Comments were received from China, India, Japan, Mongolia, Norway, 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.

The comments received can be disposed in a way to create consensus for most of the topics:
- Mongolian: move back the code chart to only show standardized variants that were agreed in the previous edition, and remove any annotation that were added since that former edition (presentation forms stay)
- Miao: fix code positions as requested by China and US
- Tamil: remove the new Tamil Supplement block and related references in existing blocks
- Nushu: re-order 10 characters as requested by UK
- Various minor editorial issues

This leaves CJK Ideographic matters as requiring substantial work, especially CJK Unified Ideographs Extension F. Therefore, in consultation with CJK experts, it was decided to wait for the next IRG meeting (#46 to be held in Beijing, China, May 23-27) to go over relevant comments and proposed disposition and create a consensus position allowing to generate an enquiry ballot (DIS) as a result.
China: Negative

Technical comments on Mongolian
(The same comments were made by Mongolia)

T1. Principle errors
First, this scheme seriously disrupts the more than 8 hundred years of formation and solidity of the complete traditional Mongolian orthography. It needs to fully and correctly reflect the diversity of traditional Mongolian orthography of the Mongolian character encoding and to be in line with the spirit of global protection and development of culture diversity. The information technology shall adapt to and solve the particular process of the traditional Mongolian orthography and must not be adapted to by breaking the Mongolian orthography for the limitation of words processing function of some current computer systems! This is the relationship between purpose and tools, must not put the cart before the horse.

Second, with the 8 hundred years of history of the development of traditional Mongolian script, its orthography has been enriched and improved. There are orthographic differences reflected in the written Mongolian sources of different times. Traditional Mongolian character encoding should include and reflect the whole process of traditional Mongolian history and should not reflect contemporary traditional Mongolian orthography only. For example; the feminine variants of traditional Mongolian syllable “QA+E” have at least 3 forms (᠕ᠠᠤᠡ), but this scheme mentions none; the final forms of traditional Mongolian letter NA have at least 6 forms (ᠠᠭᠠᠭᠠ), but this scheme has 2 forms (ᠠᠭ) only. If Uighur Mongolian is included, the variants of traditional Mongolian will become even complex.

Third, this scheme disrupts the traditional Mongolian alphabet systems and handles pairs of individual letters as “several variants of one letter”. The traditional Mongolian alphabet is an indispensable element of the orthography. For example; letters ⠱, ⠲, ⠳ and ⠳ need no need to be differentiated by FVSs. This scheme specifies that ⠱ and ⠳ do not need FVSs while ⠳ and ⠲ need FVSs in any conditions, obviously not conformed to the Mongolian alphabet system and rules. Both Chinese national standard of GB/T 26226-2010 Information Technology - Mongolian Presentation Forms Character Set and Use Rules of Controlling Characters and the Mongolian national standard MNS 4932: 2000 монголын бичиг кодыг хэрэглэх дүрэм (Use of Mongolian Character Encoding) specify that the FVSs of Mongolian scripts is used for differentiating the different free variants of one letter under the same conditions. Unfortunately, the specifications in current scheme not only disrupt the traditional Mongolian alphabet, while the use of the frequency of FVS is dramatically increased! According to statistics and on the basis of specifications in this scheme, inputting the 19,400 words of essay needs to be input 2,836 more FVSs just for ⠲ ⠳ letters!

Noted
It is not totally clear what is objected. The Mongolian encoding scheme was not a new part of this edition. Mongolian has been part of ISO/IEC 10646 for a long time and has been unchanged for many editions of the Standard. What was new in this Committee Draft was a modified of variation sequences based on a rough consensus by a large group of Mongolian experts from various constituencies as well as the introduction of the presentation forms (isolate, initial, medial, final) in the code chart to help the understanding of these variation sequences.

Many of the points raised here go much beyond of what can be described in a standard like ISO/IEC 10646 and should be described in a technical note, or added to the Unicode Standard which contains much more technical details about implementation. In all cases, should new text be added to 10646, it needs to be proposed by China and Mongolia to be actionable.

A Committee Draft is an opportunity to discuss new ideas and allow various experts to voice feedback on proposed changes.
Based on this feedback, it seems prudent to reverse the code charts to the previous version of the variation sequences as originally created, while still preserving the default presentation forms. This gets back to the original proposal as it was adopted in 10646 and never objected since.

There is however a large consensus that the current state of affair is not endorsed by all communities and all parties are encouraged to develop a consensus. Until that is done, the code charts will stay as before (except for the addition of the presentation form).

**T2. Technical errors**

(1) Lack of Unifications of the variants among 4 sub-scripts
The unifications of the variants of 4 sub-scripts (Traditional Mongolian, Todo, Sibe and Manchu) are complicated and important. For instance, it is common that 1 variant is used by 1 sub-script or shared by 2, 3, or 4 sub-scripts. Without the unifications of 4 sub-scripts, the system implementation and higher level process of language information such as TTS, OCR, MT, etc. are impossible.

_Noted_
It is not clear what the objection is. The 4 ‘sub-scripts’ or more precisely writing systems are unified in the Mongolian block and have been also unified in all know fonts. This allows font rendering to be writing system aware and render differently.
If there are issue with the current standard (please refer to the 4th edition of ISO/IEC 10646), a clear and explicit proposal for desirable changes should be made.

(2) Lack of Mandatory Ligatures
The mandatory ligatures of Mongolian scripts are not covered in the scheme. The mandatory ligatures of Mongolian scripts are important and indispensable in the system implementation of Mongolian character encoding and in font design.

_Noted_
This is probably beyond the scope of the standard, see disposition of comment T1.
If there are issue with the current standard (please refer to the 4th edition of ISO/IEC 10646), a clear and explicit proposal for desirable changes should be made.

(3) Lack of Non-mandatory Ligatures
The non-mandatory ligatures of Mongolian scripts are not covered in the scheme. The non-mandatory ligatures are important and indispensable in the system implementation of Mongolian character encoding and in font design.

_Noted_
This is probably beyond the scope of the standard, see disposition of comment T1.
If there are issue with the current standard (please refer to the 4th edition of ISO/IEC 10646), a clear and explicit proposal for desirable changes should be made.

(4) Lots of Mistakes in Rules of FVSs
Using FVSs (Free Variation Selectors) or not and which FVS should be selected depend on the theories, rules and practices of the Mongolian orthography. The scheme does not obey the above principles and leads many errors and omissions in the usage rules of the FVS within a word.

_Noted_
This is probably beyond the scope of the standard, see disposition of comment T1.
If there are issue with the current standard (please refer to the 4th edition of ISO/IEC 10646), a clear and explicit proposal for desirable changes should be made.

(5) Lack of Character Sequences of Single Presentation Forms
This revision does not contain the whole character sequences of single presentation forms. If the complete character sequences of single presentation forms are not given, it will influence the input, storage, display and transfer of the single presentation forms.
The above mentioned five contents can be found in Chines national standard GB/T 26226-2010 and Mongolian national standard MNS 4932: 2000.

_Not accepted_

Page 3
There is no need to describe how to describe character sequences of single presentation forms. The name of each presentation form (isolate, initial, medial, and final) is self-explanatory and determines which form is presented when present in a word on the appropriate position. When these presentation forms are shown in isolation, it is possible to use U+200D ZERO WIDTH JOINER before and/or after; but this is just a mechanism to override the default behavior which would otherwise show the character in isolated form.

(6) Incomplete and Unpractical term - “Context Driven”
Fifties of rather unclear terms -“Context Driven” and “needed to override default context” are mentioned in the scheme and are not given where people can get them.

Accepted
These annotations will be removed, unless new information is provided

(7) Issues on Ali Gali Letters
Ali Gali letters’ presentation forms of three sub-scripts (traditional Mongolian, Todo and Manchu) of the scheme are incomplete.

Noted
Please provide the information so that these presentation forms could be improved.

(8) Issues on Cyrillic
The comparison of traditional Mongolian letters and Cyrillic small letters of the scheme makes no sense and is incomplete (1834 \(\rightarrow\) u/u) and incorrect (1824 \(\rightarrow\) Y[u]).

Noted
It seems difficult to accept that comparison of traditional Mongolian letters and Cyrillic small letters make no sense when these two scripts are used to write Mongolian. If the entry for 1834 and 1824 are either incomplete or incorrect, appropriate suggestion for the correction and completeness would be appreciated.

T3. GB/T 26226 and MN 4932 shall be respected
The content of GB/T 26226 and MNS 4932 was jointly developed by both China and Mongolia as guidelines for UCS and are being widely supported, thus the both countries should have been consulted for any revision of Mongolian encoding.

The China national standard GB 26226-2010 is being widely supported for fonts, inputting methods, offices, OSs and publishing systems by Microsoft, Founder, Jade Bird Huaguang, China Standard Software, Menksoft, ISCAS, Inner Mongolia University and other developers, tremendous data of corpuses (about 23 million words), Knowledge bases (about 17.9 million records), E-books (1.79 million entry), web sites (145 thousand documents), governmental OAs are accumulated. This revision will introduce incompatibility thus cannot be accepted by developers and users. If the scheme has become the standard, it will lead incompatibility of mass data and bring troubles, losses and disasters.

Since the MNS 4932 was released in 2000, tremendous data resources generated by the products based on the standard have been accumulated, such as the Online Great Dictionary of Mongolian Language (ordered by the President Office), governmental documents, web sites, e-books and others.

Noted and partially accepted
There was no intent to ‘revise’ the Mongolian encoding. The intent of the new charts was just to reflect the use of variations sequences as mutually agreed by a large group of experts. As noted in the disposition of Comment 1, the text of the standard will be reversed back to the previous state.

T4. Suggestions on the structure of Mongolian character encoding
a) The “Standardized Variation Sequences” of Mongolian in UCS 2014 is adopted in principle. The sequences of the presentation forms need to be specified correctly. For instant, the second initial form “1820 180B” of Mongolian letter A (1820) should be revised as “200D 1820 180B 200D” and the second final form “1820 180B” should be revised as “200D 1820 180B”.

Not accepted
As noted in the answer to comment T2.5) this is not necessary. These U+200D code points are only needed when these presentation forms are shown in isolation and using them is indeed the correct solution in that context.
However, they are not needed when the sequences are located inside a word.

b) The usage rules of FVS within a word of different sub-scripts need to be written respectively because it is complicated, unclear and long-winded to have all rules together for all sub-scripts. The draft and technical document of the 4 Mongolian scripts (traditional Mongolian, Todo, Manchu and Uighur Mongolian scripts) will be submitted in the name of China and Mongolia later.

**Noted**
The contribution will be welcome and acted on when received.

e) It will be many new contents in the joint proposal on the 4 different Mongolian scripts. There are 20 presentation forms and particular writing forms from 1589 to 1949. The orthography of classical Todo is added in the Todo script part (including more than 50 presentation forms and particular writing forms). The peculiar contents of Manchu orthography (including more than 30 presentation forms and particular writing forms) and the diverse contents of Uighur Mongolian (including more than 30 presentation forms and particular writing forms) are added.

**Noted**

**Technical comments on New Tai Lue**
The character names of 19AA and 19AB should be changed to NEW TAILUE LETTER HIGH SVA and NEW TAILUE LETTER LOW SVA respectively.

Explanation: The two characters are both labialized consonant clusters same as the characters 19A6, 19A7, 19A8 and 19A9. It means that the lips are rounded when the consonants are articulated, making the consonants have the feature of round vowels. Therefore the naming should be coherent. The name SVA tends to be confused with the combination of consonant and round vowel U, as well as the combination of U and other vowels. When the consonant is combined with the round vowel U, the consonant should be pronounced first and then the U. While the function of the labialized consonant is to pronounce the consonant with lips rounded.

**Partially accepted**
It is not possible to change character names once encoded in the Standard. Two mechanisms are possible to achieve some of the intended result:

1. **Introduce a character name alias preceded by ‘※’ in the name list for both characters as in:**
   - 19AA ฎ NEW TAILUE LETTER HIGH SUA
   - ※ NEW TAILUE LETTER HIGH SVA
   - 19AB ฎ NEW TAILUE LETTER LOW SUA
   - ※ NEW TAILUE LETTER LOW SVA

2. **Introduce an annotation in the name list describing the issue such as:**
   - 19AA ฎ NEW TAILUE LETTER HIGH SUA
   - • a better name for this character and the following would be sva because they are both labialized consonant clusters as the previous characters
   - 19AB ฎ NEW TAILUE LETTER HIGH SUA

**Technical comment on Miao**
The following glyphs should be corrected as below:

16F2C 碣 MIAO LETTER NYA
16F2D 碣 MIAO LETTER NYHA
16F2E 碣 MIAO LETTER TSHA
16F2F 碣 MIAO LETTER DZHA
16F30 碣 MIAO LETTER YI TSHA
16F32 碣 MIAO LETTER REFORMED TSHA
16F31 碣 MIAO LETTER YI DZHA (Glyph position correct; no need to change)
Explanations:

16F2C ￡: This character is used in the *Normalised* but not the *Traditional Miao Orthography*. Moreover, the glyph shape per Miao scholars' design is ￡.

16F2D ￡: This character is used in neither the *Traditional* nor the *Normalised Miao Orthography*. According to church pastors and Miao scholars, it is used amongst the Yi group (the White Yi of Xundian, Kunming, Yunnan Province, China), but no pronunciation information is available. From the spelling rules of the [Traditional] Miao orthography, it is probably the voiced counterpart of 16F2C ￡.

16F2E ￡: This character is used in both the *Traditional* and the *Normalised Miao Orthography*. The difference is that it represents two phones in the *Traditional Miao Orthography* but only one in the *Normalised Miao Orthography*. No information about pronunciation and usage amongst the Yi is available.

16F2F ￡: This character is used only in the *Traditional Miao Orthography*. It is the voiced counterpart of 16F2E ￡.

16F30 ￡: This character is used in neither the *Traditional* nor the *Normalised Miao Orthography*. No information about pronunciation and usage amongst the Yi is available.

16F32 ￡: It is known that this character was once used amongst the Miao of Stone Gateway, Guizhou before 1949. It had the same pronunciation as j in Chinese pinyin and one of the phones of in the *Traditional Miao Orthography*.

Accordingly, based on verification of character origin and pronunciation, we agree to revise the positions of the six glyphs as shown below, but we would like more accurate pronunciation verification for those characters used amongst the Yi.

**Accepted**

See also comment T2 from US.

The changes are as follows from previous version:

16F2C → 16F32
16F2D → 16F2C
16F2E → 16F2D
16F2F → 16F2E
16F30 → 16F2F
16F31 unchanged
16F32 → 16F30

*The request about pronunciation verification is noted.*

**Technical comment on CJK Unified Ideographs Extension F**

(The detailed feedback is in the HKSAR review to IRG 2130 (which was a document containing the CJK Ext F chart): [http://appsrv.cse.cuhk.edu.hk/~irmg/irmg45/IRGN2130_HKSAR_Review.pdf](http://appsrv.cse.cuhk.edu.hk/~irmg/irmg45/IRGN2130_HKSAR_Review.pdf), some of the material is duplicated here. All these should be discussed by IRG; however the project editor has consulted with CJK experts and come with proposed dispositions. Various IRG documents mentioned in the following section can be found at [http://appsrv.cse.cuhk.edu.hk/~irmg/index.htm](http://appsrv.cse.cuhk.edu.hk/~irmg/index.htm).)

1. Radicals and Stroke Counts
   a) 2CF16, SC 3 (according to IRG 2105, Appendix 2)

   ![2CF16](http://appsrv.cse.cuhk.edu.hk/~irmg/)

   **Propose accepted**

   5.1 -> 5.3

   b) 2CF25, SC 8 (according to IRG 2105, Appendix 2)
Propose accepted
5.6 -> 5.8

c) 2CF36, SC 13, reference 55F6, 84FD, and 4EBF
2CF36
Propose accepted in principle
5.12 -> 5.13, but 102.9 would be better (102: 田)

d) 2D02F, SC 10, reference #22 of IRG N954AR & IRG N1105
2D02F
Propose not accepted
It would be 10.11 -> 10.10. I was given the example of IRG N954AR #78 to keep current residual stroke count

e) 2D108, SC 12, reference #35 of IRG N954AR & IRG N1105
2D108
Propose accepted
18.11 -> 18.12

f) 2D170, SC 4
2D170
Propose accepted
25.5 -> 25.4

g) 2D2E0, SC 15, reference 6A06, 7483, and 96E2
2D2E0
Propose accepted
30.14 -> 30.15

h) 2D332, SC 19
2D332
Propose accepted
30.18 -> 30.19

i) 2D4F2, SC 6, the SC of the residual component is 6 in KangXi dictionary, reference 2DD23, 2DA99
2D4F2
Propose accepted
40.7 -> 40.6
j) 2D68D, SC 18, reference 50B2, 71AC, and 8D05

Propose accepted
53.17 -> 53.18

k) 2D8A8, SC 12, reference 2E282 and 2E8B6

Propose not accepted
It would be 64.13 -> 64.12. I was given the example of IRG N954AR #36 to keep current residual stroke count

l) 2D8FC, SC 10

Propose accepted
66.9 -> 66.10

m) 2D9A9, SC 9, see Appendix 1 of IRG N2105

Propose accepted
72.8 -> 72.9

n) 2DA1E, Radical = Sun 日 (R72), reference U+66A2 暢 and U+7545 暢, [and 2D9C2]

Propose accepted
73.7 -> 72.7 (radical changed, no change in SC)

o) 2DA45, SC 9

Propose not accepted
It would be 74.10 -> 74.9. I was given the example of IRG N954AR #35 to keep current residual stroke count

p) 2DA5F, SC 4, reference 4F3C, 59D2, and 62DF

Propose accepted
75.3 -> 75.4

q) 2DB83, SC 23, on two nearly identical components in lower right, the one on the left has one less stroke

Propose accepted
77.24 -> 77.23
r) 2DB88, SC 2, SC of left component (radical) is 5 in KangXi dictionary, reference 2DB85, 400E, and 5DE7

Propose accepted
78.3 -> 78.2

s) 2DCF5, SC 16, SC of lower right component is 6 in KangXi dictionary, reference 2DD23

Propose accepted
85.17 -> 85.16

t) 2DDE5, SC 6, SC of right component is 6 in KangXi dictionary, reference 5905, 9004, and 964D

Propose accepted
93.7 -> 93.6

u) 2D49E, SC 13

IRG discussion
This would be 38.12 -> 38.13. That changes was not in HKSAR feedback and is out of sequence, it could be a typo for 2DE9E which is part of the HKSAR feedback and is not listed here.

v) 2DF35, SC 12

IRG discussion
This would be 104.14 -> 104.12. Another opinion is 104.13.

w) 2DFDE, SC 12

Propose accepted
109.11 -> 109.12

x) 2E0E1, SC 11, reference 5368, 21A9D, and 25801

Propose accepted
115.10 -> 115.11

y) 2E0F9, SC 16, reference 417B, 6A06, and 7483

Propose accepted
115.15 -> 115.16

z) 2E113, SC 11, reference 5368, 21A9D

Propose accepted

116.10 -> 116.11

aa) 2E172, SC 8, reference of lower right component in KangXi dictionary is 5, reference 5B64, 72D0, and 26C44

Propose accepted

118.9 -> 119.8

ab) 2E207, SC 13, see appendix 1 of IRG N2105

Propose accepted

119.14 -> 119.13

ac) 2E28B, SC 4, reference 7F52

Propose accepted

122.5 -> 122.4

ad) 2E2B8, SC 6, [probably a typo for 2E2B2 (2E2B8 RSC is 123.9), 2E2B2 is part of the HKSAR feedback, 2E2B8 is not]

Propose accepted in principle

123.7 -> 123.6

ae) 2E37A, SC 10 [another typo, should say SC 9], SC should be 9 if outer component is taken as the radical

Propose accepted in principle

134.10 -> 134.9

af) 2E38A, SC 4, IRG has resolved in appendix 2 of IRG N 2105 that the upper component SC is 5, but it is 4 in KangXi, and in reference 65E2, 65E3, 2312D, 2312E, and 2312F, the minor stroke is not counted.

Propose accepted

136.5 -> 136.4

ag) 2E3A7, SC 5, the SC of the lower component is 5 in KangXi
Propose accepted
140.4 -> 140.5

ah) 2E4F1, SC 11

Propose accepted
141.10 -> 141.11

ai) 2E4F4, SC 9, same rationale as for 2E38A

Propose accepted
141.10 -> 141.9

aj) 2E685, SC 4, same rationale as for 2E38A

Propose accepted
154.5 -> 154.4

ak) 2E713, SC 11, reference 6A06, 7483, and 96E2

Propose accepted
157.10 -> 157.11

al) 2E822, SC 3 [probably a typo for 2E822 (2E822 RSC is 167.6), 2E822 is part of the HKSAR feedback, 2E822 is not, also out of sequence], reference 2E820

Propose accepted in principle
164.2 -> 164.3

am) 2E84B, SC 12

Propose accepted
164.11 -> 164.12

an) 2E8E4, SC 12

IRG discussion
This would be 167.14 -> 167.12. Another opinion is 167.13.
ao) 2E914, SC 4, same rationale as for 2E38A

Propose accepted
169.5 -> 169.4

ap) 2E917, SC 4, the SC of the enclosed component is 5 in KangXi, reference 244F0

Propose not accepted
It would be 169.5 -> 169.4, but the KangXi SC value is not supporting the change and 244F0 is different

aq) 2EA47, SC 5

Propose accepted
184.6 -> 184.5

ar) 2EA85, SC 4, same rationale as for 2E38A

Propose accepted
187.5 -> 187.4

as) 2EB4B, SC 9 or 10? ref. U+2DAD4

IRG discussion
Propose no change: 📉 (2) + — (1) + 出 (5)

at) 2EBB3, SC 5 or 6? Ref. U+214A1, U+2503B, U+2503D, U+2503E, U+2A1DE, U+ 2A50F (only this one supports current counting method.)

IRG discussion
Propose 207.5 -> 207.6 (majority rule)

au) 2EBB6, SC 12? Ref. U+214A1, U+2503B, U+2503D, U+2503E, U+2A1DE, U+ 2A50F (only this one supports current counting method.)

IRG discussion
Propose 207.11 -> 207.12 (majority rule)

In addition to the code points mentioned above, the HKSAR feedback about IRG N2130 contains feedback for the following code points:

av) 2CF19, SC=3?
IRG discussion
Propose to stay as it is (5.4), unlike 2CF16 the oblique stroke does not connect with the vertical stroke.

av) 2D2B3, SC =13
2D2B3

IRG discussion
Propose to do 30.12 -> 30.13 as suggested.

ax) 2DA11, SC=16?, reference 2A813, 2B249, 4B1D, and 4D43
2DA11

IRG discussion
Propose to do 72.17 -> 72.16 as suggested.

ay) 2DE95, SC =17

IRG discussion
Propose to do 96.16 -> 96.17 as suggested (or the two vertical strokes should be merged into one).

az) 2DE9E, SC 13, reference 6A9B, 6FC4, 203C0 (may be part of the Chinese comment if 2D49E is a typo)

IRG discussion
Propose to do 97.12 -> 97.13 as suggested.

ba) 2E0CD, SC 9, reference 5835, 7779, and 8AF8

IRG discussion
Propose to do 115.8 -> 115.9 as suggested.

bb) 2E495, SC=15, the SC of the middle component is 12 in KangXi, reference 655D, 5E63, and 853D

IRG discussion
Propose to do 140.14 -> 140.15 as suggested.

bc) 2E4A3, SC=16
IRG discussion
Propose to do 140.15 -> 140.16 as suggested.

bd) 2E573, SC=5, the SC of the right component is 5 in KangXi, see also appendix 1 of IRG N2105, reference 2E5F3

IRG discussion
Propose to do 145.4 -> 145.5 as suggested.

be) 2E5CD, SC=9

IRG discussion
Propose to do 146.8 -> 146.9 as suggested.

bf) 2E7AE, SC=9

IRG discussion
Propose to do 162.8 -> 162.9 as suggested.

bg) 2E9A7, SC=10

IRG discussion
Propose to do 173.9 -> 173.10 as suggested.

2. Wrong Positions
KC-06578, 礻令 should be moved from U+2D1D1 to U+2E068. Its r/s value should be 113.5. See IRGN2125 Consolidated Review.
KC-07044 木名 should be moved from U+2D394 to U+2DA7C. Its r/s value should be 75.6. See IRGN2125 Consolidated Review.

Accepted
See also comments T2 from Japan, T7 and T8 from UK, TE5 and TE6 from US.

3. Fonts to be Improved
For references of above comments on CJK_F, see the HKSAR’s Feedback on IRGN2130 from IRG web site.

2CFDF
2D0CF
2D0D0
2D102
2D16F
2D171
2D5F8
2D73E [probably a typo for 2D7E3]
2DA69
2DA90
2DE2F
2DE95
2DF02
2DFC5 (USAT font to be improved)
2E41B
2E608

**IRG discussion**

Compared to the HKSAR feedback, two entries are missing: 2DAD4, 2E72C; and one entry is in the wrong category (2DE95 is a SC issue and is discussed above).

It looks like 2DF02 is probably intentional and should not be modified.

2DFC5 USAT entry needs to be fixed to be similar to the K entry:
India: Negative

Technical comments

IN.1. Page 1358 to 1360, Tamil Supplement 11FC0-11FFF.
Symbols proposed for the Tamil Supplement block in the code points between 11FC0-11FFF have major technical errors.
Tamilnadu Government / India has proposed amendments to these symbols. The amendment proposal is under the review of UTC and published for the Public review as well.
Proposed change by India
Not accepted for encoding now.
Withdraw the original proposal that proposes the symbols in the code points between 11FC0-11FFF.
The code points between 11FC0-11FFF should wait and accommodate the correct symbols proposed through the Amendment from Tamilnadu Government / India after the review of UTC.
Accepted
The proposal for encoding the content of the Tamil Supplement block is postponed, therefore removed from this edition and will not be moved to the next amendment for ballot.

IN.2. Page 145, Tamil 0B99
Annotation of 0B99 has reference to 11FD5 which is proposed to be deferred from encoding.
See "Proposed change" of Comment "IN 1".
Proposed change by India.
The annotation "→ 11FD5 ☇ tamil sign muuvulakku" has to be removed.
Accepted

IN.3. Page 145, Tamil 0BA4
Annotation of 0BA4 has reference to 11FD7 which is proposed to be deferred from encoding.
See "Proposed change" of Comment "IN 1".
Proposed change by India.
The annotation "→ 11FD7 ☇ tamil sign mukkuruni" has to be removed.
Accepted

IN.4. Page 145, Tamil 0BB3
Annotation of 0BB3 has reference to 11FD7 which is proposed to be deferred from encoding.
See "Proposed change" of Comment "IN 1".
Proposed change by India.
The annotation "→ 11FD7 ☇ tamil sign mukkuruni" has to be removed.
Accepted

IN.5. Page 146, Tamil Numerics
Notes under the paragraph/title "Tamil Numerics" has references to the Tamil Supplemet block which is proposed to be deferred from encoding.
See "Proposed change" of Comment "IN 1".
Proposed change by India.
The notes " Tamil fractions are encoded in the Tamil Supplement block at 11FC0-11FFF." has to be removed.
Accepted

IN.6. Page 146, Tamil
Notes under the paragraph/title "Tamil symbol" has references to the Tamil Supplemet block which is proposed to be deferred from encoding.
See "Proposed change" of Comment "IN 1".
Proposed change by India
The notes "More symbols are encoded in the Tamil Supplement block at 11FC0-11FFF." has to be removed.

Proposed accepted

IN.7. Page 145, Tamil 0BFA
Annotation of 0BB3 has reference to 11FF1 which is proposed to be deferred from encoding.
See "Proposed change" of Comment "IN 1".
Proposed change by India.
The annotation "→ 11FF1 ே, tamil traditional number sign" has to be removed.
Accepted
**Japan: Negative**

**Technical comments**

If T.1 and T.2 are accommodated, Japan NB changes its vote to Yes.

**T1. Page 2489-2582, Clause 33 – “CJK Unified Ideographs Extension F”**

At the last WG2 meeting in Japan, WG2 issued the following recommendation. (Recommendation M64.11)

"WG2 recommends that IRG reviews its CJK unification rules to minimize the number of glyph variants that are coded as separate characters."

Following this recommendation, IRG reviewed CJK Extension F at the last IRG meeting in Hong Kong and concluded to unify some CJK characters with the glyph variants that are separately encoded. However, after IRG meeting, Japan NB found more CJK F characters to be unified with the glyph variants based on the same principle.

See the following table showing the CJK glyphs to be unified with. (No special meaning in the area highlighted in yellow.)
Proposed change by Japan.

- Please delete the following CJK F characters, because either they are unified with other CJK unified character already encoded before CJK F or they are unified with other CJK F character having same source category (#4 and #27 of the table on left-hand side “Comments” column). Note the list is sorted in the order of code point.

  U+2D0D2, U+2D0D6, U+2D0E9, U+2D10E, U+2D136, U+2D2E5, U+2D421, U+2D44B, U+2D584, U+2D6E1, U+2D818, U+2D81D, U+2D8B4, U+2D99C, U+2DA4C, U+2DA99, U+2DAE0, U+2DAFD, U+2DB0F, U+2DB54, U+2DB8C, U+2DB90, U+2DBB8, U+2DBC2, U+2DBF6, U+2DEF3, U+2E0DD, U+2E100, U+2E168, U+2E1CF, U+2E1D3, U+2E232, U+2E295, U+2E304, U+2E314, U+2E330, U+2E341, U+2E368, U+2E40B, U+2E5E8, U+2E615, U+2E63A, U+2E752, U+2E82F, U+2E900, U+2E902

- Please unify U+2E484 (#41 of the table) with U+2E5AB, so that U+2E5AB has the two glyphs from KC and USAT.

IRG discussion
The request seems reasonable but should be endorsed by IRG.

T2. Clause 33 – “CJK Unified Ideographs Extension F”
Following glyphs are placed on same code point by mistake.
Proposed change by Japan.  
KC-06578 should be moved to U+2E068.

KC-07044 should be moved to U+2DA7C.

Accepted  
See also comments CJK.2 from China, T7 and T8 from UK, TE5 and TE6 from US.  
This was a production error. The issue with KC-06578 and KC-07044 had to do that the editor was given incorrect indexes in the original Korean font.

T3. Page 2652, Sub-clause A.5.10 390 MOJI-JOHO-KIBAN IDEOGRAPHS-2016  
As described in Editor’s Note, the file “JMJKI-2016.txt” should be consistent with the character set of CJK Extension F at the publication of the 5th edition of this International Standard.
Japan NB separately sent “JMJKI-2016.txt” file to the project editor based on the current CJK Extension F just in case.

Proposed change by Japan.  
Please maintain the contents of file “JMJKI-2016.txt” to be correspondent with the character set of CJK Extension F at the publication of the 5th edition of this International Standard

Proposed accepted in principle  
Given that the code allocation for CJK Extension F will be changed by these dispositions, the file JMJKI-2016.txt will need to be updated again. However, this could be fixed during the ballot time for the 5th edition in order to be available before publication.

Editorial comments

E1. Several throughout the whole document  
We see “CJK Unified ideograph” (capital "U") and “CJK unified ideograph." (small "u")

Proposed change by Japan

Please make the case of “CJK Unified ideograph” be consistent. As for the block name, it would be “CJK UNIFIED IDEOGRAPH”.

Accepted

E2. Page 31, 32 Sub-clause 23.1 List of source references  
[Ed. Typo]

Proposed change by Japan

“Note 1”, “Note 2” and “Note 3” should be “NOTE 1”, “NOTE 2” and “NOTE 3.

Accepted

E3. Page 32 Sub-clause 23.1 List of source references  
[Ed. Typo]

Proposed change by Japan

J3A JIS X 0213:2004 level-3 addendum from JIS JIS X 0213:2000 level-3
should be
J3A JIS X 0213:2004 level-3 addendum from JIS X 0213:2000 level-3
J13A JIS X 0213:2004 level-3 addendum from JIS JIS X 0213:2000 level-3 replacing J1 characters
should be
J13A JIS X 0213:2004 level-3 addendum from JIS X 0213:2000 level-3 replacing J1 characters
Accepted

E4. Page 32 Sub-clause 23.1 List of source references
[Ed. Typo]
Proposed change by Japan.
“(see A.4.3 and A4.4)” in NOTE 3
should be
“(see A.4.3 and A.4.4)”
Accepted

E5. Page 2489 – 2582 Clause 33 “CJK Unified Ideographs Extension F”
Some USAT glyphs on CJK F are not correctly rendered. As shown below, there are many unfilled pixels at the
position where the strokes are overlapped. We found this problem at some resolutions.

Proposed change by Japan.
USAT font should be fixed
Accepted in principle
Based on receiving such a font from SAT.

E6. Page 2637 Sub-clause Annex A.1 Collections of coded graphic characters
[Ed. Typo]
Proposed change by Japan.
1075 SUPPLEMENTAL ARROWS-C 1F800-1F8FF
should be
1075 SUPPLEMENTAL ARROWS-C 1F800-1F8FF
Accepted
Mongolia: Negative

The ballot comment from Mongolia is nearly identical to the technical comments concerning Mongolian made by China. Therefore, it is not repeated here. Please refer to the disposition of the Chinese comment T1 on Mongolian for the result on the CD content and all dispositions concerning Chinese comments on Mongolian T1 to T4.
Norway: Positive with comments

General comment:

G1. Sub-clause 4 Terms and definitions
ISO/IEC Directives Part 2 stipulates alphabetical ordering of terms and definitions as the “least preferred order”, while systematic order is the preferred order.

Proposed change by Norway.
Change order of terms and definitions

Accepted in principle
The project editor will take in consideration this input and after consultation with other experts in the Working Group will determine a preferred order for the list. The possible issue is cross reference from other standards.

G2. Sub-clause 4 Terms and definitions
ISO/IEC Directives Part 2 stipulates the use of the information category “Note # to entry” for use in the terminology section. The rules for that information category are slightly different from those of “NOTE”, in particular that normative information is permitted.

Proposed change by Norway.
Change “NOTE” to “Note # to entry” throughout

Accepted
For example, in the current term 4.1 base character, ‘NOTE 1’ becomes ‘Note 1 to entry’ and ‘NOTE 2’ becomes ‘Note 2 to entry’

Technical comment:

T1. Clause 32, Code Charts and lists of character names – Latin Extended-A
LATIN CAPITAL LETTER ENG
In the chart provided with the draft this character is correctly rendered in accordance with cultural expectations of the Sami languages (in particular Northern Sami). However the note text “glyph may also have appearance of large form of the small letter” is positively incorrect for Sami.

A large number of commercially available fonts have implemented the “note” in the character chart rather than the character form provided in the chart itself, making these fonts unacceptable for Sami. Since the character is listed under the heading “European Latin” it is assumed that the focus for these characters is on European languages and European usage.

We understand that a glyph with the form as indicated in the note is in use in other (non-European) languages, and that this glyph needs to be encoded. However, this needs to be done without causing encoding problems for languages that in fact are using and need the glyph Ŋ (and it was necessary to change font from Arial to Calibri to write the glyph correctly).

Standards Norway has been strongly requested by the Norwegian Ministry of Cultural Affairs to help ensure stable and appropriate encoding of text in our indigenous languages. Large quantities of text have been encoded using the character “014A” assuming that this is a unique representation of the CAPITAL LETTER ENG. It is noted that earlier versions of character set standards the character has been named “LATIN ... LETTER ENG (Sami)”, giving encoders the understanding that the correct form for Sami is indeed what is intended for code space 014A.

Proposed change by Norway.
Delete the note “glyph may also have appearance of large form of the small letter” and provide a separate space for “Latin capital letter ENG with shape as small letter ENG”.

Not accepted
The request amount to a dis-unification of the LETTER ENG. If Norway wants to entertain the proposal, it is up to Norway to create a proposal and follow the procedure for encoding of a new character. Until that is done and accepted, the informative annotation serves a very useful purpose.
United Kingdom: Negative

Technical comments start with ‘T’, and Editorial comments start with ‘E’:

E1. Page 12, Sub-clause 6.4, Naming of characters
“follows the rules given in 26.8 for Nushu characters, or”
For consistency with usage elsewhere in the standard, the bolded instance of “Nushu” should be written as “Nüshu”.
Proposed change by U.K.
Change “Nushu” to “Nüshu”.
Accepted

E2. Page 40, Sub-clause 25.2, Source reference file for Nüshu ideographs
“Source reference file for Nüshu ideographs”
Nüshu characters are not elsewhere referred to as “Nüshu ideographs”.
Proposed change by U.K.
Change to “Source reference file for Nüshu characters”.
Accepted

E3. Page 43, Sub-clause 26.8, Character names for Nushu characters
“Character names for Nushu characters
For Nushu characters the names are algorithmically constructed by appending their coded representation in their five hexadecimal digit notation to “NUSHU CHARACTER-”. For example, the first Nushu character has the name “NUSHU CHARACTER-1B100”.
For consistency with usage elsewhere in the standard, the bolded instances of “Nushu” should be written as “Nüshu”.
Proposed change by U.K.
Change “Nushu” to “Nüshu” in these instances.
Accepted

T4. Page 52, Clause 31 Structure of the 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. No characters are currently encoded in the TIP.”
It is probable that the SIP will be filled and a new plane required to be assigned for CJK unified ideographs before any ancient ideographic scripts are ready for encoding. If this is the case, then it may be best to use the TIP for CJK unified ideograph extensions as well as or instead of ancient ideographic scripts. Therefore it is inadvisable to state categorically that the TIP is used for ancient ideographic scripts.
Proposed change by U.K.
Change to “The TIP (plane 03) is intended for CJK unified ideographs (unified East Asian ideographs) that are not encoded in the BMP or SIP. It may also include ancient ideographic scripts that are related to but not classified as CJK unified ideographs. No characters are currently encoded in the TIP.”
The note may be left unchanged.
Accepted

T5. Page 53, Clause 33, Code Charts and lists of character names – Nüshu
We sorted the Nushu repertoire according to the ordering rules noted in the code chart for Nushu, and the following 10 characters seem to be misplaced:
NUSHU CHARACTER-1B1E0 * tcie35 should be after NUSHU CHARACTER-1B1E1 * sie35
NUSHU CHARACTER-1B201 * sew35 should be after NUSHU CHARACTER-1B202 * lew44
NUSHU CHARACTER-1B22B * cyu44 should be after NUSHU CHARACTER-1B22C * tchyu21
NUSHU CHARACTER-1B237 * huow21 should be after NUSHU CHARACTER-1B238 * kuow44
NUSHU CHARACTER-1B239 * nuow42 should be before NUSHU CHARACTER-1B238 * kuow44
NUSHU CHARACTER-1B242 * liong42 should be before NUSHU CHARACTER-1B240 * tshiong35
NUSHU CHARACTER-1B253 * tshiu21 should be after NUSHU CHARACTER-1B255 * tci21
NUSHU CHARACTER-1B2C7 * lang33 should be after NUSHU CHARACTER-1B2C8 * tang13
NUSHU CHARACTER-1B2DD * tshew5 should be after NUSHU CHARACTER-1B2DE * lew33
NUSHU CHARACTER-1B2F2 * ku44 should be before NUSHU CHARACTER-1B2F0 * cyu35

Proposed change by U.K.

Reorder these ten characters

Accepted

T6. Page 53, Clause 33, Code Charts and lists of character names – CJK Ext. F – U+2D0F0

U+2D0F0. The two source glyphs (JMJ-059378 and USAT-04376) have different left hand components, which would not seem to be unifiable.

Proposed change by U.K.

Encode JMJ-059378 and USAT-04376 as separate characters, JMJ-059378 under 8 strokes, and USAT-04376 under 9 strokes.

IRG discussion

The request seems reasonable but should be endorsed by IRG. For reference the chart entry looks like:

![chart]

T7. Page 53, Clause 33, Code Charts and lists of character names – CJK Ext. F – U+2D1D1

U+2D1D1. KC-06578 is misplaced, and should be unified with JMJ-059958 as U+2E068.

Proposed change by U.K.

Move KC-06578 to U+2E068 (with JMJ-059958).

Accepted

See also comments CJK.2 from China, T2 from Japan, TE5 and TE6 from US.


U+2D394. KC-07044 is misplaced, and should be unified with GZIW-01933 as U+2DA7C.

Proposed change by U.K.

Move KC-07044 to U+2DA7C (with GZIW-01933).

Accepted

See also comments CJK.2 from China, T2 from Japan, TE5 and TE6 from US.


U+2DDC6. The two source glyphs (JMJ-057583 and USAT-04734) have different left hand components, which are not unifiable. Moreover, the two characters are not cognate: JMJ-057583 is a variant of U+6536 收 (See Zhonghua Zihai p. 1006); whereas USAT-04734 is a variant of U+7267 牧 (See Zhonghua Zihai p. 1006).

Proposed change by U.K.

Encode JMJ-057583 and USAT-04734 as separate characters.

IRG discussion

The request seems reasonable but should be endorsed by IRG. For reference the chart entry looks like:

![chart]


U+2DF3B (USAT-04032) is under radical 104, but would be better placed under radical 61.

Proposed change by U.K.

Move U+2DF3B to radical 61, under 17 strokes.

IRG discussion

The request seems reasonable but should be endorsed by IRG. For reference the chart entry looks like:

![chart]

If accepted, the character would go after 2D7E2:
U+2DFC5. The source glyph for USAT-04573 has an incorrect radical (radical 72). The source for this character (http://21dzk.l.u-tokyo.ac.jp/SAT2012/T2157_.55.0886x11.html) shows that it should be radical 109.
Proposed change by U.K.
Correct the glyph for USAT-04573 to have the correct radical (radical 109).

IRG discussion
See also comment T from China.
The request seems reasonable but should be endorsed by IRG.

U+2E048 (JMJJ-058197) would be better placed under radical 86. Although this is a variant of U+7901礁 (radical 112), the change in position of the four-dot fire element means that U+2E048 is best classified under radical 86.
Compare the analogous pair U+9EDE點 (radical 203) and U+3E03點 (radical 86).
Proposed change by U.K.
Move U+2E048 to radical 86, under 13 strokes.

IRG discussion
The request seems reasonable but should be endorsed by IRG. For reference the chart entry looks like:

2E048礁

U+2E1F5. The two source glyphs (JMJJ-058296 and USAT-00062) have different left hand components, which would not seem to be unifiable. Compare U+2DB74 (USAT-00811) and U+2E00D (USAT-02508) which have the same difference in left hand component, but are not unified.
Proposed change by U.K.
Encode JMJJ-059378 and USAT-04376 as separate characters, JMJJ-058296 under 9 strokes, and USAT-00062 under 11 strokes.

IRG discussion
The request seems reasonable but should be endorsed by IRG. For reference the chart entries look like:

U+2E321. The two source glyphs (JMJJ-058387 and USAT-60296) have different left hand components, which would not seem to be unifiable.
Proposed change by U.K.
Encode JMJJ-058387 and USAT-60296 as separate characters, both under 8 strokes.

IRG discussion
The request seems reasonable but should be endorsed by IRG. For reference the chart entry looks like:

E15. Page 2665, Annex G
Missing space between “and” and “Tangut”.
Proposed change by U.K.
Insert a space between “and” and “Tangut”.
Accepted
USA: Negative
(If TE.3, TE.5, and TE.6 are accommodated, the USNB will change its vote to yes.

Technical comments:

TE.1. Page 53, Clause 33, Code Charts and lists of character names – Sharada
Based on evidence in UTC document [L2/15-255], the glyphs for the following two characters need to be corrected:
111BA SHARADA VOWEL SIGN VOCALIC L
111BB SHARADA VOWEL SIGN VOCALIC LL.
Proposed change by US:
Change the glyphs for U+111BA and U+111BB as follows:

111BA SHARADA VOWEL SIGN VOCALIC L
and
111BB SHARADA VOWEL SIGN VOCALIC LL
Accepted

TE.2. Page 53, Clause 33, Code Charts and lists of character names – Miao
The glyphs for U+16F2C - U+16F32 have been reported as being in error, and the USNB has received confirmation about the errors and the corrected glyphs from Adrian Cheuk. The correct glyphs are shown on the right column.
Proposed change by US:
Correct the glyphs as follows:

Accepted
See also comment from China about Miao

TE.3. Page 53, Clause 33, Code Charts and lists of character names – Tamil Supplement
Based on the extensive comments contained in UTC document [L2/16-039], the US considers Tamil Supplement not yet mature enough to progress to an enquiry ballot.
Proposed change by US:
Retain Tamil Supplement at committee draft level. If te.3, te.5, and te.6 are accommodated, the USNB will change its vote to yes.
Accepted in principle
See also comment T. from India. However, the Tamil Supplement will be removed from the 5th edition addition but will not be added in any committee draft level ballot until there is a better consensus.
TE.4. Page 53, Clause 33, Code Charts and lists of character names – Soyombo
The glyph for U+11A98 SOYOMBO GEMINATION MARK is incorrect; the triangle should be directly above the dotted circle, not above and to the right.

Proposed change by US:
Correct the glyph by centering the triangle above the dotted circle.

Accepted

TE.5. Page 53, Clause 33, Code Charts and lists of character names – CJK Ext. F – U+2D1D1
An error has been identified in CJK Extension F for the glyph and source of U+2D1D1.

Proposed change by US:
Move the glyph and source KC-06578 from U+2D1D1 (=JMJ-059415) to U+2E068 (=JMJ-059958). If te.3, te.5, and te.6 are accommodated, the USNB will change its vote to yes.

Accepted
See also comments CJK.2 from China, T2 from Japan, T7 and T8 from UK.

A second error in CJK Extension F has been found: the source and glyph U+2D394 is incorrect.

Proposed change by US:
Move the glyph and source KC-07044 from U+2D394 (=USAT-03073) to U+2DA7C (=GZJW-01933). If te.3, te.5, and te.6 are accommodated, the USNB will change its vote to yes.

Accepted
See also comments CJK.2 from China, T2 from Japan, T7 and T8 from UK.

Editorial comments:

E.1. Page 53, Clause 33, Code Charts and lists of character names – Bengali
The header above U+09FC is spelled “SignS”.

Proposed change by US:
Make the final “S” lowercase

Accepted

The heading above U+16FE1 is “Nushu mark”, but the “u” should contain an umlaut

Proposed change by US:
Change “Nushu” to “Nüshu”.

Accepted

E.3. Page 53, Clause 33, Code Charts and lists of character names – Nushu
The annotation for U+1B1FE is spelled “Nushu”, but the “u” should contain an umlaut.

Proposed change by US:
Change “Nushu” to “Nüshu”.

Accepted