

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

Doc. Type: Disposition of comments

Title: Disposition of comments on CD to ISO/IEC 10646 7th edition

Source: Michel Suignard (project editor)

Project: JTC1 02.10646.00.00.00.07

Status: For SC2 consideration

Date: 2025-02-11

Distribution: WG2

Reference: SC2 N4951, N4940

Medium: Paper, PDF file

Comments were received from the following members: Canada, China, Japan, UK, and USA and were all accommodated, except for an editorial one. This resulted in the significant following changes:

Repertoire changes:

Additions:

- Four urgently needed CJK Ideographs at the end of CJK Unified Ideographs Extension C (U+2B73B..U+2B73E)
- 8 new Emoji characters (U+1F6D8 LANDSLIDE, U+1FA8A TROMBONE, U+1FA8E TREASURE CHEST, U+1FAC8 HAIRY CREATURE, U+1FACD ORCA, U+1FADD APPLE CORE, U+1FAEA DISTORTED FACE, U+1FAEF FIGHT CLOUD)
- 2 new Tangut characters (U+18D1D and U+18D1E)

Removals:

- Two proposed ideographs in CJK Unified Ideographs Extension J (U+32E11 and U+33281 are removed; this result in reducing the block range and making the last code point U+33479.

Name change:

- U+1AE9 COMBINING LEFT ANGLE COMBINING LEFT ANGLE CENTRED ABOVE

Glyph changes for the following code points:

- U+A7F1 MODIFIER LETTER CAPITAL S
- U+113D0 TULU-TIGALARI CONJOINER
- The font for the Adlam block was updated, resulting in significant glyph changes for the following glyphs (1E900 1E903 1E905 1E907 1E90B 1E912..1E917 1E91A..1E91B 1E91E..1E91F 1E920..1E921 1E92D..1E92F 1E935 1E938..1E939 1E93C 1E93E 1E943 1E951..1E952 1E956)

Details of the ballot comments and their disposition are provided on the following pages.

Template for comments and secretariat observations

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MB/ NC ¹	Line number	Clause/ Subclause	Paragraph/ Figure/Table	Type of comment ²	Comments	Proposed change	Observations of the secretariat
CA16-001	P 48	28.11	Table 9 Note 2		ISO/TR 11941 is mentioned as the basis for the Annotation elements in Table 9. However, https://www.iso.org/obp/ui/#iso:std:iso:tr:11941:ed-1:v1:en at the ISO site indicates that ISO/TR 11941:1996(en) "This standard has been withdrawn".	Being a TR (type 2) from TC46, not sure if this document is still a valid reference to be pointed to from 10646. The July 2000 document from the Ministry of Culture and Tourism, ROK, perhaps may be a valid reference.	Accepted in principle Because the referenced document does not exist anymore, it is just simpler to remove the note including that reference as no longer applicable.
CA1-002	All	All			General comment on use of "and/or", used in several places. The 'ISO House Style' document has the following guideline on its use. 'and/or' (under section on Punctuation) (from: https://www.iso.org/ISO-house-style.html)	The phrase "and/or" is often used in English to express "either or both" of two options. The meaning can be ambiguous, especially in translation to other languages where the "/" is not a recognized punctuation mark. Avoid using "and/or" in a document to avoid confusion and misapplication. Use the construction "either x or y, or both" instead. The editor may check if it would be useful and edit the CD text as appropriate	Not accepted. In the context of this document, the meaning of and/or is 'either or both' as it is common practice in these standards documents and is not ambiguous.
US-003	P 1877	35.5	Adlam code chart, page 1877	te	The Adlam glyphs have changed since the code chart glyphs were updated in 2019. The new changes were needed to improve legibility, reduce ambiguity, and to simplify forms for writing. We recommend the current code chart font be replaced with the Ebrima v5.20 2024 font as documented in L2/24-205 , in order to provide a standard reference for future font development.	Change the code chart font for Adlam to Ebrima v5.20, 2024, as shown in L2/24-205	Accepted
US-004	P 2842	35.5	CJK Unified Ideographs Extension C code chart, page 2842	te	One urgently-needed G-source ideograph with code point U+2B73B has been recommended by IRG, as documented in IRG N2691 and Section 27 of L2/24-227R . The Unicode Standard will include this character in its 17.0 version. In order to keep 10646 in synch with Unicode, we recommend adding U+2B73B.	Add one urgently-needed G-source ideograph with code point U+2B73B.	Accepted
US-	P2842	35	CJK Unified Ideographs	te	Two urgently-needed T-source ideographs with code points U+2B73C and U+2B73D have been	Add two urgently-needed T-source ideographs with	Accepted

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005			Extension C code chart, page 2842		recommended by IRG, as documented in IRG N2709 and Section 28 of L2/24-227R . The Unicode Standard will include these characters in its 17.0 version. In order to keep 10646 in synch with Unicode, we recommend adding U+2B73C and U+2B73D.	code points U+2B73C and U+2B73D.	
US- 006	P 2842	35	CJK Unified Ideographs Extension C code chart, page 2842	te	Based on IRG N2771 , IRG has recommended disunifying U+2335F (CJK Unified Ideographs Extension B), and locating the recommended disunified ideograph at U+2B73E in CJK Unified Ideographs Extension C. Because Unicode Standard will make these changes in its 17.0 version based on Section 29 of L2/24-227R and IRG N2771 , we recommend adding the disunified form at U+2B73E.	Add the disunified form of U+2335F at U+2B73E.	Accepted
US- 007	P3187	35	CJK Unified Ideographs Extension J code chart, page 3187	te	The following character should be removed from the CJK Unified Ideographs Extension J block: U+32E11 (T-source TE-2725). Rationale: Per Recommendation IRG M63.11 in the IRG Meeting #63 recommendations , ROK agreed to change the K-source representative glyph of U+2E23A in the CJK Unified Ideographs Extension F block, which is unifiable with U+32E11 in the CJK Unified Ideographs Extension J block.	Remove U+32E11 from Extension J	Accepted
US- 008	P 3201	35	CJK Unified Ideographs Extension J code chart, page 3201	te	The following character should be removed from the CJK Unified Ideographs Extension J block: U+33281 (UK-source UK-20710) Rationale: This ideograph includes a non-Han component that requires further investigation.	Remove U+33281 from Extension J.	Accepted
US- 009	P 236	35	Combining Diacritical Marks Extended code chart, page 236	te	Unicode has received feedback that the name of the character U+1AE9 COMBINING LEFT ANGLE COMBINING LEFT ANGLE CENTERED ABOVE should be spelled "CENTRED", since British spelling is the usual convention in character names.	Change the name of provisionally assigned character of U+1AE9 from: COMBINING LEFT ANGLE COMBINING LEFT ANGLE CENTERED ABOVE to: COMBINING LEFT ANGLE COMBINING LEFT ANGLE CENTRED ABOVE	Accepted

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MB/ NC ¹	Line number	Clause/ Subclause	Paragraph/ Figure/Table	Type of comment ²	Comments	Proposed change	Observations of the secretariat
US-010	P 237	35	Combining Diacritical Marks Extended, page 237	ed	The subheader above 1AE6 has a minor typo: Historicl IPA”	Correct to “Historical IPA”	Accepted
CA18-011	P 49	29	Fourth full paragraph	2 nd field	Misspelling of ‘syntax’	Correct spelling.	Accepted
CA9-012	P22	14	Note after first para	Ed	The note references Clause 34 whereas the first paragraph refers to Clause 35	Harmonize if necessary	Accepted The note now refers to clause 35.
CN4-013	P 3246	Annex A.1	Page 3246		The scope of the code points of should be 323B0-3347B. 395 CJK UNIFIED IDEOGRAPHS-2026 Collections 394 * 2B73A 323B0-3247B	Correct it.	Accepted in principle, with other repertoire adjustments, it now reads: Collections 394 * 2B73A-2B73E 323B0-33479
US-014	P1946	35	Symbols and Pictographs Extended-A code chart, page 1946	te	Unicode has approved the following emoji characters. In order to stay in synch with Unicode 17.0, we recommend the following 8 characters be added (L2/24-226R): U+1FAEA DISTORTED FACE (L2/24-250) U+1FAEF FIGHT CLOUD (L2/24-254) U+1FADD APPLE CORE (L2/24-253) U+1FACD ORCA (L2/24-249) U+1FAC8 HAIRY CREATURE (L2/24-251) U+1FA8A TROMBONE (L2/24-256) U+1F6D8 LANDSLIDE (L2/24-257) U+1FA8E TREASURE CHEST (L2/24-255)	Add the 8 emoji characters to the code charts.	Accepted (it also concerns the ‘Transport and Map Symbols)
CA15-015	P 48	28.11	Table 9 Notes	Ed	Bold face is used for two terms, but not consistently across the two notes	Is there a reason for the bold face? If yes, should “Syllable name” not be bold in Note 1? Also, should it be “Syllable Name”?	Accepted in principle, note removed, see disposition of CA16-001 above.
US-	P1761	35	Tangut Com-	te	Document N5276 noted that the Tangut	Remove the glyph at U+18D8E and shift the	Accepted

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016			ponents Supplement code chart, page 1761		<p>Component 783 located at 18D8E in the code chart (below) is unifiable with Tangut Component 324.</p>  <p>As a result, 18D8F should be moved to 18D8E, and the following characters should all be shifted up by one. Also Tangut Component 883 documented in N5218R3 should be added at 18DF2.</p> <p>The corrected list of characters is included in N5218R3, which is reflected in M71.10 (f) in WG2 N5254 Recommendations from WG2 meeting 71.</p>	following characters up by one. Add Tangut Component 883 documented in N5218R3 at 18DF2.	(was a production error)
US-017	P1760	35	Tangut Supplement code chart, page 1760	te	Two Tangut characters have been discovered while indexing an important, recently published nine-volume dictionary of Tangut words. Because the characters occur in original texts and modern printed sources, we recommend the following two characters be added, based on L2/24-236 : U+18D1D TANGUT IDEOGRAPH-18D1D and U+18D1E TANGUT IDEOGRAPH-18D1E.	Add the two Tangut characters U+18D1D TANGUT IDEOGRAPH-18D1D and U+18D1E TANGUT IDEOGRAPH-18D1E.	Accepted
US-018	P 1449	35	Tulu-Tigalari code chart, page 1449	te	The glyph for U+113D0 TULU-TIGALARI CONJOINER appears with the “+” inside the dotted circle. Glyphs for similar characters in other script have the “+” below the dotted circle.	Change the glyph for U+113D0 so the “+” is below the dotted circle.	Accepted
CA8-019	P 22	14	First para	Ed	Characters are not people and in the last sentence the usage is singular	Replace each use of “their” with “its”	Accepted
CA10-020	P 23	15.1	Last sentence	Ed	Missing comma before “and SSP”; Missing space before “28.5.1”	Insert comma and space	Accepted
CA11-021	P 25	17.5	First para	Ed	Second last sentence reads “in more details”	Replace with “in more detail” or “with more details”	Accepted with ‘in more detail’.

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CA12 -022	P 27	17.6.4	NOTE	Ed	Link points to a 2017 version but it appears there is a more recent version	Replace link with .../data/2022-09-13/ ?	Accepted
CA13 -023	P31	23.1	Note 2 just before 23.2	Ed	Misspelling “In-formation Technology”	Remove hyphen	Accepted
CA14 -024	P 31	23.2	Last para	Ed	The 'unique spelling rule' applicable to rows 09 to 0D, 0F and 10, in this clause, may be applicable to also other similar scripts; such as KAITHI in row 110 in SMP (https://www.unicode.org/charts/PDF/U11080.pdf)	Could 11083+110B0 be considered alternate spelling for 11084 ? Also, in Khojki (https://www.unicode.org/charts/PDF/U11200.pdf) in row 112 in SMP; could 11200+1122C be an alternate spelling for 11201? (There may be other scripts too.)	Accepted, added Kaithi and Khojki to the list.
CA17 -025	P 49	29	Note 1		“Either” applies only when there are exactly TWO cases, here there are three.	Remove “either” and insert “, and” before “in listing of repertoires”	Accepted
CA19 -026	P 58	35.3	Note near bottom of page		Reference to section 24.1 of Unicode Standard 9.0.	Should this be updated to the Unicode Standard Version with which this edition of 10646 will be in synch, (Appropriate section in Unicode 16.0 for now)? (possibly with an editorial note).	Accepted in principle, there are many references that will need update by publication time as the target Unicode version is 18.0.
JP- 027	3007	35.5 24.2	Code charts and lists of character names, Source references file for CJK Ideographs (CJkSrc.txt)	ed	The source reference “JMJ-060341” on U+2EA41 is not correct.	Change “JMJ-060341” to “JMJ-068100”.	Accepted
JP- 028	2939	35.5	Code charts and lists of character	ed	The source reference “JMJ-059505” on U+2D4F1 is not correct.	Change “JMJ-059505” to “JMJ-068098”.	Accepted

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		24.2	names, Source references file for CJK Ideographs (CJKSrc.txt)				
JP- 029	2925	35.5 24.2	Code charts and lists of character names, Source references file for CJK Ideographs (CJKSrc.txt)	ed	The source reference “JMJ-059372” on U+2D0B2 is not correct.	Change “JMJ-059372” to “JMJ-068097”.	Accepted
GB01 -030	1207	35.5	Latin Extended-D	te	The glyph for U+A7F1 Modifier Letter Capital S is not the same font style as other Latin letters in the standard, and in particular it does not match the serified form of Latin Capital Letter S.	Change the glyph for U+A7F1 to use a standard serif S at the same size and position as other modifier letters in the standard.	Accepted
GB02 -031		35.5	Tangut	te	In ISO/IEC 10646:2020 Amd. 2 the glyph for U+17D0B was modified to add a dot to the radical component on the left side. This radical has now been added in this CD at U+18D8E (Tangut Component-783), so the radical for U+17D0B can now be changed from 198 to 783. The stroke count also needs correcting from 6 to 7.	Modify the radical/stroke value for U+17D0B in the code chart to 783.7, and change the radical glyph shown to use U+18D8E (the glyph mistakenly shown at U+18D8F in this CD). Modify TangutSrc.txt entry for U+17D0B to: U+17D0B kRSTUnicode 783.7	Accepted
GB03 -032		35.5	Tangut Components Supplement	te	The code chart appears to be using an old version of the Tangut Components font, with the result that the glyph for U+18DB5 is incorrect (4 strokes instead of 8 strokes), and a component removed during review is inserted at U+18D8E, causing all following characters to be offset by one, with the final component lost.	Regenerate the code chart with the latest Tangut Component font (dated 2024-01-29), so that 18D8F..[18DF3] are moved up to 18D8E..18DF2, and 18DB4 has the correct 8-stroke glyph form.	Accepted (related to US-016)
CN5- 033		A.5.8 287 COMMON JAPANESE	Page 3258	ed	It seems that this paragraphs in red oval is redundant, thus should be removed.	Remove it.	Accepted

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					<p>A.5.8 287 COMMON JAPANESE</p> <p>The fixed collection 287 COMMON JAPANESE is a core Japanese subset containing 7 493 characters. It includes a fixed collection from A.5 and several ranges of code points.</p> <p>Planes 00</p> <p>© ISO/IEC 2024 - All rights reserved 3258</p>		
CN3- 034		CJK Unified Ideographs Extension J		te	<p>U+32C39 32C39 烏 田 102.4 GDM-00374</p> <p>The radical should be changed to simplified Bird (鳥196’), thus the stroke count should be changed to 5.</p> <p>Reference: The corresponding traditional form which was already encoded shows Radical Bird (鳥196).</p> <p>2A00B 鳥 196.5 鳥 鳥 GHZ-10042.04 T6-504E</p> <p>鳥 JMJ-055482</p>	Change attributes of U+32C30 to 鳥196’ .5.	<p>Accepted in principle.</p> <p>New CJK extensions are created in RS order, to avoid disruption it is suggested to use both 102.4 and 196’.5 as in:</p> <p>32C39 烏 田 102.4 鳥 196’.5 GDM-00374</p> <p>Both are useful for discoverability.</p>
CN2- 035		CJK Unified Ideographs Extension J		te	<p>U+32E11 32E11 縹 糸 120.11 TE-2725</p> <p>IRG 63# determined to change the up-right component of U+2E23A 縹 (KC-06640) to 纈, the T-source glyph of U+32E11 (TE-2725) in CJK Ext.J (draft) should be unified to</p>	Remove it.	<p>Accepted.</p> <p>See also US-007</p>

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					U+2E23A. 		
CN1-036		CJK Unified Ideographs Extension J		te	<p>U+33281</p> <p>The character UK-20710 (IRG Working Set 2021 #04356) should be removed from the Extension J block for it contains ䷁ (U+2637, 坤卦) which is not a CJKUI or Han-component.</p> <p>CJKUIs are characters combined by Character Description Component (CDC), which have been defined in the PnP of IRG:</p> <p>Character Description Component (CDC): It refers to any symbols that can be used with the Ideograph Description Characters to form an Ideograph Description Sequence. It includes all coded CJK unified ideographs, Kangxi Radicals, CJK Radical Supplements, and coded CJK Compatibility ideographs.</p>	Remove it.	Accepted See also US-008
CA3-037	P vii	Final 3 bullet points		Ed	First bullet point ends without punctuation, the other two have semi-colon	First bullet point should end in semi-colon; second should have semi-colon followed by 'and'; third one should end in full stop.	Accepted

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CA6- 038	P viii	Final para		Ed	BMP not previously defined	Replace 'BMP' with 'Basic Multilingual Plane (hereinafter BMP)'. Similarly throughout for other mnemonics	Accepted in principle, just replaced by 'Basic Multilingual Plane'. BMP is clarified in next occurrence (page 1)
CA5- 039	P viii	First para		Ed	Languages of the world suggests 'living languages' only	Expand along the lines of '... languages of the world, whether living or extinct'	Accepted
CA2- 040	P vii	First para			"bodies that are members" is the US form of a restricted clause. International English uses "who" or "which" without commas.	Replace with "bodies which are members"	Accepted, note however that the text template is controlled by ISO editing team and may be superseded before publication.
CA7- 041	P 14	Just before 7.6		Ed	"Error! Reference sources not found"	Resolve the error here	Accepted
CA4- 042	P vii	Second last bullet point		Ed	Three extensions are listed	Change "Extension" to "Extensions"	Accepted

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