh), (J3C-hhhh), (J4-hhhh), (J4B-hhhh), (J4C-hhhh), (JA-hhhh), (JARIB-hhhh), (JH-xxxxxx), (JH-xxxxxxS), (JMJ-dddddd), or (JK-ddddd)”
with
“(J0-hhhh), (J1-hhhh), (J13-hhhh), (J13A-hhhh), (J14-hhhh), (J3-hhhh), (J3A-hhhh), (J4-hhhh), (JA-hhhh), (JA3-hhhh), (JA4-hhhh), (JARIB-hhhh), (JH-xxxxxx), (JH-xxxxxxS), (JMJ-dddddd), or (JK-ddddd)”
Propose acceptance

T3. Page 53, Clause 32 – "CJK Unified Ideographs" and "CJK Unified Ideographs Extension A"

Same as above, the source reference information in the code charts of "CJK Unified Ideographs" and "CJK Unified Ideographs Extension A" should be changed.

Proposed change by Japan.

Please change the source reference information in the code charts.

- From J3B to J13
- From J3C to JA3
- From J4B to J14
- From J4C to JA4
- From J3BA to J13A

Propose acceptance in principle

The last change is incorrect, there is no J3BA sources; J13A would be a new source. Two of the current J3A sources (identified in disposition of the comment T.1 would become J13A.

T4. Page 2565, Annex A.4.2 371 JIS 2004 IDEOGRAPHICS EXTENSION

Same as above, the source reference information should be changed.

Proposed change by Japan.

Please change

"The code points of this collection are identified by J3 Kanji J sources (J3, J3A, J3B, and J3C) and J4 Kanji J sources (J4, J4B, and J4C) in the Source Reference file for CJK Unified Ideographs (CJKSrc.txt)."

to

"The code points of this collection are identified by J3 Kanji J sources (J3, J3A, J13, J13A and JA3) and J4 Kanji J sources (J4, J14 and JA4) in the Source Reference file for CJK Unified Ideographs (CJKSrc.txt)."

Proposed acceptance

T5. Page 2566, Annex A.4.3, A.4 (collection 373 and 373)

Same as above, the source reference information should be changed.

Proposed change by Japan.

Please change

"The code points of this collection are identified by the J1 Kanji J sources, the J3B Kanji J sources, and the J4B sources in the Source Reference file for CJK Unified Ideographs (CJKSrc.txt)."

to

"The code points of this collection are identified by the J1 Kanji J sources, the J13 Kanji J sources, the J13A Kanji J sources and J14 Kanji J sources in the Source Reference file for CJK Unified Ideographs (CJKSrc.txt)."

And change

"The code points of this collection are identified by the JA Kanji J sources, the J3C Kanji J sources, and the J4C sources in the Source Reference file for CJK Unified Ideographs (CJKSrc.txt)."

to

"The code points of this collection are identified by the JA Kanji J sources, the JA3 Kanji J sources, and the JA4 Kanji J sources in the Source Reference file for CJK Unified Ideographs (CJKSrc.txt)."

Proposed acceptance

T6. CJKSrc.txt file

Same as above, the source reference information should be changed.

Proposed change by Japan.

Please correct the source reference information in "CJKSrc.txt" file.

- From J3B to J13
- From J3C to JA3
- From J4B to J14
- From J4C to JA4
- From J3BA to J13A

Proposed acceptance in principle

The last change is incorrect, there is no J3BA sources. J13A is a new source.

T7. Page 53, Clause 32 Soyombo and Zanabazar Square blocks

For Zanabazar Square script and Soyombo script, an expert meeting is planned to be held in Tokyo during Oct/16-17. JNB objects to the standardization of these scripts without the explicit consensus with Mongolian experts.

Proposed change by Japan.

JNB requests to exclude Zanabazar Square and Soyombo scripts.

WG2 discussion

T8. Page 53, Clause 32 Nushu block

The Nushu block contains the problematic characters as described in WG2 N4610.

Proposed change by Japan.

JNB requests to follow the repertoire proposed in WG2 N4652.

WG2 discussion

See also comments from U.K.

In WG2 N4656 (Disposition of comments on PDAM2.2), the U.K. NB provided a detailed answer on the points raised by N4610 which it is useful to repeat here:

General points

A. The preferred glyph form for a given Nüshu character may vary from one Nüshu user to another, and there is no good reason to prioritise the preferences of one user over another user. Therefore, we do not consider that it is acceptable to change the glyph shape of a proposed character simply because the preferred glyph shape for one or more informants for N4610 differs from the representative glyph shape in the Chinese proposal. In cases where there is disagreement over the preferred glyph, we consider that an acceptable solution would be to keep the proposed glyph and define variation sequences for alternative glyph forms.

B. The inability of one or more informants for N4610 to recognise a particular character does not indicate that it is not required for encoding. There is no reason to remove any Nüshu character from this amendment if it is attested in the source NSDB.

C. Where a character unifies several variants with different stroke counts, NSDB orders the character by the stroke count of one particular variant. However, in some cases the glyph used in the code chart is a different variant with a different stroke count, with the result that the character is ordered under the wrong stroke count in the code chart. We have noted all such examples that we have found during our review in "Additional Comments".

D. In some cases the code chart glyph is not ideal, and we have had to refer to NSDB and/or NSYZBJ in order to determine how the character should be correctly drawn (this is case for 1B1DA and 1B1F2 for example). We also note that many characters with a diagonal box are drawn with a gap between the strokes at the top (e.g. 1B159), when no so such gap is shown for these characters in NSDB, NSYZBJ, or Chiang. We further note that the rotational angle of some characters (e.g. 1B15F and 1B1B5) differs significantly from the glyph examples given for the corresponding character in NSDB, NSYZBJ and Chiang. We have not individually indicated such minor glyph issues as we suppose that they fall within the acceptable range of glyph variation for the character, but we do think that they may cause problems for font designers.

Response to comments in N4610

1B108 : The representative glyph shape is consistent with NSDB (p. 36), NSYZBJ (p. 27), and Chiang (p. 190). No good reason to change the glyph shape.

1B117 : The character and glyph shape is attested in NSDB (p. 37), NSYZBJ (p. 141), and Chiang (p. 173). Do not remove.

1B11F : We agree that the glyph form for 1B11F in PDAM2.2 is incorrect, and should have a short vertical stroke instead of a circle, as shown in NSDB, NSYZBJ and Chiang (p. 148). On the other hand i^5 (similar to the

glyph for 1B11F in PDAM2.2) is already encoded at 1B14D and does not need further consideration. Correct the glyph for 1B11F to reflect the shape shown in NSDB.

1B124 : The character and glyph shape is attested in NSDB (p. 38), NSYZBJ (p. 60), and Chiang (p. 192). Keep the character and representative glyph shape, and consider adding a Variation Sequence (or sequences) for the alternative glyph(s) if necessary in the future.

1B13A : The character and glyph shape is attested in NSDB (p. 39), NSYZBJ (p. 27), and Chiang (p. 187). Keep the character and representative glyph shape, and consider adding a Variation Sequence for the alternative glyph if necessary in the future.

1B13B : The character and glyph shape is attested in NSDB (p. 39), NSYZBJ (p. 28), and Chiang (pp. 189–190). Keep the character and representative glyph shape, and consider adding a Variation Sequence for the alternative glyph if necessary in the future. However, we agree that the stroke count for the representative glyph should be 7 strokes not 5 strokes, so reorder the character under 7 strokes.

1B13F : ku^{21} is encoded at 1B115, and tɕ‘ie^{44} is encoded at 1B13F., so there is no good reason to remove either character. Variation Sequences may be added for alternative glyphs for either of these characters if necessary in the future.

1B147 : No good reason to change the glyph for this character. A Variation Sequence may be added for the alternative glyph if necessary in the future.

1B148 : No good reason to change the glyph for this character. A Variation Sequence may be added for the alternative glyph if necessary in the future.

1B149 : No good reason to change the glyph for this character. A Variation Sequence may be added for the alternative glyph if necessary in the future.

1B14F : The character and glyph shape is attested in NSDB (p. 40) and NSYZBJ (p. 81). Keep the character and representative glyph shape, and consider adding a Variation Sequence for the alternative glyph if necessary in the future.

1B156 : We agree that evidence for the disunification of 1B156 and 1B157 is not compelling, but we see no harm in keeping 1B157. Therefore keep both 1B156 and 1B157.

1B15E : No good reason to change the glyph for this character. A Variation Sequence may be added for the alternative glyph if necessary in the future.

1B15F : The character and glyph shape is attested in NSDB (p. 41), NSYZBJ (p. 120), and Chiang (p. 154). Keep the character and representative glyph shape, and consider adding a Variation Sequence for the alternative glyph if necessary in the future.

1B166 : The character and glyph shape is attested in NSDB (p. 41), NSYZBJ (p. 141), and Chiang (p. 173). Keep the character and representative glyph shape.

1B172 : The character and glyph shape is attested in NSDB (p. 42), NSYZBJ (p. 37), and Chiang (p. 215). Keep the character and representative glyph shape.

1B178 : No good reason to change the glyph to the 10-stroke form, which could be defined as a variation sequence in the future if required. However, correct the glyph to remove the extra dot in the middle (see comment on 1B178 below).

1B182 : The character and glyph shape is attested in NSDB (p. 43), NSYZBJ (p. 89), and Chiang (p. 137). Keep the character and representative glyph shape.

1B183 : The character and glyph shape is attested in NSDB (p. 43), NSYZBJ (p. 91), and Chiang (p. 145). Keep the character and representative glyph shape.

1B18A : The character and glyph shape is attested in NSDB (p. 43), NSYZBJ (p. 100), and Chiang (p. 174). Keep the character and representative glyph shape.

1B190 : The character and glyph shape is attested in NSDB (p. 43), NSYZBJ (p. 117), and Chiang (p. 192). Keep the character and representative glyph shape.

1B193 : The character and glyph shape is attested in NSDB (p. 43) and NSYZBJ (p. 122). Keep the character and representative glyph shape.

1B194 : No good reason to change the glyph for this character. A Variation Sequence may be added for the alternative glyph if necessary in the future.

1B19F : The character and glyph shape is attested in NSDB (p. 44), NSYZBJ (p. 148), and Chiang (p. 149). Keep the character and representative glyph shape.

1B1AC : The character and glyph shape is attested in NSDB (p. 45), NSYZBJ (p. 38), and Chiang (p. 139). Keep the character and representative glyph shape.

1B1AD : The character and glyph shape is attested in NSDB (p. 45), NSYZBJ (p. 39), and Chiang (p. 162). Keep the character and representative glyph shape.

1B1AE : The character and glyph shape is attested in NSDB (p. 45) and NSYZBJ (p. 42). Keep the character and representative glyph shape.

1B1AF : The character and glyph shape is attested in NSDB (p. 45) and NSYZBJ (p. 43). Keep the character and representative glyph shape.

1B1B1 : The character and glyph shape is attested in NSDB (p. 45) and NSYZBJ (p. 45). Keep the character and representative glyph shape.

1B1BD : The character and glyph shape is attested in NSDB (p. 45), NSYZBJ (p. 90), and Chiang (p. 139). Keep the character and representative glyph shape.

1B1BE : The character and glyph shape is attested in NSDB (p. 45) and NSYZBJ (p. 97). Keep the character and representative glyph shape.

1B1C4 : No good reason to change the glyph for this character. A Variation Sequence may be added for the alternative glyph if necessary in the future.

1B1CA : The character and glyph shape is attested in NSDB (p. 46) and NSYZBJ (p. 131). Keep the character and representative glyph shape.

1B1D1 : The character and glyph shape is attested in NSDB (p. 46), NSYZBJ (p. 146), and Chiang (p. 214). Keep the character and representative glyph shape.

1B1D5 : The character and glyph shape is attested in NSDB (p. 46), NSYZBJ (p. 158), and Chiang (p. 195). Keep the character and representative glyph shape.

1B1F4 : The character and glyph shape is attested in NSDB (p. 48) and NSYZBJ (p. 98). Keep the character and representative glyph shape.

1B1F8 : The character and glyph shape is attested in NSDB (p. 48) and NSYZBJ (p. 108). Keep the character and representative glyph shape.

1B1FD : The character and glyph shape is attested in NSDB (p. 48), NSYZBJ (p. 117), and Chiang (p. 139). Keep the character and representative glyph shape.

1B213 : The character and glyph shape is attested in NSDB (p. 49), NSYZBJ (p. 158), and Chiang (p. 195). Keep the character and representative glyph shape.

1B219 : The character and glyph shape is attested in NSDB (p. 50) and NSYZBJ. Keep the character and representative glyph shape.

1B21B : The character and glyph shape is attested in NSDB (p. 50), NSYZBJ (p. 36), and Chiang (p. 215). Keep the character and representative glyph shape.

1B21F : No good reason to change the glyph for this character. A Variation Sequence may be added for the alternative glyph if necessary in the future.

1B220 : The character and glyph shape is attested in NSDB (p. 50) and NSYZBJ (p. 54). Keep the character and representative glyph shape.

1B223 : The character and glyph shape is attested in NSDB (p. 50) and NSYZBJ (p. 66). Keep the character and representative glyph shape.

1B22B : The character and glyph shape is attested in NSDB (p. 50), NSYZBJ (p. 100), and Chiang (p. 175). Keep the character and representative glyph shape.

1B233 : The character and glyph shape is attested in NSDB (p. 51), NSYZBJ (p. 118), and Chiang (p. 192). Keep the character and representative glyph shape.

1B23C : The character and glyph shape is attested in NSDB (p. 51), NSYZBJ (p. 146), and Chiang (p. 214). Keep the character and representative glyph shape.

1B23E : The character and glyph shape is attested in NSDB (p. 51) and NSYZBJ (p. 87). Keep the character and representative glyph shape.

1B252 : The character and glyph shape is attested in NSDB (p. 53) and NSYZBJ (p. 25). Keep the character and representative glyph shape.

1B25D : The character and glyph shape is attested in NSDB (p. 53) and NSYZBJ (p. 25). Keep the character, but modify the representative glyph shape as discussed in comment for 1B25D below.

1B25F : The character and glyph shape is attested in NSDB (p. 53) and NSYZBJ (p. 31), but modify the representative glyph shape as discussed in comment for 1B25F below.

1B27A : The character and glyph shape is attested in NSDB (p. 55), NSYZBJ (p. 132), and Chiang (p. 140). Keep the character and representative glyph shape.

1B27D : The character and glyph shape is attested in NSDB (p. 55), NSYZBJ (p. 154), and Chiang (p. 187). Keep the character and representative glyph shape.

1B288 : The character and glyph shape is attested in NSDB (p. 56) and NSYZBJ (p. 73). Keep the character and representative glyph shape.

1B28B : The character and glyph shape is attested in NSDB (p. 56) and NSYZBJ (p. 54). Keep the character and representative glyph shape.

The other points (mentioned as 'Additional Comments' from the U.K. NB in 4656 are not repeated here because a newer version of them was provided in their ballot to the CD. See comments T10 to T42 from UK.

T9. Page 53, Clause 32 CJK Unified Ideographs Extension F

CJK Unified Ideographs extension F should be revised to follow the recommendation from IRG (Special) Meeting #44 described in IRG N2084 "CJK_F1 Editorial Meeting Report."

Proposed change by Japan.

Please develop the code charts of CJK Unified Ideographs Extension F with the following changes.

- Delete the 49 characters proposed by SAT that are described in the section "IRGN2041 SAT dropping list" on IRG N2042.
- Change the radical of U+2DCD5 from "stone" to "fire", and then change the radical number and stroke count to "86.13".

Propose acceptance in principle

The 49 characters were already deleted as part of the 60 (49+11) characters removed as the disposition of comment N4656 (Chinese comment T1, UK comment T16, T17, and US comment TE 2. While the extension F was removed from Amendment 2 it was added back in the CD 5th edition with these 60 characters (including the 49 SAT characters) removed. The block was originally encoded in the range 2CEB0-2CDDB in PDAM 2.2 and was reduced to 2CEB0-2CD7F to take into account the 60 characters removed.

The change for the radical for U+2DCD5  *should be confirmed, neither radical (either stone or fire) are obvious choices.*

T10. "CJKSrc.txt" file

As commented above about CJK F, "CJKSrc.txt" should follow IRG recommendation.

Proposed change by Japan.

Delete the 49 characters proposed by SAT that are described in the section "IRGN2041 SAT dropping list" on IRG N2042.

Propose acceptance in principle

The 49 characters were already deleted as part of the 60 (49+11) characters removed as the disposition of comment N4656 (Chinese comment T1, UK comment T16, T17, and US comment TE 2.

T11. Page 2557 Annex A.1 Collections of coded graphics character

Because the collection

373 JAPANESE IT VENDORS CONTEMPORARY IDEOGRAPHS-1993

is fixed collection, “*” should be added after “see A.4.4”.
Proposed change by Japan.
Please change “see A.4.4” to “see A.4.4 *”.
Propose acceptance

T12. Page 2566, Annex A.4.3 372 JAPANESE IDEOGRAPHICS SUPPLEMENT
The number of characters that are common between the collections 371 and 372 is wrong.
Proposed change by Japan.
Please change
“NOTE – 2 742 characters are common between the collections 371 and 372.”
to
“NOTE – 2 743 characters are common between the collections 371 and 372.”
Proposed acceptance

T13. Page 2569, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015
The name of “390 MOJI-JOHO—KIBAN IDEOGRAPHS-2015” collection should reflect the publication date of this standard “ISO/IEC 10646:2016”.
Proposed change by Japan.
Please change the name of collection to “390 MOJI-JOHO—KIBAN IDEOGRAPHS-2016”.
Proposed acceptance in principle
The name should not contain an Em Dash between JOHO and KIBAN but instead a hyphen-minus (U+002D) and the name should read: “390 MOJI-JOHO-KIBAN IDEOGRAPHS-2016”. *See also comment E4.*

T14. Page 2570, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015
As mentioned in “Editor’s Note” on A.5.10, the file for the collection “JMJKI-2014.txt” does not contain CJK Unified Ideographs Extension F characters.
Proposed change by Japan.
Please replace “JMJKI-2014.txt” attached in CD text with the file that JNB is separately sending to project editor.
Note the characters after U+2CEB0 are CJK F characters.
Proposed acceptance in principle
The editor did not receive yet the file.

T15. Page 2570, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015
The name of “JMJKI-2014.txt” file should reflect the publication date of this standard “ISO/IEC 10646:2016”.
Proposed change by Japan.
Please change the name of file to “JMJKI-2016.txt”.
Proposed acceptance in principle

T16. Page 2599, Annex I.2 Syntax of an ideographic description sequence
“A coded stroke”, the character on the CJK STROKES block (U+31C0 - U+31EF), is proposed as one of DCs (Description Component). JNB thinks the characters on CJK STROKES should not be allowed to use as DC.
Proposed change by Japan.
Delete the item “a coded stroke, which consists of any coded character from the CJK STROKES block.”
Proposed change by Japan.
Delete the item “a coded stroke, which consists of any coded character from the CJK STROKES block.”
Proposed non acceptance
Japan made a similar argument for Amendment 2 to 10646 4th edition where this change was originally proposed. This was resolved in N4683. In that ballot, the comment from JNB had more details:

> JNB understands some characters such as 깡흥창 can be represented as IDS sequences if the CJK stroke (U+31E3 CJK STROKE Q) is allowed.
> However, we think the following impact negates the above merit.
> Since CJK STROKES are too elementary as a glyphic component to describe the structure of CJK Ideographs, there could be several variations of IDS for one ideograph character if using CJK STROKES. It would introduce

unexpected ambiguity into IDS. As one of practical usages for IDS, IRG has the procedure to verify if the proposed ideograph is not duplicated with encoded ideographs by comparing their IDSs. By introducing CJK STROKES as DC, it is difficult to verify because the difference on stroke information does not necessarily mean whether they should be unified or not.
Therefore, JNB thinks the characters on CJK STROKES should not be allowed to use as DC.

The following repeats the disposition made in N4683:

There are clearly arguments pro and con for allowing the CJK Strokes in DCs. However, the fact that some CJK Ideographs cannot be represented in their absence seems a compelling argument. To reiterate the argument made in the disposition for a similar comment made in page 6 of N4664 'Disposition of comments on PDAM2.3 to ISO/IEC 10646 4th edition):

> *CJK strokes should not be removed from the list of IDC elements, as characters such as [illegible] can only be represented as IDS sequences if the ㇣ stroke (U+31E3 CJK STROKE Q) is allowed (some people use U+3007 IDEOGRAPHIC NUMBER ZERO 〇, but that is not correct).*
>
> *The argument that allowing CJK strokes will introduce ambiguous sequences as some strokes are visually the same as some encoded characters is not convincing as already all Kangxi radicals and most CJK radicals supplement characters are visual clones of unified ideographs, and so a process dealing with IDS sequences already needs to deal with visual ambiguity.*
>
> *Concerning their elementary shape, it is true that they should only be used in cases as above where they bring shapes not available elsewhere and should not be used to decompose characters in lengthy sequences where more complex components (such as radicals or other ideographs) should be used instead. In other words, CJK STROKES should only be used sparingly but they nevertheless have some good use cases.*

T17. Page 2611, Annex M Sources of characters

The date of publication of ISO 10754 should be corrected.
Proposed change by Japan.
Please change "ISO 10754:1984" to "ISO 10754:1996."
Accepted

T18. Page 2629, Annex P Additional information on CJK Unified Ideographs

There is the description about the J1 source characters and JA source characters which source reference information is changed as follows.
"The set consists of 2828 characters, of which 2723 were part of JIS X 0212-1990 (referred as J1 sources in this International Standard) and 85 were part of the 'Unified Japanese IT Vendors Contemporary Ideographs, 1993' (referred as JA in this International Standard)."
JNB thinks the list of all 2828 characters are helpful to the user.
Proposed change by Japan.
Please attach the file containing the list of 2828 characters. JNB is separately sending the list to the project editor.
Proposed acceptance in principle
The project editor has not received yet the file. However, it seems better to create a collection in Annex A describing these characters and refer to that collection in Annex P. In other words, enumerated list of code points should be all described in Annex A for consistency.

T19. Page 2636, Annex S.3 Source separation examples

As described in Annex S.1.6, JIS X 0212-1990 is one of the source standards that the source code separation rule is applied.

Since the source reference information for some of "JIS X0212-1990" source characters is changed as proposed on this amendment, it would be difficult to recognize JIS X0212 characters when the source code separation rule is applied. JNB requests to add some text to clarify it.

Proposed change by Japan.

Please see the proposed text in the comment on Annex P below.

Propose acceptance in principle

There is a note added by this amendment for the sub-clause S.1.6 'Source separation rule' that indicates that the collection 372 JAPANESE IDEOGRAPHICS SUPPLEMENT identifies the JIX X 0212-1990 characters. Therefore, it should not be difficult to recognize these characters. This does not prevent some additional clarification as suggested for Annex P.

T20. Page 2629, Annex P Additional information on CJK Unified Ideographs

JNB requests to revise the following text in Annex P to reflect the comments above that are related to Annex P.

"The Japanese Industrial Standard JIS X 0213:2004 contains characters in its levels 3 and 4 which were part of previous JIS standards. The set consists of 2828 characters, of which 2723 were part of JIS X 0212-1990 (referred as J1 sources in this International Standard) and 85 were part of the 'Unified Japanese IT Vendors Contemporary Ideographs, 1993' (referred as JA in this International Standard). Among these 2828 characters, 205 had their glyph representation slightly modified. These 2828 characters use the 'J3B, J3C, J4B, and J4C' notations in their prefix four source identification as described in subclause 23.1.".

Proposed change by Japan.

Please change the description of Annex P as follows. (Comment to project editor: Some part of the figure below are truncated. Please contact JNB for whole picture of figure.)

The Japanese Industrial Standard JIS X 0213:2004 includes a set of characters which were part of previous JIS standards. The set consists of 2828 characters, of which 2743 were part of JIS X 0212-1990 (referred as J1 sources in the previous version of this International Standard) and 85 were part of the 'Unified Japanese IT Vendors Contemporary Ideographs, 1993' (referred as JA in the previous version of this International Standard). These 2828 characters use the 'J13, J13A, J14, JA3, JA4' notations in their prefix five source identification as described in sub-clause 23.1. The glyph representation of them also reflects the one shown in JIS X 0213:2004.

The list of 2828 characters is provided in machine-readable format that is accessible as a link from this document. The content linked to is a plain text file, using ISO/IEC 646-IRV characters with CARRIAGE RETURN/ LINE FEED as end of line mark that specifies, each line contains the following information organized in fields delimited by the TAB character:

- 1st field: UCS code point in the format 'hhhh', 'h' being a hexadecimal unit,
- 2nd field: Source reference in previous editions of this standard.
- 3rd field: Source reference in this standard.

Click on this highlighted text to access the reference file.

> NOTE – The content is also available as a separate viewable file in the same file directory as this document. The file is named: "xxxx.txt". (To project editor: please assign the appropriate name.)

Out of the pairs of ideographs which are exceptions to the unification rules described in S.1, the source reference of either ideograph of the pairs shown below are JIS X 0213:2004 level-3 characters replacing J1 characters.

[U+5861] J1-3834 → J3B-2F58 [U+586B] J0-4536

[U+6483] J0-3762 [U+64CA] J1-4123 → J3B-7522

[U+75E9] J0-4169 [U+7626] J1-4D77 → J3BA-7E7D

[U+83D1] J1-583B → J3B-7B21 [U+8458] J1-5858

[U+848B] J0-3E55 [U+8523] J1-5936 → J3B-7B36

[U+91A4] J0-3E5F [U+91AC] J1-6273 → J3B-7C79

[U+985A] J1-6833 → J3B-7E23 [U+985B] J0-453F

Proposed acceptance in principle

As hinted in the disposition of comment T18, it is preferable to move the content definition of the collection of 2828 characters to Annex A, using a new collection number (for example collection 374 under a new A.4.5 subclause). Concerning the graphic description above, it duplicates what is already described in Annex S.3 Source separation examples. Therefore, it makes more sense to add a note to S.3, covering these 7 pairs by indicating that some of the J sources of these pairs have J13 (not J3B) source type indicating their original source as JIS X 212-1990). The note could be phrased as follows:

> NOTE – Seven pairs described below have J sources which were originally part of the JIS X 212-1990 level-3, therefore covered by the Source separation rule, which are also part of the JIS X 213:2004 with source identified as J13. The pairs (J13 character code points emphasized) are: **U+5861**-U+586B, U+6483-**U+64CA**, U+75E9-**U+7626**, **U+83D1**-U+8458, U+848B-**U+8523**, U+91A4-**U+91AC**, and **U+985A**-U+985B.

Editorial comments

E1. Page 2562 Annex A.2.3 Blocks in the SIP

CJK UNIFIED IDEOGRAPHS EXTENSION F is not included in the list of A.2.3.

Proposed change by Japan

Please add

"CJK UNIFIED IDEOGRAPHS EXTENSION F 2CEB0-2DD7F"

after "CJK UNIFIED IDEOGRAPHS EXTENSION E 2B820-2CEAF"

Accepted

E2. Page 2562 Annex A.2.3 Blocks in the SIP

[Ed. Errata in the referencing of Unicode collections]

Proposed change by Japan

Please change the following

"The Unicode collections are described in A.5.10."

to

"The Unicode collections are described in A.6.".

Accepted

E3. Page 2565, Annex A.4.2 371 JIS 2004 IDEOGRAPHICS EXTENSION

[Ed. Typo]

Proposed change by Japan

Please correct the following typo.

"ThThe code points of this collection are …."

to

"The code points of this collection are ….".

Accepted

Note that the text is changed per disposition of JNB comment T6 in WG2 N4683:

> The code points of this collection are identified by J3 Kanji J sources (J3, J3A, J13, J13A and JA3) and J4 Kanji J sources (J4, J14 and JA4) in the Source Reference file for CJK Unified Ideographs (CJKSrc.txt). See 23.1 and 23.2 for details.

E4. Page 2569, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015

[Ed. Typo]

Proposed change by Japan.

Please correct the following.

"A.5.10 390 MOJI-JOHO—KIBAN IDEOGRAPHS-2015"

to

"A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015"

(Comment: EM DASH is used after "MOJI-JOHO").

Proposed acceptance in principle

See also comment T13. The year is also changed from 2015 to 2016 as in: "A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2016".

E5. Page 2569, Annex A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015

[Ed. Typo]

Proposed change by Japan.

Please correct the following.

"The fixed extended collection 388 MOJI-JOHO-KIBAN IDEOGRAPHS-2015 consists of …"

to

"The fixed extended collection 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2015 consists of …".

Accepted in principle

See also comment T13. The year is also changed from 2015 to 2016 as in: "390 MOJI-JOHO-KIBAN IDEOGRAPHS-2016".

E6. Page 2583, Annex A.6.14 315 UNICODE 8.0

[Ed. Typo]

Proposed change by Japan.

Please correct the following.

"The fixed collection 314 UNICODE 7.0 is arranged by planes as follows."

to

"The fixed collection 315 UNICODE 8.0 is arranged by planes as follows."

Accepted in principle

See also comment E21 from U.K.

The editor is intending to replace the sub-clause A.6 Unicode collections and its referencing by the inclusion of the file DerivedAge.txt from Unicode which describes the various versions of Unicode in much more succinct term. It will prevent any errors brought by the transcription from the original Unicode format.

Mongolia: Negative

General comment:

We would like to share our opinion and the latest research outcomes with researcher scholars who specialized on Soyombo script at Tokyo meeting in October 2015.

We have to start research project on Soyombo script of the historical and cultural heritage which are found from Mongolia as soon as possible. This year some conferences will held on Zanabazars' Soyombo script in abroad and Mongolia. The research outcomes on Soyombo script from the conferences will bring significant result for Encoding project of Soyombo script, therefore we would like to implement careful research on Soyombo script for further. Thank you for your kind consideration.

T1. Page 1316-1319 Zanabazar Square - Soyombo

The are some characters are missing in the Proposal to Encode the Soyombo Script in ISO/IEC 10646:2016 (E) the table of scripts on page 1316, 1319.

Proposed change by Mongolia

Mongolian researchers are proposing some characters to add to the proposal. We hope that we will reach consensus with the script proposal author, standards people and language and script experts during the Tokyo meeting in 14 OCT 2015.

Accepted in principle

We will take the ad hoc report to determine the best course of action.

T2. Page 1320 Soyombo 2nd column 31st line

Bindu /Sun/ symbol is missing from Soyombo character.

Proposed change by Mongolia

Add Bindu /Sun/ symbol to Soyombo character

WG2 discussion

Not clear which character is concerned or if it is a request to add a new character.
We will take the ad hoc report to determine the best course of action.

T3. Page 1316-1319 Zanabazar Square - Soyombo

Mongolian vowels, consonants, phonetics, word-lore and grammar should be considered in the proposal./need some research study on this project/.

Proposed change by Mongolia

To improve the proposal

WG2 discussion

We will take the ad hoc report to determine the best course of action.

United Kingdom: Negative

General comment:

G1. Page 32, Code Charts and lists of character names – CJK Unified Ideographs Extension F

We do not think that sufficient evidence has been provided to properly evaluate the proposed set of characters in the CJK Unified Ideographs Extension F block. The WG2 proposal document should include detailed information for each character, including radical/stroke count, an IDS sequence, its reading if known, its meaning, its relationship to any other existing or proposed CJK unified ideograph (Y-variants or Z-variants), and a reference to an IRG document that provides evidence for its usage.

Proposed change by U.K.

Provide detailed information and evidence of usage for each proposed CJK unified ideograph in a WG2 document for this and all future submissions for sets of CJK unified ideographs.

WG2 discussion

There are clearly various opinions on how this process should be conducted. However, there is a large majority that thinks that this kind of evidence gathering (detailed information and evidence of usage) is best done within the context of the Ideographic Rapporteur Group (IRG). All NBs that want to evaluate the CJK Ideographs are strongly encouraged to send experts to the IRG meetings. While it does not preclude other NBs to comment on the proposal at the committee level (CD or PDAM), it would facilitate the overall processing of that repertoire.

Technical comments:

T1. Clause 32, Code Charts and lists of character names – CJK Unified Ideographs – 9FCE

The residual stroke count for 9FCE should be six not seven. Cf. 54D2 (30.6), 57AF (32.6), 631E (64.6), 8359 (140.6), 8DF6 (157.6), 95FC (169'.6), and 9791 (177.6).

Proposed change by U.K.

Change “112.7” to “112.6” in the code chart.

Make the corresponding change in CJKSrc.txt.

Propose acceptance

T2. Clause 32, Code Charts and lists of character names – Newa – Murmured Resonants

We are concerned that the implications of encoding the six murmured resonants NGHA, NYHA, NHA, MHA, RHA and LHA have not been sufficiently explored, and that there may be issues of multiple representation and spoofing if they are encoded as atomic characters. We are not convinced by the statement that these letters "are not used for the representation of Sanskrit in the Newa script", and have seen no evidence that the conjuncts corresponding to these letters are written differently to the proposed characters. We believe that in the absence of convincing technical reasons for encoding the six murmured resonants atomically it would be more appropriate and safest to represent them as conjuncts, as proposed in WG2 N4184.

Proposed change by U.K.

Remove 11413, 11419, 11424, 1142A, 1142D, and 1142F.

Propose non acceptance

WG2 4184 was created before comprehensive feedback was received from the expert communities. The rationale for inclusion is given in the document L2/14-281 (http://www.unicode.org/L2/L2014/14281-newa-atomic.txt).

T3. Clause 32, Code Charts and lists of character names – Zanabazar Square – 11A09

For 11A09, “REVERSED VOWEL SIGN I” should be “VOWEL SIGN REVERSED I” (cf. 0F80 TIBETAN VOWEL SIGN REVERSED I).

Proposed change by U.K.

Change “ZANABAZAR SQUARE REVERSED VOWEL SIGN I” to “ZANABAZAR SQUARE VOWEL SIGN REVERSED I”.

Propose acceptance

Pending result of the ad-hoc report.

T4. Clause 32, Code Charts and lists of character names – Zanabazar Square – 11A3A

For consistency with Soyombo cluster-initial letters (11A84..11A87) and the code chart subheadings, “CLUSTER INITIAL” in the character name for 11A3A should be hyphenated.
“LETTER” should also go after the “CLUSTER-INITIAL” modifier (cf. Tibetan, Phags-pa and Soyombo character names).
Proposed change by U.K.
Change “ZANABAZAR SQUARE LETTER CLUSTER INITIAL RA” to ZANABAZAR SQUARE CLUSTER-INITIAL LETTER RA”..
Propose acceptance
Pending result of the ad-hoc report.

T5. Clause 32, Code Charts and lists of character names – Zanabazar Square – 11A3B..11A3E

For consistency with cluster-initial characters and the code chart subheadings, “CLUSTER FINAL” in the character names for 11A3B through 11A3E should be hyphenated.
“LETTER” should also go after the “CLUSTER-FINAL” modifier (cf. Tibetan, Phags-pa and Soyombo character names).
Proposed change by U.K.
Change “ZANABAZAR SQUARE LETTER CLUSTER FINAL YA” to ZANABAZAR SQUARE CLUSTER-FINAL LETTER YA”.
Change “ZANABAZAR SQUARE LETTER CLUSTER FINAL RA” to ZANABAZAR SQUARE CLUSTER-FINAL LETTER RA”.
Change “ZANABAZAR SQUARE LETTER CLUSTER FINAL LA” to ZANABAZAR SQUARE CLUSTER-FINAL LETTER LA”.
Change “ZANABAZAR SQUARE LETTER CLUSTER FINAL VA” to ZANABAZAR SQUARE CLUSTER-FINAL LETTER VA”.
Propose acceptance
Pending result of the ad-hoc report.

T6. Clause 32, Code Charts and lists of character names – Zanabazar Square – 11A41..11A44

For consistency with the names of the corresponding characters in Tibetan and Phags-pa, the names for 11A41 through 11A44 should include the word “MARK”.
Proposed change by U.K.
Change “ZANABAZAR SQUARE TSHEG” to “ZANABAZAR SQUARE MARK TSHEG”.
Change “ZANABAZAR SQUARE SHAD” to “ZANABAZAR SQUARE MARK SHAD”.
Change “ZANABAZAR SQUARE DOUBLE SHAD” to “ZANABAZAR SQUARE MARK DOUBLE SHAD”.
Change “ZANABAZAR SQUARE LONG TSHEG” to “ZANABAZAR SQUARE MARK LONG TSHEG”.
Propose acceptance
Pending result of the ad-hoc report.

T7. Clause 32, Code Charts and lists of character names – Soyombo – 11A98..11A9A

For consistency with the names of the corresponding characters in Tibetan and Phags-pa, the names for 11A98 through 11A9A should include the word “MARK”.
Proposed change by U.K.
Change “SOYOMBO TSHEG” to “SOYOMBO MARK TSHEG”.
Change “SOYOMBO SHAD” to “SOYOMBO MARK SHAD”.
Change “SOYOMBO DOUBLE SHAD” to “SOYOMBO MARK DOUBLE SHAD”.
Propose acceptance

T8. Clause 32, Code Charts and lists of character names – Soyombo – 11A9B..11A9D

As all three head marks include a candrabindu sign, it is not necessary to specify that 11A9D is “with candrabindu”. Additionally, the ornament at the top of 11A9C is not obviously a single flame, and is elsewhere referred to simply as an “ornament” (e.g. 11A36 ZANABAZAR SQUARE SIGN CANDRABINDU WITH ORNAMENT).
Proposed change by U.K.
Change “SOYOMBO HEAD MARK WITH CANDRABINDU” to “SOYOMBO HEAD MARK”.
Change “SOYOMBO HEAD MARK WITH SINGLE FLAME” to “SOYOMBO HEAD MARK WITH ORNAMENT”.
Propose non acceptance
The Ad hoc came with the following names and annotation:
11A9B SOYOMBO HEAD MARK WITH MOON AND SUN AND TRIPLE FLAME
- National symbol of Mongolia

11A9C SOYOMBO HEAD MARK WITH MOON AND SUN AND FLAME
11A9D SOYOMBO HEAD MARK WITH MOON AND SUN

T9. Clause 32, Code Charts and lists of character names – Nushu – 1B100..1B28B

As the character names for NUSHU characters are algorithmically derived from their code points, the character names do not define character identity. It is essential that the standard defines a method for establishing character identity for Nushu characters in the same way that character identity for CJK ideographs and Tangut ideographs is defined in a separate text file.

Proposed change by U.K.

Create a separate text file named NushuSrc.txt that defines the character identity for each Nüshu character, with references to Nüshu Duben [NSDB], Nüshu Yongzi Bijiao [NSYZBJ], and other relevant sources as appropriate.

Propose acceptance in principle

Pending receiving such information about character identity.

T10. Clause 32, Code Charts and lists of character names – Nushu – 1B11E

1B11E is ordered under 4 strokes, but the glyph is drawn with 5 strokes. The stroke count is ambiguous for the glyph shown in NSDB p. 37, but is clearly 5 strokes in the glyphs shown in NSYZBJ p. 26.

Proposed change by U.K.

Reorder 1B11E under 5 strokes.

Propose acceptance

These comments (T10 to T42) are similar to the ones made in WG2 N4656 by UK (page 21-23).

T11. Clause 32, Code Charts and lists of character names – Nushu – 1B11F

1B11F is ordered under 4 strokes, consistent with NSDB (p. 37), NSYZBJ (p. 41), and Chiang 1995 (p. 148), but the glyph is drawn with 5 strokes, with a circle instead of a short vertical stroke.

Proposed change by U.K.

Correct the glyph for 1B11F to reflect the 4-stroke shape shown in NSDB.

Propose acceptance

T12. Clause 32, Code Charts and lists of character names – Nushu – 1B129

The glyph for 1B129 does not accurately reflect the glyph shape given in NSDB (p. 38), NSYZBJ (p. 83), and Chiang 1995 (p. 180), and is confusable with 1B11D.

Proposed change by U.K.

Correct the glyph for 1B129 to reflect the shape shown in NSDB and NSYZBJ.

Propose acceptance

T13. Clause 32, Code Charts and lists of character names – Nushu – 1B13B

1B13B is ordered under 5 strokes, but the glyph is drawn with 7 strokes. There are two glyph forms in NSDB (p. 39), one 7 strokes and one 5 strokes.

Proposed change by U.K.

Either change the glyph for 1B13B to the 5-stroke form, **or** reorder 1B13B under 7 strokes.

WG2 decision

One option must be picked.

T14. Clause 32, Code Charts and lists of character names – Nushu – 1B178

1B178 is ordered under 6 strokes, consistent with NSDB (p. 42) and NSYZBJ (p. 45), but the glyph is drawn with 7 strokes, with an extra dot in the bottom middle.

Proposed change by U.K.

Correct the glyph for 1B178 to reflect the 6-stroke shape shown in NSDB.

Propose acceptance

T15. Clause 32, Code Charts and lists of character names – Nushu – 1B196

1B196 is ordered under 6 strokes, consistent with NSDB (p. 43) and NSYZBJ (p. 127), but the glyph is drawn with 5 strokes, with a missing dot on the left.

Proposed change by U.K.

Correct the glyph for 1B196 to reflect the 6-stroke shape shown in NSDB.
Propose acceptance

T16. Clause 32, Code Charts and lists of character names – Nushu – 1B19A

1B19A is ordered under 6 strokes, consistent with NSDB (p. 44), NSYZBJ (p. 137), and Chiang 1995 (p. 153), but the glyph is drawn with 7 strokes, with a dot on the left that should be the bottom left limb of an 'x', with the result that it is confusable with 1B1AA.
Proposed change by U.K.
Correct the glyph for 1B19A to reflect the 6-stroke shape shown in NSDB.
Propose acceptance

T17. Clause 32, Code Charts and lists of character names – Nushu – 1B1B3

1B1B3 is ordered under 7 strokes, but the glyph is drawn with 8 strokes. There are two glyph forms in NSDB (p. 45), one 7 strokes and one 8 strokes.
Proposed change by U.K.
Either change the glyph for 1B1B3 to the 7-stroke form, **or** reorder 1B1B3 under 8 strokes.
WG2 decision
One option must be picked.

T18. Clause 32, Code Charts and lists of character names – Nushu – 1B1C1

1B1C1 is ordered under 7 strokes, consistent with NSDB (p. 45) and NSYZBJ (p. 112), but the glyph is drawn with 6 strokes, with a missing diagonal stroke on the right.
Proposed change by U.K.
Correct the glyph for 1B1C1 to reflect the 7-stroke shape shown in NSDB.
Propose acceptance

T19. Clause 32, Code Charts and lists of character names – Nushu – 1B1CB

1B1CB is ordered under 7 strokes, but the glyph is drawn with 9 strokes. There are two glyph forms in NSDB (p. 46), one 7 strokes and one 9 strokes.
Proposed change by U.K.
Either change the glyph for 1B1CB to the 7-stroke form, **or** reorder 1B1CB under 9 strokes.
WG2 decision
One option must be picked.

T20. Clause 32, Code Charts and lists of character names – Nushu – 1B1CD

1B1CD is ordered under 7 strokes, but the glyph is drawn with 8 strokes, consistent with NSYZBJ (p. 143) and NSDB (p. 46) which both show the character with 8 strokes.
Proposed change by U.K.
Reorder 1B1CD under 8 strokes.
Propose acceptance

T21. Clause 32, Code Charts and lists of character names – Nushu – 1B1D1

1B1D1 is ordered under 7 strokes, but the glyph is drawn with 9 strokes. There are two glyph forms in NSDB (p. 46), one 7 strokes and one 9 strokes.
Proposed change by U.K.
Either change the glyph for 1B1D1 to the 7-stroke form **or** reorder 1B1D1 under 9 strokes.
WG2 decision
One option must be picked.

T22. Clause 32, Code Charts and lists of character names – Nushu – 1B1D3

1B1D3 is ordered under 7 strokes, but the glyph is drawn with 6 strokes. The examples given in NSDB (p. 46), NSYZBJ (p. 156) and Chiang 1995 (p. 194) show either 6 strokes or 7 strokes. 1B1DF, 1B20E and 1B221 also have this

component, and the glyph shape for these characters is also inconsistent. We suggest consistently using the 7-stroke form for this component in 1B1D3, 1B1DF, 1B20E and 1B221.
Proposed change by U.K.
Change the glyph for 1B1D3 to the 7-stroke form.
Propose acceptance

T23. Clause 32, Code Charts and lists of character names – Nushu – 1B1DF

1B1DF is ordered under 8 strokes, and the glyph is drawn with 8 strokes, consistent with NSDB (p. 47). However, NSYZBJ (p. 48) shows 8-stroke and 9-stroke forms, and the 9-stroke form should be used for consistency with 1B1D3, 1B20E and 1B221.
Proposed change by U.K.
Change the glyph for 1B1DF to the 9-stroke form, and reorder under 9 strokes.
Propose acceptance

T24. Clause 32, Code Charts and lists of character names – Nushu – 1B1E6

1B1E6 is ordered under 8 strokes, consistent with NSDB (p. 47) and NSYZBJ (p. 79), but the glyph is drawn with 6 strokes, missing a circle (2 strokes) in the middle.
Proposed change by U.K.
Correct the glyph for 1B1E6 to reflect the 8-stroke shape shown in NSDB and NSYXBJ.
Propose acceptance

T25. Clause 32, Code Charts and lists of character names – Nushu – 1B1EA

1B1EA is ordered under 8 strokes, but the glyph is drawn with 9 strokes. The examples in NSDB (p. 47) and NSYZBJ (p. 63) are not clear, but appear to be 9 strokes, consistent with the glyph shown in the code chart.
Proposed change by U.K.
Reorder 1B1EA under 9 strokes.
Propose acceptance

T26. Clause 32, Code Charts and lists of character names – Nushu – 1B1F0

1B1F0 is ordered under 8 strokes, but the glyph is drawn with 5 strokes. The examples in NSDB (p. 48) and NSYZBJ (p. 90) are 5 strokes, consistent with the glyph shown in the code chart.
Proposed change by U.K.
Reorder 1B1F0 under 5 strokes.
Propose acceptance

T27. Clause 32, Code Charts and lists of character names – Nushu – 1B1FF

1B1FF is ordered under 8 strokes, but the glyph is drawn with 9 strokes. The example in NSDB (p. 48) is 9 strokes but most examples in NSYZBJ (p. 118) are 8 strokes (without the stroke on the top left).
Proposed change by U.K.
Either change the glyph for 1B1FF to the 8-stroke form, **or** reorder 1B1FF under 9 strokes.
WG2 decision
One option must be picked.

T28. Clause 32, Code Charts and lists of character names – Nushu – 1B120E

1B20E is ordered under 8 strokes, but the glyph is drawn with 9 strokes, consistent with NSDB (p. 49), and NSYZBJ (p. 48) which shows 8-stroke and 9-stroke forms.
Proposed change by U.K.
Reorder 1B20E under 9 strokes.
Propose acceptance

T29. Clause 32, Code Charts and lists of character names – Nushu – 1B212

1B212 is ordered under 8 strokes, consistent with NSDB (p. 49) and NSYZBJ (p. 157), but the glyph is drawn with 7 strokes, missing a stroke in the middle.

Proposed change by U.K.
Correct the glyph for 1B212 to reflect the 8-stroke shape shown in NSDB and NSYXBJ.
Propose acceptance

T30. Clause 32, Code Charts and lists of character names – Nushu – 1B221

1B221 is ordered under 9 strokes, but the glyph is drawn with 8 strokes. However, NSDB (p. 50) and NSYZBJ (p. 59) show 9-stroke forms.
Proposed change by U.K.
Change the glyph to the 9-stroke form shown in NSDB and NSYZBJ.
Propose acceptance

T31. Clause 32, Code Charts and lists of character names – Nushu – 1B22D

1B22D is ordered under 9 strokes, but the glyph is drawn with 8 strokes, consistent with NSDB (p. 51) and NSYZBJ (p. 109) which appear to show 8-stroke forms.
Proposed change by U.K.
Reorder 1B22D under 8 strokes.
Propose acceptance

T32. Clause 32, Code Charts and lists of character names – Nushu – 1B230

1B230 is ordered under 9 strokes, but the glyph is drawn with 8 strokes. The glyph seems to be somewhat different from the examples shown in NSDB (p. 51) and NSYZBJ (p. 114), and should be replaced with a glyph that better reflects the example given in NSDB. The character **may also** need to be reordered under 8 strokes.
Proposed change by U.K.
Replace the glyph for 1B230 with one that better reflects the example given in NSDB. The character **may also** need to be reordered under 8 strokes.
WG2 decision
A decision needs to be made about possible re-ordering.

T33. Clause 32, Code Charts and lists of character names – Nushu – 1B23B

1B23B is ordered under 9 strokes, consistent with NSDB (p. 51) and NSYZBJ (p. 145), but the glyph is drawn with 8 strokes, missing a dot at the top.
Proposed change by U.K.
Correct the glyph for 1B23B to reflect the 9-stroke shape shown in NSDB and NSYXBJ.
Propose acceptance

T34. Clause 32, Code Charts and lists of character names – Nushu – 1B23D

1B23D is ordered under 9 strokes, consistent with NSDB (p. 51) and NSYZBJ (p. 147), but the glyph is drawn with 10 strokes, with a circle (2 strokes) on the left instead of a vertical stroke.
Proposed change by U.K.
Correct the glyph for 1B23D to reflect the 9-stroke shape shown in NSDB and NSYXBJ.
Propose acceptance

T35. Clause 32, Code Charts and lists of character names – Nushu – 1B253

1B253 is ordered under 10 strokes, consistent with NSDB (p. 53) and NSYZBJ (p. 114), but the glyph is drawn with 9 strokes.
Proposed change by U.K.
Correct the glyph for 1B253 to reflect the 10-stroke shape shown in NSDB and NSYXBJ.
Propose acceptance

T36. Clause 32, Code Charts and lists of character names – Nushu – 1B25D

1B25D is ordered under 11 strokes, consistent with NSDB (p. 53) and NSYZBJ (p. 25), but the glyph is drawn with 10 strokes, missing a dot on the bottom right.
Proposed change by U.K.
Correct the glyph for 1B25D to reflect the 11-stroke shape shown in NSDB and NSYXBJ.

Propose acceptance

T37. Clause 32, Code Charts and lists of character names – Nushu – 1B25F

1B25F is ordered under 11 strokes, but the glyph is drawn with 8 or 9 strokes. NSDB (p. 53) and NSYZBJ (p. 31) appear to show 10-stroke forms.

Proposed change by U.K.

Change the glyph for 1B25F to reflect the 10-stroke shape shown in NSDB and NSYZBJ, and reorder the character under 10 strokes.

Propose acceptance

T38. Clause 32, Code Charts and lists of character names – Nushu – 1B260

The glyph for 1B260 is drawn with two x-shaped components at the bottom, but the examples in NSDB (p. 54) and Chiang 1995 (p. 194) show two inverted v-shaped components. NSYZBJ (p. 36) shows both glyph forms (but more v-shaped forms than x-shaped forms), but as NSDB is the primary source for the character repertoire we would expect that the glyph would correspond to that shown in NSDB.

Proposed change by U.K.

Change the glyph for 1B260 to the form shown in NSDB.

Propose acceptance

T39. Clause 32, Code Charts and lists of character names – Nushu – 1B267

1B267 is ordered under 11 strokes, but the glyph is drawn with 12 strokes. It is not clear from the examples in NSDB (p. 54) and NSYZBJ (p. 69) whether this character should be 11 strokes or 12 strokes.

Proposed change by U.K.

Check the correct glyph form for 1B267, and **either** change the glyph to 11 strokes **or** reorder the character under 12 strokes as appropriate.

WG2 decision

A decision needs to be made about possible re-ordering.

T40. Clause 32, Code Charts and lists of character names – Nushu – 1B26A

1B26A is ordered under 11 strokes, consistent with NSDB (p. 54) and NSYZBJ (p. 85), but the glyph is drawn with 10 strokes, missing a stroke in the left side component.

Proposed change by U.K.

Correct the glyph for 1B26A to reflect the 11-stroke shape shown in NSDB and NSYXBJ.

Propose acceptance

T41. Clause 32, Code Charts and lists of character names – Nushu – 1B276

1B276 is ordered under 12 strokes, but the glyph is drawn with 11 strokes. NSDB (p. 55) and NSYZBJ (p. 67) appear to show 11-stroke forms, consistent with the glyph shown in the code chart.

Proposed change by U.K.

Reorder the character under 11 strokes..

Propose acceptance

T42. Clause 32, Code Charts and lists of character names – Nushu – 1B279

1B279 is ordered under 12 strokes, but the glyph is drawn with 11 strokes. NSDB (p. 55) and NSYZBJ (p. 122) show somewhat different 11-stroke glyphs (the left component may be 1B1E9 in some examples).

Proposed change by U.K.

Check the correct glyph form for 1B279, and reorder the character under 11 strokes.

Propose acceptance

T43. Clause 32, Code Charts and lists of character names – CJK Extension F – 2CEF1

2CEF1 (JMJ-056848) has a round dot above which is not a stroke used in the Han script. Is this really a distinct character? Or is it simply 20000  with an editorial dot, in which case it can be represented as 20000 plus 0307 combining dot above.

Proposed change by U.K.
Remove 2CEF1 pending confirmation of whether the dot is an intrinsic part of the character or not.
Propose non acceptance
This has been answered in document N4663 by IR. The Japanese NB provided evidence in the DaiKanwa Dictionary as evidence.

T44. Clause 32, Code Charts and lists of character names – CJK Extension F – 2D449

2D449 (USAT-60078) ⿰啵女 seems to be a misanalysis of 5619 嘍. This is evident from the SAT reference for this character < http://21dzk.l.u-tokyo.ac.jp/SAT2012/T0397_,13,0242x10.html > (see notes 5 and 10) where 5619 嘍 is shown.
Proposed change by U.K.
Remove 2D449.
WG2 decision
This comment is different from comment T18 in WG2 N4656 for the same ideograph:

> 2D459 (USAT-60078) ⿰啵女 is actually 5619 嘍. This is evident from the 口 element which is large and not aligned with 波 (cf. the size and position of口 in 2D446 USAT-00947).

This was answered in N4663 as follows:

> The proposed character shape has different relative position of component therefore they should be separated because of S.1.4.2. What is the reason changing radical?

The U.K. comment is new and require new analysis.

Editorial comments:

E1. Clause 3 – Normative references

Unicode Standard version 7.0 is referenced, but the latest version of the Unicode Standard is 8.0.
Proposed change by U.K.
Change "Unicode Standard Version 7.0, Chapter 4, Character Properties http://www.unicode.org/versions/Unicode7.0.0/ch04.pdf " to "Unicode Standard Version 8.0, Chapter 4, Character Properties http://www.unicode.org/versions/Unicode8.0.0/ch04.pdf ".
Propose acceptance
Unicode 8.0 references were not available when the CD was prepared.

E2. Sub-clause 6.4 Naming of characters,

Character names are not provided for Tangut ideographs in clause 32.
Proposed change by UK
Change "The list of character names, except for CJK unified ideographs and Hangul syllables, is provided in 32." to "The list of character names, except for CJK unified ideographs, Tangut ideographs and Hangul syllables, is provided in 32."
Accepted

E3. Sub-clause 25.6 Character names for CJK Ideographs,

"Ideographs" should not be capitalized in the clause heading.
Proposed change by UK
Change "Character names for CJK Ideographs" to "Character names for CJK ideographs".
Accepted

E4. Sub-clause 25.7 Character names for Tangut Ideographs

"Ideographs" should not be capitalized in the clause heading.
Proposed change by UK
Change "Character names for Tangut Ideographs" to "Character names for Tangut ideographs".
Accepted

E5. Clause 27 Structure of the Basic Multilingual Plane, Figure 8 – Phags-Pa

"Phags-Pa" should be written "Phags-pa" for consistency with the name given in the code chart for this block.

Proposed change by UK

Change "Phags-Pa" to "Phags-pa".

WG2 discussion

There are some inconsistencies on the use of capitalization for Phags-Pa, including the Unicode web site. Agree in principle on a consistent terminology.

E6. Clause 27 Structure of the Basic Multilingual Plane, Figure 9 – Nko

"Nko" should be written "NKo" for consistency with the name given in the code chart for this block.

Proposed change by UK

Change "Nko" to "NKo".

Accepted

E7. Clause 28 Structure of the SMP, Figure 10 – Tangut Component

"Tangut Component" should be "Tangut Components".

Proposed change by UK

Change "Tangut Component" to "Tangut Components".

Accepted

E8. Clause 28 Structure of the SMP, Figure 10 – Kana supplement

"Kana supplement" should be written "Kana Supplement" for consistency with other supplement blocks.

Proposed change by UK

Change "Kana supplement" to "Kana Supplement".

Accepted

E9. Clause 30 Structure of the TIP, Note

The TIP roadmap tentatively maps Small Seal Script and Oracle Bone Script, but not Bronze Script.

Proposed change by UK

Change "The TIP may contain scripts such as Oracle Bone or Bronze in future editions of this International Standard." to "The TIP may contain scripts such as Oracle Bone or Small Seal in future editions of this International Standard."

Accepted

E10. Sub-clause 32.1 General

The code chart for Tangut ideographs is not followed by a character names list.

Proposed change by UK

Change "Each code chart is followed by a corresponding character names list, except blocks for the CJK ideographs and Hangul syllables" to "Each code chart is followed by a corresponding character names list, except blocks for the CJK ideographs, Tangut ideographs and Hangul syllables".

Accepted

E11. Sub-clause 32.2 Code chart

There does not seem to be an explanation anywhere for the mark in the top-right corner of code chart cells for characters with variation sequences.

Proposed change by UK

Add a note to the effect that characters for which one or more standardized variation sequences are defined are indicated with a mark in the top-right corner of the corresponding code chart cell.

Accepted

E12. Sub-clause 32.3 Character names list

The note does not reference the latest version of the Unicode Standard.

Proposed change by UK

Change “Unicode Standard Version 7.0” to “Unicode Standard Version 8.0”.
Accepted

E13. Clause 32 Code charts and list of character names – Zanabazar Square

Incorrect capitalization in subheadings.
Proposed change by UK
Change “Final Consonant Mark” to “Final consonant mark”.
Change “Candrabindu and Candra Ornaments” to “Candrabindu and candra ornaments”.
Accepted

E14. Clause 32 Code charts and list of character names – Soyombo

For consistency with Zanabazar Square and other blocks, 11A50 should be referred to as a vowel letter rather than a vowel carrier.
Proposed change by UK
Change subheading “Vowel carrier” to “Vowel letter”.
Add a note “used for representing independent vowels in combination with vowel signs”, as is given for the corresponding letter in Zanabazar Square.
Accepted

E15. Clause 32 Code charts and list of character names – Soyombo

Incorrect capitalization in subheadings.
Proposed change by UK
Change “Terminal Marks” to “Terminal marks”.
Accepted

E16. Clause 32 Code charts and list of character names – Nushu

Incorrect capitalization in subheadings.
Proposed change by UK
Change “Nushu Mark” to “Nushu mark”.
Accepted

E17. Clause 32 Code charts and list of character names – Nushu

The Nushu block note includes text that is no longer relevant.
Proposed change by UK
Remove “The tone numbers are not exhaustive (because many characters have more than one reading), but they relate to identified characters in the source materials.”
Accepted

E18. Clause 32 Code charts and list of character names – Enclosed Ideographic Supplement

Incorrect capitalization in subheadings.
Proposed change by UK
Change “Symbols for Chinese Folk Religion” to “Symbols for Chinese folk religion”.
Accepted

E19. Clause 32 Code charts and list of character names – Supplemental Symbols and Pictographs

Spelling mistake in note for 1F935.
Proposed change by UK
Change “peared with” to “paired with”.
Accepted

E20. Clause 32 Code charts and list of character names – Supplemental Symbols and Pictographs

Unexpected words “Animal face” above 1F98A. If this is supposed to be a subheading for 1F98A FOX FACE then it is unnecessary as 1F981 LION FACE and 1F984 UNICORN FACE are not under an “Animal face” subheading.

Proposed change by UK

Remove the words “Animal face”.

Accepted

E21. Annex A.6.14 315 UNICODE 8.0

Text incorrectly refers to Unicode 7.0 instead of Unicode 8.0.

Proposed change by UK

Change “The fixed collection 314 UNICODE 7.0 is arranged by planes as follows.” to “The fixed collection 315 UNICODE 8.0 is arranged by planes as follows.”

Accepted

See also comment E6 from Japan NB.

E22. Annex A.6.14 315 UNICODE 8.0 – Note

The code point “7E” is incorrectly written with a superscript letter E.

Proposed change by UK

Change “2D-2F 7^{E}-7F CF-D3 F8-FF” to “2D-2F 7E-7F CF-D3 F8-FF”.

Accepted

E23. Annex G Alphabetically sorted list of character names

Nushu character names are not listed in Allnames.txt.

Proposed change by UK

Change “The file specifies, after a 4-lines header, all the character names from this International Standard except Hangul syllables, CJK ideographs, and Tangut ideographs” to “The file specifies, after a 4-lines header, all the character names from this International Standard except Hangul syllables, CJK ideographs, Tangut ideographs, and Nushu characters”.

Accepted

E24. Annex I.2 Syntax of an ideographic description sequence

Various typographic errors (suggested corrections are highlighted in bold).

Proposed change by UK

Change “a coded CJK **ideographs**, which consists of any coded character from the CJK UNIFIED IDEOGRAPHS **block** or the CJK COMPATIBILITY IDEOGRAPHS blocks” to “a coded CJK **ideograph**, which consists of any coded character from the CJK UNIFIED IDEOGRAPHS **blocks** or the CJK COMPATIBILITY IDEOGRAPHS blocks”.

Change “a coded CJK radical, which consists of any coded character from the CJK RADICALS **blocks** or the KANGXI RADICALS block” to “a coded CJK radical, which consists of any coded character from the CJK RADICALS **block** or the KANGXI RADICALS block”.

Change “the character FF1F **FULL WIDTH** QUESTION MARK to represent an otherwise **un-described** DC” to “the character FF1F **FULLWIDTH** QUESTION MARK to represent an otherwise **undescribed** DC”.

Change “a Tangut component, which consists of any coded character from the TANGUT **COMPONENT** block” to “a Tangut component, which consists of any coded character from the TANGUT **COMPONENTS** block”.

Accepted

E25. Annex I.2 Syntax of an ideographic description sequence

A fullwidth question mark is required to represent an undescribed DC for Tangut IDS sequences.

Proposed change by UK

Add “the character FF1F FULLWIDTH QUESTION MARK to represent an otherwise undescribed DC,” to the Tangut IDS subgroup.

Accepted

E26. Annex L Character naming guidelines

Character names for Tangut ideographs and Nushu characters are formed algorithmically.

Proposed change by UK

Change “These guidelines do not apply to the names of CJK **Ideographs** and Hangul syllables which are formed using rules specified in 25.6 and 25.9 respectively.” to “These guidelines do not apply to the names of CJK **ideographs**, Tangut ideographs, Nushu characters and Hangul syllables which are formed using rules specified in 25.6, 25.7, 25.8 and 25.9 respectively.”.

Accepted

E27. Annex M Source of characters

Update sources of characters to reflect newly added character repertoires, including but not limited to Tangut.

Proposed change by UK

Add a section for Tangut, under which are listed the works cited in WG2 N4522 section 11.

Accepted

USA: Negative

General comment:

GE.1.

The US believes Newa, Adlam, and the following emoji characters are mature enough to advance to a DIS ballot:
1F57A
1F5A4
1F6F4-1F6F5
1F6D1
1F919-1F91E
1F920-1F926
1F930
1F933-1F937
1F940
1F942
1F950-1F955
1F985-1F98A
The two scripts are urgently needed for modern user communities. The emoji characters are also needed based on requests from implementers and users.
Proposed change by US:
The US requests that a repertoire that includes at least Newa, Adlam, and the emoji characters listed (under "Comments", to left) be included in an enquiry draft that goes out for ballot immediately following closure of this CD ballot.
Noted

Technical comments:

TE1. Supplemental Symbols and Pictographs

The following three characters have not been formally proposed, and should be removed from the ballot:
1F931 HERO
1F932 CRIMINAL
1F941 MAGIC WAND.
Proposed change by US:
Remove the three characters. If te.1 and te.2 are accommodated, the US changes its vote to Yes.
Propose acceptance

TE.2. Old Italic

A meeting was held in July with experts on Old Italic. Based on their input, the name of 1032F OLD ITALIC LETTER TTE should be changed to OLD ITALIC LETTER SOUTHERN TSE. Justification is provided in UTC document 15-181 (http://www.unicode.org/L2/L2015/15181-n4669-olditalic.pdf).
Proposed change by US:
Change the name for 1032F to OLD ITALIC SOUTHERN TSE. If te.1 and te.2 are accommodated, the US changes its vote to Yes.
Propose acceptance

TE.3. Old Italic

Based upon feedback from experts, two characters should be added to the Old Italic block, with justification in UTC document 15-181:
1032D OLD ITALIC LETTER YE
1032E OLD ITALIC LETTER NORTHERN TSE.
Proposed change by US:

Add the two characters.
Proposed acceptance

Editorial comments:

E.1. Nushu

The note before the Nushu block (p. 1471) mentions tone numbers, but the character names no longer include readings with tone.
Proposed change by US:
Remove the sentence beginning “The tone numbers are not exhaustive….”
Accepted

E.2. Supplemental Symbols and Pictographs

1F935 MAN IN TUXEDO contains a typographical error in the annotation. The annotation currently reads: “appearance for groom, may be peared with 1F470 bride with veil”. The word “peared” should be spelled “paired”.
Proposed change by US:
Correct the spelling to “paired”.
Accepted

E.3. Supplemental Symbols and Pictographs

“Animal face” appears in the names list after 1F989 OWL and before 1F98A FOX FACE. “Animal face” should be made into a sub-header, so as not to be read as an annotation for 1F989 OWL.
Proposed change by US:
Change “Animal face” into a subheader before 1F98A FOX FACE.
Accepted

E.4. Malayalam

The glyph for 0D44 MALAYALAM VOWEL SIGN VOCALIC RR needs to be corrected, as documented in UTC document 15-174 (http://www.unicode.org/L2/L2015/15174-malayalam-rep-glyph.pdf).
Proposed change by US:
Change the glyph to the following shape:

Accepted

E.5. Annex F.1.2 Word boundary indicators

The U.S. noted some errors in section F.1.2 describing U+2060 WORD JOINER. Three changes are needed to correct the text. The current text and proposed changes (in yellow) are on the right. Background information is contained in UTC document 15-211 (http://www.unicode.org/L2/L2015/15211-word-joiner.pdf).
Proposed change by US:

Make the corrections, specified here:

Current text:
Word boundary indicators

Change to:
Word and line boundary indicators

Current text:
WORD JOINER (2060) and **ZERO WIDTH NO-BREAK SPACE** (FEFF): These characters behave like a NO-BREAK SPACE in that they indicate the absence of word boundaries, but unlike NO-BREAK SPACE they have no presentational width.

Change to:
WORD JOINER (2060) and **ZERO WIDTH NO-BREAK SPACE** (FEFF): These characters behave like a NO-BREAK SPACE in that they indicate the absence of line breaking opportunities, but unlike NO-BREAK SPACE they have no presentational width.

Current text:
For example, these characters could be inserted after the fourth character in the text "base+delta" to indicate that there is to be no word break between the "e" and the "+".

Change to:
For example, these characters could be inserted after the fourth character in the text "base+delta" to indicate that there is to be no line breaking opportunity between the "e" and the "+"..
Propose acceptance