

Title: CJK & Unihan Working Group Recommendations for UTC Meeting #183

Author: Ken Lunde

Date: 2025-04-11

This document provides the CJK & Unihan Working Group recommendations for UTC Meeting #183, based on a meeting that took place on 2025-04-04 from 6 to 9PM PDT, which was attended by Yi Bai, Eiso Chan, Peter Constable, Kushim Jiang, Ken Lunde, William Nelson, CheonHyeong Sim, Michel Suignard, Harald Tveiten, and Yifán Wáng via Webex. The Chair of the [CJK & Unihan Working Group](#), Ken Lunde, chaired the meeting.

The CJK & Unihan Working Group reviewed public feedback and documents that were received since UTC Meeting #182 took place. Comments are marked in **green**, and Recommendations to the UTC are marked in **red**. A “plain text” Copy&Paste-ready version of the Recommendations is also provided as the PDF attachment named *recommendations-20250404.txt*.

PRI #508 Feedback

The 11 items of [PRI #508](#) (*Proposed Update UAX #38*) feedback that are in this section were reviewed and discussed by the WG, and for convenience, the following data files, which are PDF attachments, include the recommended Unihan database additions, changes, and removals based on them, along with the recommended UAX #45 *USourceData.txt* data file changes:

- *Unihan-additions-20250404.txt*
- *Unihan-removals-20250404.txt*
- *Unihan_IRGSources-additions-20250404.txt*
- *Unihan_IRGSources-changes-20250404.txt*
- *USource-changes-20250404.txt*
- *kMandarin-changes-20250404.txt*

With the exception of the proposed *kMandarin* property value change, the recommended Unihan database additions, changes, and removals, along with the recommended UAX #45 *USourceData.txt* data file changes, are also shown inline, following the **Recommendations**.

01) ID20250121122459

Date/Time: Tue Jan 21 12:24:59 CST 2025

ReportID: ID20250121122459

Name: Harriet Riddle

Report Type: Public Review Issue

Opt Subject: **508**

The Unihan database for Unicode 16 contains the following line:

U+8280 kGB3 7215

However, character 72-15 in GB 7589 and 13131 is actually U+827B 芳, while U+8280 芳 appears in GB 7590 as character 71-30.

Thus, the correct data would be as follows:

U+827B kGB3 7215

No kGB3 for U+8280

U+8280 kGB5 7130

This does also imply that the IRG source G3-682F for U+8280 is incorrect and should be G5-673E (or perhaps GKX-1017.13 or GHZ-53173.10), but that would presumably need national body approval to change.

Comments: Ken Lunde forwarded this feedback to China, and their reply dated 2025-04-01 indicated that the normative *kIRG_GSource* property values of **U+827B** and **U+8280** should be changed to **G3-682F** and **G5-673E**, respectively. Accordingly, the WG agreed with the feedback, which further recommended that the provisional *kGB3* property value of U+8280 should be removed, and that *kGB3* and *kGB5* property values should be added to U+827B and U+8280, respectively. Below are the Unicode Version 16.0 code chart excerpts for U+827B and U+8280:

827B	芳	芳	芳	芳	芳	芳
艸 140.2	GE-4934	H-8F48	T3-2438	J1-572C	K2-5673	KP1-6D04
8280	芳	芳	芳	芳	芳	芳
艸 140.2	G3-682F	HB2-CA4C	T2-226C	J1-572F	K2-5677	KP1-6D07

For comparison, below are the corresponding rows in China’s GB/T 7589 (aka the simplified version of G3) and GB/T 7590 (aka the simplified version of G5) standards that show the representative glyphs of U+827B and U+8280, respectively:

72 区	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19
01 19	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	糲	芳
20 39	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芳
40 59	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芳
60 79	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芳
80 94	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芑	芳

71 区 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19
 01 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 19 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 20 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 39 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 40 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 59 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 60 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 79 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 80 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗
 94 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗 糗

Recommendations: The WG recommends to the UTC the following disposition ⇒

Consensus: Accept the proposal to change the normative kIRG_GSource property values of U+827B and U+8280 to G3-682F and G5-673E, respectively, based on PRI #508 feedback [ID20250121122459] and as amended in Section 01 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Change the kIRG_GSource property values of U+827B and U+8280 in ISO/IEC 10646's CJKSrc.txt data file, based on PRI #508 feedback [ID20250121122459] and as amended in Section 01 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database, based on PRI #508 feedback [ID20250121122459] and as amended in Section 01 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update the Unihan database to remove the kGB3 property value of U+8280, to add 7215 as the kGB3 property value of U+827B, and to add 7130 as the kGB5 property value of U+8280, based on PRI #508 feedback [ID20250121122459] and Section 01 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 01 of document L2/25-090. See PRI #508 feedback [ID20250121122459].

Current:

U+827B	kIRG_GSource	GE-4934
U+8280	kGB3	7215
U+8280	kIRG_GSource	G3-682F

Remove:

U+8280	kGB3	7215
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Adjusted:

U+827B	kIRG_GSource	G3-682F
U+8280	kIRG_GSource	G5-673E

New:

U+827B	kGB3	7215
U+8280	kGB5	7130

02) ID20250129190211

Date/Time: Wed Jan 29 19:02:11 CST 2025

ReportID: ID20250129190211

Name: Paul Masson

Report Type: Error Report

Opt Subject: **kMandarin for U+9826 颯**

The pronunciation in the database does not match that in my dictionaries, nor does it match the pronunciation of its simplified form U+988F 颯. This entry should be corrected to kē.

Comments: The WG reviewed and discussed this feedback, and noted that the informative *kMandarin* property values for these two ideographs were uniform from Unicode Version 2.0—when this property was introduced—through Version 6.0 as follows:

U+9826	kMandarin	HAI2 KE1 KE2
U+988F	kMandarin	HAI2 KE1 KE2

Their *kMandarin* property values subsequently diverged in Unicode Version 6.1 as follows:

U+9826	kMandarin	hái
U+988F	kMandarin	kē

The WG therefore agreed that it is reasonable that their *kMandarin* property values be the same, but as usual, the proposed *kMandarin* property value change will need to be checked by the CLDR-TC prior to the UTC accepting it.

Recommendations: The WG recommends to the UTC the following disposition ⇒

Action Item for Sharon Chen, CJK: Ask the CLDR-TC to check the proposed *kMandarin* property value change for U+9826, then report back to the UTC. See PRI #508 feedback [ID20250129190211] and Section 02 of document L2/25-090.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 02 of document L2/25-090. See PRI #508 feedback [ID20250129190211].

03) ID20250130151942

Date/Time: Thu Jan 30 15:19:42 CST 2025

ReportID: ID20250130151942

Name: Harriet Riddle

Report Type: Public Review Issue

Opt Subject: **508**

Despite otherwise giving a comprehensive list of the dictionaries for which indices are provided, Section 3.3 ("Dictionary Indices") does not mention `kMorohashi` (although it also does not mention `kHanYu`, `kKangXi` or `kDaeJaweon`, it does mention `kIRGHanyuDaZidian`, `kIRGKangXi` and `kIRGDaeJaweon` respectively).

U+8FD6 appears with a `kIRG\_KSource` value of `2-6557` in `Unihan-3.txt` [1] (1999) and `Unihan-3.1.txt` [2] (March 2001), but has no `kIRG\_KSource` value

in any subsequent version (not even a `KU-` source reference), starting with `Unihan-3.1.1.txt` [3] (June 2001). It does not appear in the final published version of KS X 1027-1 (2011, some ten years later), but the `0x6557` position is conspicuously skipped in what is otherwise a continuous allocated block within a 94×94 plane. If this has not already been done, it might be worth asking ROK to clarify whether this character was withdrawn from KS X 1027-1 intentionally or inadvertently.

A number of characters in CJK Extension A have sources prefixed with `G3` or `G5`, but no `kGB3` or `kGB5` property. This is unexpected considering that, for example, `kGB1` covers a strict superset of the `G1` source prefix (converted to row-cell format). `kGB3` and `kGB5` would similarly be expected to cover a superset of the `G3` and `G5` source prefixes converted to row-cell format, respectively. (In contrast to the former `kKSC1` property, `kGB3` and `kGB5` are not redundant in scope to the IRG source prefixes, since the sources in question (especially GB 7590 / 13132) include characters which have other G-source prefixes, providing considerable room for expansion of their coverage[4].)

The property description for `kJa` indicates that its scope comprises the characters that previously had a `JA-` source prefix. A total of 85 characters had their source reference changed from a `JA-` source to a JIS X 0213 source. [5] However, only seven characters have a `kJa` property.

[1] <https://www.unicode.org/Public/3.0-Update/Unihan-3.txt>

[2] <https://www.unicode.org/Public/3.1-Update/Unihan-3.1.txt>

[3] <https://www.unicode.org/Public/3.1-Update1/Unihan-3.1.1.txt>

[4] One example amongst many is <https://hc.jsecs.org/irg/ws2024/app/index.php?id=00374#c1995> . I have compiled the data for the currently-encoded portion of the remainder of GB 13132 at https://github.com/harjitmoe/ecma35lib/blob/master/ecma35/data/multibyte/mbmaps/Custom/GB13132_additional.txt

[5] <https://www.unicode.org/wg2/iso10646/edition5/data/JIS-X-0213-FromPrevious.txt>

Comments: The WG reviewed and discussed this feedback, and recommends that the following actions be taken for each of the four paragraphs:

For the first paragraph, Ken Lunde should be assigned an action item to update Section 3.3 of UAX #38 to 1) mention the *kMorohashi* property in the third bullet; 2) reference the *kIRGDaiKanwaZiten* property, which was removed in Unicode Version 15.1, in the fifth paragraph; and 3) reference the *kHanYu*, *kKangXi*, and *kDaeJaweon* properties somewhere in that section.

For the second paragraph, the WG confirmed that 0x6557 is the only missing code point in the range 0x2121 through 0x7530 in ROK's KS X 1027-1:2011 standard (the Chair of the WG has the printed version in his library). Ken Lunde forwarded this feedback to ROK on 2025-03-05 and 2025-04-10 to solicit a response, and the subsequent email discussion with ROK concluded that no one can explain this gap, nor can explain why U+8FD6 has a *kIRG_KSource* property value only in Unicode Versions 3.0 and 3.1. Ken Lunde checked the ISO/IEC 10646-1:2000 standard,

which is equivalent to Unicode Version 3.0, but its code chart is lacking a K-source representative glyph for U+8FD6. See the excerpt below, which was modified to show the column header:

ISO/IEC 10646-1:2000(E)

© ISO/IEC

Row/Cell	C	J	K	V	Row/Cell	C	J	K	V	Row/Cell	C	J	K	V
Hex Code	G-Hanzi-T	Kanji	Hanja	ChuNom	Hex Code	G-Hanzi-T	Kanji	Hanja	ChuNom	Hex Code	G-Hanzi-T	Kanji	Hanja	ChuNom
143/214	込込				143/230	迦迦迦迦迦				143/246	道道道道			
8FD6	E-4031 2-2870 E-3217 2-0880				8FE6	0-6548 1-535E 0-3260 0-4A3C 0-4550 0-6940 1-5162 0-1864 0-4228 0-3748				8FF6	E-4037 2-3335 1-6148 2-6561 E-3223 2-1921 1-6540 2-6965			

He also checked the ISO/IEC 10646-2:2001 standard, which is equivalent to Unicode Version 3.1, but the only CJK Unified Ideographs code chart that it includes is for the Extension B block. Below is an excerpt from

For the third paragraph, if someone, such as the feedback submitter, prepares and submits a proposal to add provisional *kGB3* and *kGB5* property values to ideographs that use the “G3” or “G5” source prefix of the normative *kIRG_GSource* property, the WG will consider adding them.

For the fourth paragraph, the provisional *kJa* property was added to the UniHan database in Unicode Version 8.0 per UTC #141 Action Items [141-A16](#) and [141-A17](#). The purpose of this provisional property was to capture historic information about the identity of seven ideographs that would have been obfuscated when their *kIRG_JSource* property values **and** representative glyphs were changed in Unicode Version 8.0. These seven ideographs are shown in the following excerpt from page 6 of document [L2/14-149](#) (aka [WG 2 N4620](#)):

7 Characters originally from JA sources (now J3 and J4)

UCS	Old glyph	New glyph	Old source	New source
382F	𠂔	𠂔	JA-2256	J4-286F
4105	𠂔	𠂔	JA-2537	J4-7264
42C6	𠂔	𠂔	JA-2567	J4-742B
459D	𠂔	𠂔	JA-2657	J3-7B51
484E	𠂔	𠂔	JA-272F	J4-795C
4B3B	𠂔	𠂔	JA-2772	J4-7C55
4C17	𠂔	𠂔	JA-2822	J3-7E3E

The feedback in the fourth paragraph was submitted because the current description of the *kJa* property does not clearly reflect its intended purpose. Due to the extremely limited scope of the *kJa* property, along with the fact that the information it provides can be found in earlier versions of the UniHan database and will therefore never change, the WG recommends that this provisional property be removed from the UniHan database.

Lastly, the WG noted that the *kJa* property is referenced in Section 24 of ISO/IEC 10646, specifically as *kJA* in NOTE 4 in Section 24.1, *List of source references*, as follows:

J Sources that have been partially superseded (J1 and JA) are described in Annex A (see A.4.3 and A.4.4). They can also be found as provisional sources in the Unihan Data base in <http://www.unicode.org/reports/tr38/> fully described as *kJis1* for J1: JIS X 0212-1990 and *kJA* for the JA source.

According to Michel Suignard, the content of Section 24 is targeted for removal, which will instead reference UAX #38 for up-to-date information about IRG source prefixes, so there is no need to submit CD comments recommending a change.

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the proposal to remove the provisional *kJa* property from the Unihan database, based on PRI #508 feedback [ID20250130151942] and as amended in Section 03 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Remove the *kJa* property from the Unihan database, based on PRI #508 feedback [ID20250130151942] and as amended in Section 03 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update UAX #38 to remove the *kJa* property, based on PRI #508 feedback [ID20250130151942] and as amended in Section 03 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update Section 3.3 of UAX #38, based on PRI #508 feedback [ID20250130151942] and as amended in Section 03 of document L2/25-090, for Unicode Version 17.0.

Action Item for John Wilcock, PAG: Remove the provisional *kJa* property from UAX #42, based on PRI #508 feedback [ID20250130151942] and as amended in Section 03 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 03 of document L2/25-090. See PRI #508 feedback [ID20250130151942].

04) ID20250203225756

Date/Time: Mon Feb 03 22:57:56 CST 2025

ReportID: ID20250203225756

Name: Judith Chen

Report Type: Public Review Issue

Opt Subject: **508**

U+7A40 穀 currently has a *kGB8* property of 9258. However, according to GB 8565.2-88 and ISO-IR-165:1992, the character placed at 92-58 is U+6996 穀.

Therefore, I propose the following changes to the Unihan database:

- U+7A40 穀

- kGB8: 9258 -> (null)
- U+6996 穀
- kGB8: (null) -> 9258

That is all.

Comments: The WG reviewed and discussed this feedback, and agreed that the provisional kGB8 property value of U+7A40 should be removed, and that **9258** should be added as a new kGB8 property value of U+6996. Below are the Unicode Version 16.0 code chart excerpts for U+6996 and U+7A40:

6996
木 75.10
穀 穀 穀 穀 穀 穀 穀
G3-4F31 HB2-E242 T2-4A68 J14-2F35 K2-3C2E KP1-4C9E V1-5A46

7A40
禾 115.10
穀 穀 穀 穀 穀 穀
G1-7836 HB1-BD5C T1-6E27 J0-3972 K0-4D5A KP0-D0A7

For comparison, below is the Row 92 excerpt from China's GB/T 8565.2-1988 standard that shows a representative glyph at 92-58 that matches that of U+6996, although the sixth stroke appears to be slanted, followed by one from ISO-IR-165:1992 that shows it to be horizontal:

92区	7021	7022	7023	7024	7025	7026	7027	7028	7029	702A	702B	702C	702D	702E	702F	7030	7031	7032	7033
01/19	榼	榾	榿	榽	榾	榿	榽	榾	榿	榽	榾	榿	榽	榾	榿	榽	榾	榿	榽
20/39	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌	甌
40/59	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔	叔
60/79	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜	烜
80/94	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎	汎

58	穀
92	穀

ISO-IR-165:1992 post-dates the GB/T 8565.2-1988 standard by four years, so it is reasonable to conclude that the former standard includes a more up-to-date representative glyph.

Recommendations: The WG recommends to the UTC the following disposition ⇒

Action Item for Ken Lunde, CJK: Update the Unihan database to remove the kGB8 property value of U+7A40, and to add 9258 as a new kGB8 property value of U+6996, based on PRI #508 feedback [ID20250203225756] and Section 04 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 04 of document L2/25-090. See PRI #508 feedback [ID20250203225756].

Current:

U+7A40	kGB8	9258
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Remove:

U+7A40	kGB8	9258
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New:

U+6996	kGB8	9258
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05) ID20250213194050

Date/Time: Thu Feb 13 19:40:50 CST 2025

ReportID: ID20250213194050

Name: Paul Masson

Report Type: Error Report

Opt Subject: **U+9F02 𪛗** and **U+9F0C 𪛘**

These two characters are related as traditional and simplified versions. The database currently does not indicate this relationship in either of their records. Please update the relevant variant fields.

Comments: The WG reviewed and discussed this feedback, and agreed that adding *kSimplifiedVariant* and *kTraditionalVariant* property values to the two respective ideographs is appropriate.

Recommendations: The WG recommends to the UTC the following disposition ➡

Action Item for Ken Lunde, CJK: Update the UniHan database to add *kSimplifiedVariant* and *kTraditionalVariant* property values to U+9F02 and U+9F0C, respectively, based on PRI #508 feedback [ID20250213194050] and Section 05 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & UniHan Working Group comments in Section 05 of document L2/25-090. See PRI #508 feedback [ID20250213194050].

New:

U+9F02	kSimplifiedVariant	U+9F0C
U+9F0C	kTraditionalVariant	U+9F02

06) ID20250216091652

Date/Time: Sun Feb 16 09:16:52 CST 2025

ReportID: ID20250216091652

Name: Harriet Riddle

Report Type: Public Review Issue

Opt Subject: **508**

How are Jaemin Chung's observations in IRGN2479[1] impacted by the reconstructed KPS 10721?[2] Or in other words, what is the relationship between:

- KP0-E5A9 𪛗木市 "시" in KPS 9566,[3]

- KP1-4ABB 𪛗市 "시" in KPS 10721,[2]
- KP1-4B0C 𪛗市 "시" in KPS 10721,[2]
- U+676E 柿 "페" in Unicode, and
- U+67FF 柿 "시" in Unicode?

In particular, does the fact that KP1-4ABB and KP1-4B0C seem to be collated by the same pronunciation[4] (but different residual stroke counts) make the observation in IRGN2479 that KP0-E5A9 is collated by U+67FF's pronunciation moot? If so, does this imply that U+676E can be either an independent character (페, per its `kKorean` property value) or a variant (`kSpecializedSemanticVariant`?) of U+67FF (시)? Also, would any of this be worth documenting in UTN #50?

(Sidenote: it's interesting to note that U+676E seems to have been included in IICore solely on account of having been equated with KP0-E5A9.)

See also UCV #197, under which KP0-F2A5, KP1-50BD and KP1-510B, all pronounced 패, all correspond to at least one reference glyph of U+6C9B 沛.

[1] <https://www.unicode.org/irg/docs/n2479-KP0-E5A9.pdf>

[2] <http://cheonhyeong.com/PDF/KP1-reconstitution.pdf>

[3] <https://www.unicode.org/irg/docs/n2783-ISO-IR-202.pdf>

[4] KP1-4ABA is U+233DA 𪛗, i.e. 시. KP1-4ABC is U+6794 𪛗, i.e. 심. KP1-4B0B is U+67F9 柿, i.e. 시. KP1-4B0D is U+67B2 𪛗, i.e. 시. Thus, KP1-4ABB and KP1-4B0C are plausibly both 시, and neither is 페 or 불.

Comments: The WG reviewed and discussed this feedback, and agreed that the only action, other than to convey the WG comments to the feedback submitter, should be for the author of [UTN #50](#), *KP-Source Property Value History*, to consider noting these and other issues in the next version. Also see document [L2/25-013](#) in Section 20 of this document.

Recommendations: The WG recommends to the UTC the following disposition ➡

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 06 of document L2/25-090. See PRI #508 feedback [ID20250216091652].

07) ID20250214163909

Date/Time: Fri Feb 14 16:39:09 CST 2025

ReportID: ID20250214163909

Name: Nick C.

Report Type: Error Report

Opt Subject:

One of the strokes in U3153A is faulty, and has been that way since its introduction in the charts in Unicode 15.0.

Comments: The WG reviewed and discussed this feedback, and agreed that one of the horizontal strokes of the V-source representative glyph of U+3153A in the [CJK Unified Ideographs](#)

Extension H block is faulty. Vietnam also agreed. The WG also noted that its representative glyph in [IRG Working Set 2017](#) (#00566) appears to be okay. Below is the Unicode Version 16.0 code chart excerpt for U+3153A:

3153A 𠂇
□ 30.13 𠂇
VN-F1D6B

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the proposal to update the V-source representative glyph of U+3153A in the CJK Unified Ideographs Extension H block, based on PRI #508 feedback [ID20250214163909] and Section 07 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the V-source representative glyph update to the code chart for the CJK Unified Ideographs Extension H block with an updated TrueType font provided by Vietnam, based on PRI #508 feedback [ID20250214163909] and Section 07 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 07 of document L2/25-090. See PRI #508 feedback [ID20250214163909].

08) [ID20250223233935](#)

Date/Time: Sun Feb 23 23:39:35 CST 2025

ReportID: ID20250223233935

Name: Edward Ng

Report Type: Error Report

Opt Subject: **2F936**

Unihan Radical-Stroke Index --> Radical #102 (field) 田

Strokes Character

3 𠂇 code point 753e

3 𠂇 code point 2f936

4 𠂇 code point 31c2d

<https://www.unicode.org/cgi-bin/UnihanRSIndex.pl?minstrokes=0&maxstrokes=100&submit=Submit&radical=102>

<https://www.unicode.org/cgi-bin/GetUnihanData.pl?codepoint=2F936>

<https://en.glyphwiki.org/wiki/u2f936>

Your browser: 𠂇

<https://en.glyphwiki.org/wiki/u31c2d>

Your browser: 𠂇

Question: 2F936

Comments: The WG reviewed and discussed this somewhat cryptic feedback, and agreed that the *kRSUnicode* property value of U+2F936 should be changed from 102.3 to 102.4. Its *kTotalStrokes* property value, 9, does not need to change. Below is the Unicode Version 16.0 code chart excerpt for U+2F936:

2F936
田 102.3

TU-2F936 KPU-2F936

≡ 753E 𪗇
~ 753E FE00

Recommendations: The WG recommends to the UTC the following disposition ⇒

Consensus: Accept the proposal to change the informative *kRSUnicode* property value of U+2F936, based on PRI #508 feedback [ID20250223233935] and Section 08 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Change the *kRSUnicode* property value of U+2F936 in ISO/IEC 10646's CJKSrc.txt data file, based on PRI #508 feedback [ID20250223233935] and Section 08 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database, based on PRI #508 feedback [ID20250223233935] and Section 08 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 08 of document L2/25-090. See PRI #508 feedback [ID20250223233935].

Current:

U+2F936	<i>kRSUnicode</i>	102.3
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Adjusted:

U+2F936	<i>kRSUnicode</i>	102.4
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09) ID20250228104951

Date/Time: Fri Feb 28 10:49:51 CST 2025

ReportID: ID20250228104951

Name: Judith Chen

Report Type: Public Review Issue

Opt Subject: **508**

Currently, the following line appears in the USourceData.txt file:

- UTC-00369;Variant;U+69EA;75.11;;𪗇既木;kMeyerWempe 1212;;;

However, the glyph for UTC-00369 is identical to U+3BA3 𣎵. Therefore, I suggest horizontally extending U+3BA3 to add UTC-00369 as a new source reference and updating the line in USourceData.txt as follows:

- UTC-00369;ExtA;U+3BA3;75.9;;𣎵木;kMeyerWempe 1212;;;

That is all.

Comments: The WG reviewed and discussed this feedback, and noted that this ideograph was added to UAX #45 because it is used in Cantonese. While the recommended code point, U+3BA3, indeed shares the same representative glyph as UTC-00369, so does the H-source (aka Cantonese) representative glyph of U+69E9. The WG therefore recommends that U+69E9 be horizontally extended to add UTC-00369 as a new *kIRG_USource* property value, and further recommends that the total strokes (Field 8) and first residual stroke (Field 9) values be added to its UAX #45 record as 13 and 5, respectively. Other adjustments to its UAX #45 record include changing Field 1 from *Variant* to *URO* (*Unified Repertoire & Ordering*, which refers to the original [CJK Unified Ideographs](#) block), and Field 3 from 75.11 to 75.10. Below is the glyph for UTC-00369:

𣎵

For comparison, below are the Unicode Version 16.0 code chart excerpts for U+3BA3 and U+69E9:

3BA3 木 75.9	𣎵 GHZ-21257.01	𣎵 T3-4167					
69E9 木 75.10	𣎵 GE-3D65	𣎵 H-9B4C	𣎵 T3-4C64	𣎵 J3-7623	𣎵 K1-576B	𣎵 KP1-4CFB	𣎵 V2-8D3A

The table below constitutes a proposal to horizontally-extend U+69E9 by adding UTC-00369 as its *kIRG_USource* property value:

Code Point	Code Chart Excerpt—Version 16.0	U-Source	
		Source Reference	Representative Glyph
U+69E9	69E9 木 75.10 𣎵 GE-3D65	UTC-00369	𣎵

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the proposal to add UTC-00369 as a new normative *kIRG_USource* property value for U+69E9, based on PRI #508 feedback [ID20250228104951] and as amended in Section 09 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Add UTC-00369 as a new kIRG_USource property value for U+69E9 in ISO/IEC 10646's CJKSrc.txt data file, based on PRI #508 feedback [ID20250228104951] and as amended in Section 09 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database to add UTC-00369 as a new kIRG_USource property value for U+69E9, based on PRI #508 feedback [ID20250228104951] and as amended in Section 09 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update the UAX #45 data file to reflect the changes to the record for UTC-00369, based on PRI #508 feedback [ID20250228104951] and as amended in Section 09 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update the UAX #45 TrueType font to map U+69E9 to the glyph for UTC-00369, then provide the updated UAX #45 TrueType font to Michel Suignard and the Charts Working Group, based on PRI #508 feedback [ID20250228104951] and as amended in Section 09 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 09 of document L2/25-090. See PRI #508 feedback [ID20250228104951].

Current:

UTC-00369;Variant;U+69EA;75.11;;𣎵既木;kMeyerWempe 1212;;;

Adjusted:

UTC-00369;UR0;U+69E9;75.10;;𣎵既木;kMeyerWempe 1212;;13;5

New:

U+69E9	kIRG_USource	UTC-00369
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10) ID20250321120004

Date/Time: Fri Mar 21 12:00:04 CDT 2025

ReportID: ID20250321120004

Name: Judith Chen

Report Type: Public Review Issue

Opt Subject: **508**

The left part of U+2CC27 𪛗 should be corrected to 𪛗, with the stroke | connected to 𪛗.

The right part of U+2E01D 𪛗 should be corrected to 𪛗, with the stroke 丿 passing through 𪛗.

Comments: Ken Lunde forwarded this feedback to China on 2025-04-01, and followed up on 2025-04-05. The reply dated 2025-04-06 stated that China prefers to normalize the representative glyphs of these two G-source ideographs to match their regional conventions. The WG therefore agreed that the representative glyphs of these two G-source ideographs should be updated accordingly. Below are the Unicode Version 16.0 code chart excerpts for U+2CC27 and U+2E01D:

2CC27

革 177.9

𪚥

GZJW-01810

2E01D

石 112.7

𪚦

GZ-4232418

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the proposal to update the G-source representative glyphs of U+2CC27 and U+2E01D in the CJK Unified Ideographs Extension E and CJK Unified Ideographs Extension F blocks, respectively, based on PRI #508 feedback [ID20250321120004] and Section 10 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the G-source representative glyph updates to the code charts for the CJK Unified Ideographs Extension E and CJK Unified Ideographs Extension F blocks with an updated TrueType font provided by China, based on PRI #508 feedback [ID20250321120004] and Section 10 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & Unihan Working Group comments in Section 10 of document L2/25-090. See PRI #508 feedback [ID20250321120004].

11) ID20250320230458

Date/Time: Thu Mar 20 23:04:58 CDT 2025

ReportID: ID20250320230458

Name: Eiso Chan

Report Type: Public Review Issue

Opt Subject: **GJZ-00265 glyph for U+2CD98**

China once requested to update GJZ-00265 glyph for U+2CD98 from 𪚥 to 𪚦 in IRG N2747, and this request had been accepted in CJK & Unihan Working Group Recommendations for UTC #181 Meeting, see Item 25 of L2/24-227R. However, IRG has decided to encode 𪚥 and 𪚦 separately in IRG #64, see <https://hc.jsecs.org/irg/ws2024/app/?id=04489>. Therefore, there is no need to change the glyph in Unicode, Version 17.0, that means to keep the current G-Source glyph.

Comments: Based on IRG Working Set 2024 discussions that took place during IRG Meeting #64, China wants the G-source representative glyph of U+2CD98 to be reverted to its Unicode Version 16.0 form. China will submit the form in the Unicode Version 17.0 Alpha code charts in a future IRG working set. The WG noted that the blue highlighting for U+2CD98 should be removed from the code chart for the Extension E block for the Unicode Version 17.0 Beta review. Below are the Unicode Version 16.0 (top) and Unicode Version 17.0 Alpha (bottom) code chart excerpts for U+2CD98:

2CD98
鱼 195.9
鯨
GJZ-00265

2CD98
鱼 195.9
鯨
GJZ-00265

Recommendations: The WG recommends to the UTC the following disposition ⇒

Consensus: Accept the proposal to revert the G-source representative glyph of U+2CD98 in the CJK Unified Ideographs Extension E block to its Unicode Version 16.0 form, based on PRI #508 feedback [ID20250320230458] and Section 11 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Revert the G-source representative glyph of U+2CD98 in the code chart for the CJK Unified Ideographs Extension E block with an updated TrueType font provided by China, and remove its blue highlighting in the code chart, based on PRI #508 feedback [ID20250320230458] and Section 11 of document L2/25-090, for Unicode Version 17.0.

PRI #513 Feedback

The single item of [PRI #513](#) (*Proposed Update UAX #50*) feedback that is in this section was reviewed and discussed by the WG.

12) ID20250212195405

Date/Time: Wed Feb 12 19:54:05 CST 2025

ReportID: ID20250212195405

Name: Kushim Jiang

Report Type: Public Review Issue

Opt Subject: **513**

U+A700..U+A707 (MODIFIER LETTER CHINESE TONE YIN PING .. MODIFIER LETTER CHINESE TONE YANG RU) are used to add around the CJK ideographs so they should be displayed as upright. They are not combining marks though, so there are still some implementation issues.

Comments: The WG reviewed and discussed this feedback, and agreed that additional discussion would be necessary before any changes should be considered for the *Vertical_Orientation* (vo) property values of U+A700 through U+A707 in the [Modifier Tone Letters](#) block. The WG therefore recommends that no action be taken at this time. The WG also noted that a formal proposal, which would include visuals that cannot be easily included in “plain text” PRI feedback, should be considered for any future discussion on this proposal.

Recommendations: The WG recommends to the UTC the following disposition ➡

No UTC action is required.

PRI #514 Feedback

The two items of [PRI #514](#) (*Unicode 17.0 Alpha Review*) that are in this section were reviewed and discussed by the WG, and for convenience, the following data file, which is a PDF attachment, includes the recommended UAX #45 *USourceData.txt* data file changes:

- *USource-changes-20250404.txt*

The recommended UAX #45 *USourceData.txt* data file changes are also shown inline, following the **Recommendations**.

13) ID20250205202205

Date/Time: Wed Feb 05 20:22:05 CST 2025

ReportID: ID20250205202205

Name: Shieru Asakoto

Report Type: Public Review Issue

Opt Subject: **514**

I found several errors in the draft *USourceData.txt* for UAX #45, listed as follows:

1. Field 8 & 9 for UTC-03571~03581 are reversed.
2. The status of UTC-00588 is incorrect: should be 'WS-2021' instead of 'Rejected' because 𪛇 is found in WS-2021 as WS2021-03048, even though U-source is not recorded.

Comments: The WG reviewed and discussed this feedback, and agreed that Fields 8 and 9 of UTC-03571 through UTC-03574 and UTC-03576 through UTC-03581 in the UAX #45 *USourceData.txt* data file are transposed, and should therefore be corrected.

As for the second issue, the WG noted that the UTC did not submit this ideograph for IRG Working Set 2021, so its current Status value is actually correct, but it will be changed to **ExtJ** after the Unicode Version 17.0 Beta review, which will also require a horizontal extension. The UK submitted this ideograph as UK-20533. Also, the next field will be changed to its CJK Unified Ideographs Extension J code point, which is currently U+32DE8 in Unicode Version 17.0 Alpha, the total strokes value (29) can be added, and its first residual stroke value should be changed to 4. These changes and additions have been added to the agenda for the next CJK & Unihan Working Group meeting, and will therefore be covered during UTC Meeting #184 in July.

Recommendations: The WG recommends to the UTC the following disposition ➡

Action Item for Ken Lunde, CJK: Update the records for UTC-03571 through UTC-03574 and UTC-03576 through UTC-03581 in the UAX #45 *USourceData.txt* data file, based on PRI #514

14) ID20250318000003

Date/Time: Tue Mar 18 00:00:03 CDT 2025

ReportID: ID20250318000003

Name: Charles Lew

Report Type: Public Review Issue

Opt Subject: **514**

I observed EquivalentUnifiedIdeograph.txt maps 2E81 to 5382, but I think U+20086 might be a equivalent good choice, if not better. I wonder if there's any plan to update EquivalentUnifiedIdeograph.txt to reflect this, or have some UniHan attribute to reflect this somehow? The goal is make this sort of information machine-accessible. Thanks!

Comments: The WG reviewed and discussed this feedback, and noted that while U+20086 may appear to be a better visual match for U+2E81 according to the code charts, semantically, U+5382 is still the better match. The respective annotations of U+2E81 and U+2F1A (decomposes to U+5382 per Normalization Forms NFKC and NFKD) are revealing:

variant of Kangxi Radical 27

Kangxi Radical 27

U+2E81 also includes cross references to both U+5382 and U+20086. The WG therefore recommends no action other than to convey the WG comments to the feedback submitter.

Recommendations: The WG recommends to the UTC the following disposition ⇒

Action Item for Ken Lunde, CJK: Convey to the feedback submitter the CJK & UniHan Working Group comments in Section 14 of document L2/25-090. See PRI #514 feedback [ID20250318000003].

UAX #38 / UniHan Database Documents

The two UTC documents in this section were reviewed and discussed by the WG, and for convenience, the following data files, which are PDF attachments, include all of the recommended UniHan database additions and removals based on it:

- *UniHan-additions-20250404.txt*
- *UniHan-removals-20250404.txt*
- *kTayNumeric-20250404.txt*

The recommended UniHan database additions and removals are also shown inline, following the **Recommendations**.

15) L2/25-050: Request to Move KP1-5FBF to U+2544B

Comments: The WG reviewed and discussed this document, and agreed with the proposal to move the normative *kIRG_KPSource* property value **KP1-5FBF** from U+7841 to U+2544B.

Recommendations: The group recommends to the UTC the following disposition ➡

Consensus: Accept the proposal to move the normative `kIRG_KPSource` property value `KP1-5FBF` from `U+7841` to `U+2544B`, based on document L2/25-050 (Sim) and Section 15 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Move the `kIRG_KPSource` property value of `U+7841` to `U+2544B` in ISO/IEC 10646's `CJKSrc.txt` data file, based on document L2/25-050 and Section 15 of document L2/25-090, and provide to Ken Lunde an updated `Unihan17.txt` data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated `Unihan17.txt` data file to update the Unihan database, based on document L2/25-050 and Section 15 of document L2/25-090, for Unicode Version 17.0.

Current:

<code>U+7841</code>	<code>kIRG_KPSource</code>	<code>KP1-5FBF</code>
---------------------	----------------------------	-----------------------

Remove:

<code>U+7841</code>	<code>kIRG_KPSource</code>	<code>KP1-5FBF</code>
---------------------	----------------------------	-----------------------

New:

<code>U+2544B</code>	<code>kIRG_KPSource</code>	<code>KP1-5FBF</code>
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16) L2/25-054: Proposal on adding one provisional `kTayNumeric` property to Unihan DB

Comments: The WG reviewed and discussed this document, which is a proposal to add *kTayNumeric* to the Unihan database as a new provisional property, and agreed that it makes sense given that there are other comparable numeric properties for other languages, such as *kVietnameseNumeric* and *kZhuangNumeric*.

Recommendations: The group recommends to the UTC the following disposition ➡

Consensus: Accept the new provisional Unihan database property, `kTayNumeric`, based on document L2/25-054 (Chan) and Section 16 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Add the `kTayNumeric` property and its property values to the Unihan database, based on document L2/25-054 and Section 16 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update UAX #38 to document the `kTayNumeric` property, based on document L2/25-054 and Section 16 of document L2/25-090, for Unicode Version 17.0.

Action Item for John Wilcock, PAG: Add the provisional `kTayNumeric` property to UAX #42, based on document L2/25-054 and Section 16 of document L2/25-090, for Unicode Version 17.0.

New:

<code>U+5200</code>	<code>kTayNumeric</code>	<code>1</code>
<code>U+6761</code>	<code>kTayNumeric</code>	<code>1</code>
<code>U+80FD</code>	<code>kTayNumeric</code>	<code>1</code>

U+2B871	kTayNumeric	2
U+31EC7	kTayNumeric	4
U+2B872	kTayNumeric	5
U+2C954	kTayNumeric	7

UAX #45 / U-Source Documents

The three UTC documents in this section were reviewed and discussed by the WG, and for convenience, the following data file, which is a PDF attachment, includes the recommended UAX #45 *USourceData.txt* data file additions based on them:

- *USource-additions-20250404.txt*

The recommended UAX #45 *USourceData.txt* data file additions are also shown inline, immediately following the **Recommendations**.

17) L2/25-053: Proposal to add one ideograph for Japanese place names to UAX #45

Comments: The WG reviewed and discussed this proposal, and agreed that adding the ideograph to UAX #45 is reasonable, with an assigned status value of **FutureWS**. The ideograph, whose representative glyph is shown below, can therefore be considered as a candidate for inclusion in the UTC's submission for the next IRG working set:

向島

Recommendations: The WG recommends to the UTC the following disposition ⇒

Consensus: Accept one new U-source ideograph as UTC-03582 with a UAX #45 status value of FutureWS, based on document L2/25-053 (Tsukada) and Section 17 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Add one new record to the UAX #45 *USourceData.txt* data file and its representative glyph to *USourceGlyphs.pdf*, based on document L2/25-053 and Section 17 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the author of document L2/25-053 the CJK & Unihan Working Group comments in Section 17 of document L2/25-090.

New:

UTC-03582;FutureWS;;196.6;;向島;UTCDoc L2/25-053;kJapanese ひよ;17;4

18) L2/25-056: Proposal to add three abbreviated ideographs in Japan to UAX #45

Comments: The WG reviewed and discussed this proposal, and agreed that adding the three abbreviated ideographs to UAX #45 is reasonable, with an assigned status value of **FutureWS**. The three ideographs, whose representative glyphs are shown below, can therefore be considered as candidates for inclusion in the UTC's submission for the next IRG working set:

品 品 協

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept three new U-source ideographs as UTC-03583 through UTC-03585 with a UAX #45 status value of FutureWS, based on document L2/25-056 (Kojitani) and Section 18 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Add three new records to the UAX #45 USourceData.txt data file and their representative glyph to USourceGlyphs.pdf, based on document L2/25-056 and Section 18 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the author of document L2/25-056 the CJK & Unihan Working Group comments in Section 18 of document L2/25-090.

New:

UTC-03583;FutureWS;;30.4;;く;UTCDoc L2/25-056 1;kJapanese ヒン ホン

しな:kSemanticVariant U+54C1;7;2

UTC-03584;FutureWS;;30.5;;、;UTCDoc L2/25-056 2;kJapanese ヒン ホン

しな:kSemanticVariant U+54C1;8;4

UTC-03585;FutureWS;;24.5;;く;UTCDoc L2/25-056 3;kJapanese キョウ

かなう:kSemanticVariant U+5354;7;5

19) L2/25-070: Proposal to add 11 ideographs used in Chinese and Japanese books, photos and advertisements

Comments: The WG reviewed and discussed this proposal, and agreed that adding the 11 ideographs to UAX #45 is reasonable, with an assigned status value of **FutureWS**. The 11 ideographs, whose representative glyphs are shown below, can therefore be considered as candidates for inclusion in the UTC's submission for the next IRG working set:

沅迤蘇經犬平舛垂厠𠂔

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept 11 new U-source ideographs as UTC-03586 through UTC-03596 with a UAX #45 status value of FutureWS, based on document L2/25-070 (Lin) and Section 19 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Add 11 new records to the UAX #45 USourceData.txt data file and their representative glyphs to USourceGlyphs.pdf, based on document L2/25-070 and Section 19 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Convey to the author of document L2/25-070 the CJK & UniHan Working Group comments in Section 19 of document L2/25-090.

New:

UTC-03586;FutureWS;;85.6;;[?]尸;UTCDoc L2/25-070 1;kMandarin yuán:kSemanticVariant
U+6E90;9;1

UTC-03587;FutureWS;;54.4;;[𠄎介](#);UTCDoc L2/25-070 2;kMandarin jiàn:kSemanticVariant U+5EFA;7;3
 UTC-03588;FutureWS;;140.13;;[𠄎𠄎](#);UTCDoc L2/25-070 3;kMandarin sū:kSemanticVariant U+8607;17;3
 UTC-03589;FutureWS;;120'.7;;[𠄎𠄎](#);UTCDoc L2/25-070 4;kMandarin jīng:kJapanese ケイ:kSemanticVariant U+7D93;10;1
 UTC-03590;FutureWS;;1.4;;[𠄎](#);UTCDoc L2/25-070 5;kMandarin rán:kSemanticVariant U+7136;5;1
 UTC-03591;FutureWS;;24.5;;[𠄎](#);UTCDoc L2/25-070 6;kMandarin zhǔn:kSemanticVariant U+51D6;7;1
 UTC-03592;FutureWS;;55.2;;[𠄎](#);UTCDoc L2/25-070 7;kMandarin yǔ:kSemanticVariant U+8207;5;1
 UTC-03593;FutureWS;;4.5;;[𠄎](#);UTCDoc L2/25-070 8;kMandarin zhòng chóng:kSemanticVariant U+91CD;6;1
 UTC-03594;FutureWS;;37.3;;[𠄎](#);UTCDoc L2/25-070 9;kMandarin xià:kSemanticVariant U+5EC8;5;1
 UTC-03595;FutureWS;;27.5;;[𠄎](#);UTCDoc L2/25-070 10;kMandarin xià:kSemanticVariant U+5EC8;7;4
 UTC-03596;FutureWS;;75.4;;[𠄎](#)[𠄎](#)[𠄎](#)[𠄎](#);UTCDoc L2/25-070 11;kMandarin sēn:kJapanese もり:kSemanticVariant U+68EE;8;4

Other UTC Documents

The four UTC documents in this section were reviewed and discussed by the WG.

20) L2/25-013: UTN #50 Additions

Comments: The WG reviewed and discussed this document, which is a proposal to add information to [UTN #50](#), *KP-Source Property Value History*, and agreed that doing so would help to minimize the amount of feedback that the UTC receives about issues related to KP-source representative glyphs and *kIRG_KPSource* property values. The author of UTN #50 will work with the author of this document to make additions to UTN #50 in a future version.

Recommendations: The WG recommends to the UTC the following disposition ⇒

No UTC action is required.

21) L2/25-036: Proposal to Encode One Small Kana Letter

Comments: The WG reviewed and discussed this proposal, and agreed that the proposed character name and properties, along with the proposed code point, looked good. Michel Suignard already received a TrueType font that includes its representative glyph. The WG also noted that due to its *Vertical_Orientation* (vo) property value, **Tu**, it will eventually need to be added to Table 3 of UAX #50.

Recommendations: The WG recommends to the UTC the following disposition ⇒

Consensus: Provisionally assign U+1B168 KATAKANA LETTER SMALL ARCHAIC YE in the Small Kana Extensions block, based on document L2/25-036 (Sim) and Section 21 of document L2/25-090.

Action Item for Ken Whistler, RMG: Update the Pipeline to add the provisionally assigned character U+1B168 KATAKANA LETTER SMALL ARCHAIC YE, based on document L2/25-036 and Section 21 of document L2/25-090.

Action Item for Ken Lunde, CJK: Prepare text for the Core Specification that describes U+1B168 KATAKANA LETTER SMALL ARCHAIC YE, based on document L2/25-036 and Section 21 of document L2/25-090.

22) L2/25-042: Proposal to add Katakana Letter Small Ne to Unicode L2/25-060: Addendum to Proposal to add Katakana Letter Small Ne to Unicode

Comments: The WG reviewed and discussed this proposal, and agreed with the feedback from the Script Encoding WG and the Japan NB, specifically that the use of this particular small katakana character appears to be through the use of markup for an emphasis effect rather than as an actual small katakana character with semantics and readings that diverge from U+30CD ㇶ KATAKANA LETTER NE. The WG therefore does not recommend that this character be provisionally assigned at this time.

Recommendations: The WG recommends to the UTC the following disposition ⇒

Action Item for Ken Lunde, CJK: Convey to the author of documents L2/25-042 and L2/25-060 the CJK & Unihan Working Group comments in Section 22 of document L2/25-090.

IRG Documents

The 19 IRG documents in this section were reviewed and discussed by the WG, and for convenience, the following data files, which are PDF attachments, include all of the recommended Unihan database additions, changes, and removals based on them:

- *Unihan-additions-20250404.txt*
- *Unihan-changes-20250404.txt*
- *Unihan-removals-20250404.txt*
- *Unihan_IRGSources-additions-20250404.txt*
- *Unihan_IRGSources-changes-20250404.txt*
- *Unihan_IRGSources-removals-20250404.txt*
- *kMandarin-additions-20250404.txt*

With the exception of the large G-source horizontal extension that is proposed in document IRG N2729R3, along with the proposed *kMandarin* property value additions, the recommended Unihan database additions, changes, and removals are also shown inline, following the **Recommendations**.

23) [IRG N2763](#): US/Unicode Activity Report for IRG Meeting #64 [[L2/25-057](#)]

Comments: This document is the UTC’s activity report as delivered during IRG Meeting #64 in March of 2025, and is therefore an FYI document for the UTC.

Recommendations: The WG recommends to the UTC the following disposition ⇒

No UTC action is required.

24) [IRG N2765](#): IRG Meeting #64 Recommendations and Action Items

Comments: While this is mainly an FYI document for the UTC, because all of the necessary actions have been recommended under documents that are referenced later in the “IRG Documents” section of this document, it is important to point out the future IRG meeting schedule, the IRG Working Set 2024 review schedule, and other IRG-related activities, all of which impact UTC experts:

- Per **Recommendation IRG M64.01**, the next IRG meeting, **IRG Meeting #65 (2025-10-13 through 2025-10-17)** will be hosted by China in Guangzhou (hybrid), and **IRG Meeting #66 (2026-03-16 through 2026-03-20)** will be virtual (Webex) and hosted by Apple. None of the dates have changed. The host and dates of **IRG Meeting #67** (hybrid), along with the dates of **IRG Meeting #68** (Webex), are expected to be approved during WG 2 Meeting #72 in June.
- Per **Recommendation IRG M64.04**, the following is the review schedule for **IRG Working Set 2024 Version 3.0**:
 - **2025-05-02**: The IRG Chief Editor and ORT Manager fix all data; submitters that need to update representative glyphs provide updated fonts to the IRG Chief Editor and ORT Manager — 6 weeks
 - **2025-05-30**: The ORT Manager releases IRG Working Set 2024 Version 3.0 online via the ORT and as document IRG N2809 with an attached attributes file in Excel format — 4 weeks
 - **2025-07-18**: ORT editors submit comments via the ORT — 7 weeks
 - **2025-08-15**: The ORT Manager releases Consolidated Comments via the ORT and as document IRG N2810 — 4 weeks
 - **2025-09-26**: Submitters provide responses to comments via the ORT—3 weeks before IRG Meeting #65
- Per **Recommendation IRG M64.19**, the IRG briefly reviewed document [IRG N2799](#) that details the current status of encoding CJKV components in a new block tentatively named **CJK Unified Ideographs Components**, and encouraged its authors to continue developing the repertoire according to the plan that is outlined in the document.
- Per **Recommendation IRG M64.20**, the topic of script-hybrid Han ideographs was once again discussed, which included contributions from ROK in documents [IRG N2792](#) and [IRG N2793R](#), along with the UNC proposal in document [IRG N2789](#) (see Section 25 of this document for its disposition). The consensus among IRG experts was to continue discussing the topic of encoding script-hybrid Han ideographs during future IRG meetings.

- Per **Recommendation IRG M64.21**, the IRG supported and endorsed the registration of the new **CAAPH** (*Culture and Art Publishing House*, 文化艺术出版社) IVD collection whose preliminary version is proposed in document [IRG N2796R2](#). This new IVD collection, along with its initial set of 198 sequences, was submitted to the IVD Registrar for registration, and is currently undergoing a 90-day public review period as [PRI #521](#), *Combined registration of the CAAPH collection and of sequences in that collection*, which closes on 2025-07-11.

Recommendations: The WG recommends to the UTC the following disposition ⇒

No UTC action is required.

25) IRG N2753: China's UNC proposal on 9 characters

[IRG N2789](#): US/Unicode Urgently Needed Character Proposal for Two Ideographs [[L2/25-058](#)]

[IRG N2802R2](#): UNC Proposal from National Library of China and NanJing XiaoZhuang University

Comments: Per **Recommendation M64.05** in document IRG N2765, the IRG recommended accepting the 12 urgently-needed G-source ideographs in documents IRG N2753 and IRG N2802R2, with **U+2CEA2 through U+2CEAD** at the end of the Extension E block as the recommended code points. The documents include as PDF attachments TrueType fonts that include the representative glyphs. The two urgently needed U-source ideographs proposed in document IRG N2789 were not accepted due to lack of consensus. The WG therefore recommends that the UTC accept these 12 urgently-needed G-source ideographs with Unicode Version 17.0 as the target.

The WG noted that the proposed *kCantonese* property values should be forwarded to Professor Hou, and that the proposed *kMandarin* property values will need to be vetted by the CLDR-TC as usual. The WG also noted that **GGT** and **GZHSJ** are new *kIRG_GSource* property source prefixes that need to be added to UAX #38.

The following two lines of code are useful for implementing the extension to this block:

```
#define CJK_EXTE_FIRST (0x2B820)
#define CJK_EXTE_LAST (0x2CEAD)
```

Recommendations: The WG recommends to the UTC the following disposition ⇒

Consensus: Accept the 12 urgently-needed G-source ideographs with code points U+2CEA2 through U+2CEAD at the end of the Extension E block, along with all of the associated property value additions, based on documents IRG N2753 (China) and IRG N2802R2 (China), and Section 25 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Add the property values for U+2CEA2 through U+2CEAD to ISO/IEC 10646's CJKSrc.txt data file, based on documents IRG N2753 and IRG N2802R2, and Section 25 of document L2/25-090, and provide to Ken Lunde an updated UniHan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the Unihan17.txt data file to update the Unihan database, based on documents IRG N2753 and IRG N2802R2, and Section 25 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update UAX #38 to add the new GGT and GZHSJ source prefixes to the description of the kIRG_GSource property, based on documents IRG N2753 and IRG N2802R2, and Section 25 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Forward the proposed kCantonese property value additions to Professor Hou. See documents IRG N2753 and IRG N2802R2, and Section 25 of document L2/25-090.

Action Item for Sharon Chen, CJK: Ask the CLDR-TC to check the proposed kMandarin property value additions, then report back to the UTC. See documents IRG N2753 and IRG N2802R2, and Section 25 of document L2/25-090.

Action Item for Ken Whistler, UTC: Update the pipeline to add U+2CEA2 through U+2CEAD, based on documents IRG N2753 and IRG N2802R2, and Section 25 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Whistler, RMG: Add mention of the range extension of the CJK Unified Ideographs Extension E block to the Beta review notes for Unicode Version 17.0, based on documents IRG N2753 and IRG N2802R2, and Section 25 of document L2/25-090.

Action Item for Ken Whistler, EDC: Document the range extension of the CJK Unified Ideographs Extension E block in the Core Specification, based on documents IRG N2753 and IRG N2802R2, and Section 25 of document L2/25-090, for Unicode Version 17.0.

New:

U+2CEA2	kIRG_GSource	GCESI-00507
U+2CEA2	kRSUnicode	1.2 12.1
U+2CEA2	kTotalStrokes	3
U+2CEA2	kSemanticVariant	U+4E0C
U+2CEA3	kIRG_GSource	GCESI-00508
U+2CEA3	kRSUnicode	1.3 30.1
U+2CEA3	kTotalStrokes	4
U+2CEA3	kZhuang	guh
U+2CEA3	kSemanticVariant	U+65E6 U+8DB3
U+2CEA4	kIRG_GSource	GZHSJ-0133
U+2CEA4	kRSUnicode	8.4 28.4
U+2CEA4	kTotalStrokes	6
U+2CEA4	kSemanticVariant	U+6EDA U+6EFE U+7384 U+78D9 U+886E U+889E
U+2CEA5	kIRG_GSource	GCESI-00509
U+2CEA5	kRSUnicode	8.6
U+2CEA5	kTotalStrokes	8
U+2CEA5	kSemanticVariant	U+5353
U+2CEA6	kIRG_GSource	GCESI-00510
U+2CEA6	kRSUnicode	8.9
U+2CEA6	kTotalStrokes	11
U+2CEA6	kSemanticVariant	U+9AD8
U+2CEA7	kIRG_GSource	GCESI-00511
U+2CEA7	kRSUnicode	12.3 10.3
U+2CEA7	kTotalStrokes	5
U+2CEA7	kSemanticVariant	U+5149 U+6C34

U+2CEA8	kIRG_GSource	GCESI-00512
U+2CEA8	kRSUnicode	18.4
U+2CEA8	kTotalStrokes	6
U+2CEA8	kSemanticVariant	U+50CF U+8C61
U+2CEA9	kIRG_GSource	GCESI-00513
U+2CEA9	kRSUnicode	25.4 72.2
U+2CEA9	kTotalStrokes	6
U+2CEA9	kFanqie	五割
U+2CEAA	kIRG_GSource	GCESI-00514
U+2CEAA	kRSUnicode	94.10
U+2CEAA	kTotalStrokes	13
U+2CEAA	kSemanticVariant	U+2DE30
U+2CEAB	kIRG_GSource	GGT-00001
U+2CEAB	kRSUnicode	46.17
U+2CEAB	kTotalStrokes	20
U+2CEAC	kIRG_GSource	GGT-00002
U+2CEAC	kRSUnicode	97.21
U+2CEAC	kTotalStrokes	26
U+2CEAC	kSemanticVariant	U+3F16 U+74E5 U+24B24
U+2CEAD	kIRG_GSource	GXM-00519
U+2CEAD	kRSUnicode	144.8
U+2CEAD	kTotalStrokes	14
U+2CEAD	kSemanticVariant	U+5E72 U+5E79

26) IRG N2778: Disunification request for 15 characters

Comments: Per **Recommendation M64.06** in document IRG N2765, the IRG recommended disunifying 16—not 15 as the document title suggests—T-source ideographs in the [CJK Compatibility Ideographs Supplement](#) block, with the disunified forms encoded at code points in existing CJK Unified Ideographs extension blocks. Per the proposal, the T-source representative glyphs for the following pairs of ideographs should also be updated, and should look identical:

U+2F81D/U+20674
U+2F82D/U+2D161
U+2F85D/U+21587
U+2F92B/U+248FD
U+2F97E/U+2659D
U+2F9A4/U+26D06
U+2F9CB/U+4695
U+2F9D6/U+25AD4

The WG noted that the following five ideograph pairs would benefit from blue highlighting in the code charts:

U+2F81D/U+20674
U+2F82D/U+2D161
U+2F85D/U+21587
U+2F92B/U+248FD
U+2F9A4/U+26D06

The WG therefore recommends that the UTC accept this proposal with Unicode Version 17.0 as the target.

The WG would also like to use this opportunity to point out that while most disunifications result in a new code point being assigned, usually at the end of a CJK Unified Ideographs extension block, if an existing code point in a CJK Unified Ideographs block can accommodate the disunified ideograph, which is the case for all 16 cases in this proposal, a new code point is not assigned.

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the disunification of 16 T-source ideographs, based on document IRG N2778 (TCA) and Section 26 of document L2/25-090, for Unicode Version 17.0.

Consensus: Accept the representative glyph changes for eight pairs of T-source ideographs, based on document IRG N2778 (TCA) and Section 26 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update ISO/IEC 10646's CJKSrc.txt data file to change 16 kIRG_TSource property values and to add 16 new kIRG_TSource property values, based on document IRG N2778 and Section 26 of document L2/25-090, and provide to Ken Lunde an updated UniHan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the UniHan17.txt data file to update the UniHan database, based on document IRG N2778 and Section 26 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the T-source representative glyph changes to eight pairs of ideographs with an updated TrueType font provided by TCA, and apply blue highlighting only to the five ideograph pairs U+2F81D/U+20674, U+2F82D/U+2D161, U+2F85D/U+21587, U+2F92B/U+248FD, and U+2F9A4/U+26D06, based on document IRG N2778 and Section 26 of document L2/25-090, for Unicode Version 17.0.

Note: Most disunifications of CJK Unified Ideographs or CJK Compatibility Ideographs result in a new code point being assigned in the Unicode Standard, typically at the end of a CJK Unified Ideographs extension block that may include up to 15 unassigned code points. However, if an existing code point in a CJK Unified Ideographs block can accommodate the disunified ideograph, a new code point is not assigned.

Current:

U+2F81D	kIRG_TSource	T5-2129
U+2F82D	kIRG_TSource	T6-2F38
U+2F85B	kIRG_TSource	T6-5157
U+2F85D	kIRG_TSource	T6-243B
U+2F860	kIRG_TSource	T6-2267
U+2F89C	kIRG_TSource	T3-3565
U+2F905	kIRG_TSource	T6-3921
U+2F927	kIRG_TSource	T6-4B42
U+2F92B	kIRG_TSource	T6-2D24
U+2F935	kIRG_TSource	T6-3279
U+2F943	kIRG_TSource	T6-3331
U+2F96E	kIRG_TSource	T7-266A
U+2F97E	kIRG_TSource	T5-4874
U+2F9A4	kIRG_TSource	T6-4E3B
U+2F9CB	kIRG_TSource	T5-7A38

U+2F9D6	kIRG_TSource	T3-607C
Adjusted:		
U+2F81D	kIRG_TSource	TU-2F81D
U+2F82D	kIRG_TSource	TU-2F82D
U+2F85B	kIRG_TSource	TU-2F85B
U+2F85D	kIRG_TSource	TU-2F85D
U+2F860	kIRG_TSource	TU-2F860
U+2F89C	kIRG_TSource	TU-2F89C
U+2F905	kIRG_TSource	TU-2F905
U+2F927	kIRG_TSource	TU-2F927
U+2F92B	kIRG_TSource	TU-2F92B
U+2F935	kIRG_TSource	TU-2F935
U+2F943	kIRG_TSource	TU-2F943
U+2F96E	kIRG_TSource	TU-2F96E
U+2F97E	kIRG_TSource	TU-2F97E
U+2F9A4	kIRG_TSource	TU-2F9A4
U+2F9CB	kIRG_TSource	TU-2F9CB
U+2F9D6	kIRG_TSource	TU-2F9D6
New:		
U+4695	kIRG_TSource	T5-7A38
U+20674	kIRG_TSource	T5-2129
U+21533	kIRG_TSource	T6-5157
U+21587	kIRG_TSource	T6-243B
U+216A7	kIRG_TSource	T6-2267
U+22505	kIRG_TSource	T3-3565
U+23D40	kIRG_TSource	T6-3921
U+248FD	kIRG_TSource	T6-2D24
U+24C36	kIRG_TSource	T6-3279
U+2511A	kIRG_TSource	T6-3331
U+25AD4	kIRG_TSource	T3-607C
U+2659D	kIRG_TSource	T5-4874
U+26D06	kIRG_TSource	T6-4E3B
U+2AEC5	kIRG_TSource	T6-4B42
U+2D161	kIRG_TSource	T6-2F38
U+31E7C	kIRG_TSource	T7-266A

27) IRG N2782: Proposal to Disunify U+6138

IRG N2786: Proposal to Disunify U+FACB and U+2F9FF

IRG N2834: Feedback on the Unihan property values of U+980B

Comments: Per **Recommendation M64.07** in document IRG N2765, the IRG recommended disunifying the KP-source ideograph of U+6138, KP1-439A, with U+2B81E at the end of the Extension D block as the recommended code point for the disunified ideograph. And, per **Recommendation M64.08** in the same document, the IRG further recommended disunifying U+980B, U+FACB, and U+2F9FF, with U+2B81F at the end of the Extension D block as the recommended code point for the disunified ideograph.

However, in light of document IRG N2834 that recommends that the KP- and T-source disunifications in document IRG N2786 be reconsidered during the next IRG meeting, there is no longer a desire to keep both disunified ideographs together. The WG instead recommends using code point U+2B73F at the end of the Extension C block, which will also fill said block. The WG

therefore recommends that the UTC accept only the amended disunification proposal in document IRG N2782 with Unicode Version 17.0 as the target.

The following two lines of code are useful for implementing the extension to this block:

```
#define CJK_EXTC_FIRST (0x2A700)
#define CJK_EXTC_LAST (0x2B73F)
```

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the disunification of the KP-source of U+6138, along with the encoding of the disunified ideograph at code point U+2B73F at the end of the CJK Unified Ideographs Extension C block, based on document IRG N2782 (Sim) and as amended in Section 27 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update ISO/IEC 10646's CJKSrc.txt data file to remove the kIRG_KPSource property value of U+6138, and to add U+2B73F to the CJK Unified Ideographs Extension C block, based on document IRG N2782 and as amended in Section 27 of document L2/25-090, and provide to Ken Lunde an updated UniHan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated UniHan17.txt data file to update the UniHan database, based on document IRG N2782 and as amended in Section 27 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Whistler, UTC: Update the pipeline to add U+2B73F, based on document IRG N2782 and as amended in Section 27 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Whistler, RMG: Add mention of the range extension of the CJK Unified Ideographs Extension C block to the Beta review notes for Unicode Version 17.0, based on document IRG N2782 and as amended in Section 27 of document L2/25-090.

Action Item for Ken Whistler, EDC: Document the range extension of the CJK Unified Ideographs Extension C block in the Core Specification, based on document IRG N2782 and as amended in Section 27 of document L2/25-090, for Unicode Version 17.0.

Current:

U+6138	kIRG_KPSource	KP1-439A
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Remove:

U+6138	kIRG_KPSource	KP1-439A
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New:

U+2B73F	kIRG_KPSource	KP1-439A
U+2B73F	kRSUnicode	61.9
U+2B73F	kTotalStrokes	13

28) IRG N2729R3: G-Source horizontal extensions for 2,145 characters

Comments: Per **Recommendation M64.10** in document IRG N2765, the IRG recommended accepting China's 2,145-ideograph horizontal extension proposed in document IRG N2729R3. The document includes as a PDF attachment a TrueType font that includes the representative glyphs. The WG therefore recommends that the UTC accept this 2,145-ideograph horizontal extension with Unicode Version 17.0 as the target.

The WG noted that **GWY** is a new *kIRG_GSource* property source prefix that needs to be added to UAX #38.

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the 2,145-ideograph horizontal extension, based on document IRG N2729R3 (China) and Section 28 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Add the 2,145 new *kIRG_GSource* property values to ISO/IEC 10646's CJKSrc.txt data file, based on document IRG N2729R3 and Section 28 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database, based on document IRG N2729R3 and Section 28 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update UAX #38 to add the new GWY source prefix to the description of the *kIRG_GSource* property, based on document IRG N2729R3 and Section 28 of document L2/25-090, for Unicode Version 17.0.

29) IRG N2777: Clarification Regarding the T-Glyph Issue of U+2B7C2

Comments: Per **Recommendation M64.15** in document IRG N2765, the IRG recommended accepting the proposed T-source representative glyph change for U+2B7C2 in document IRG N2777, along with a corresponding *kIRG_TSource* property value change. The WG therefore recommends that the UTC accept this proposal with Unicode Version 17.0 as the target.

The WG noted that the reason for the *kIRG_TSource* property value change is because both representative glyphs, although unifiable according to IRG unification rules, have separate code points in Taiwan's CNS 11643 character set standard.

The WG also noted that the T-source representative glyph of U+2B7C2 would benefit from blue highlighting in the Extension D code chart.

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the *kIRG_TSource* property value change for U+2B7C2, based on document IRG N2777 (TCA) and Section 29 of document L2/25-090, for Unicode Version 17.0.

Consensus: Accept the T-source representative glyph change for U+2B7C2, based on document IRG N2777 (TCA) and Section 29 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update the *kIRG_TSource* property value of U+2B7C2 in ISO/IEC 10646's CJKSrc.txt data file, based on document IRG N2777 and Section 29 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database, based on document IRG N2777 and Section 29 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the T-source representative glyph change to U+2B7C2 with an updated TrueType font provided by TCA, and apply blue highlighting, based on document IRG N2777 and Section 29 of document L2/25-090, for Unicode Version 17.0.

Current:

U+2B7C2	kIRG_TSource	TB-7329
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Adjusted:

U+2B7C2	kIRG_TSource	TB-7C6B
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30) IRG N2779R2: T-Source Glyph Modification and Horizontal Extension

Comments: Per **Recommendation M64.12** and **Recommendation M64.15** in document IRG N2765, the IRG recommended accepting TCA's 12-ideograph horizontal extension and the 363 T-source representative glyph changes in document IRG N2779R2, along with the corresponding *kRSUnicode* and *kTotalStrokes* property value changes. The WG therefore recommends that the UTC accept this proposal with Unicode Version 17.0 as the target.

The WG also noted that among the 363 T-source representative glyph changes, the one for U+2752C, whose code chart excerpt is shown below, is significant in that its left component is being corrected, and therefore deserves an erratum notice to be issued, along with the customary blue highlighting in the Extension B code chart:

2752C	𧈧	𧈨
虫 142.16		
	GKX-1102.38	T4-693D

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the 12-ideograph horizontal extension, along with the *kIRG_TSource*, *kRSUnicode*, and *kTotalStrokes* property value changes, based on document IRG N2779R2 (TCA) and Section 30 of document L2/25-090, for Unicode Version 17.0.

Consensus: Accept the representative glyph changes for 363 T-source ideographs, based on document IRG N2779R2 (TCA) and Section 30 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update ISO/IEC 10646's CJKSrc.txt data file to change *kIRG_TSource*, *kRSUnicode*, and *kTotalStrokes* property values, and to add 12 new *kIRG_TSource* property values, based on document IRG N2779R2 and Section 30 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database, based on document IRG N2779R2 and Section 30 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the representative glyph changes to 363 T-source ideographs with an updated TrueType font provided by TCA, and apply blue highlighting only to U+2752C, based on document IRG N2779R2 and Section 30 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Whistler, EDC: Draft and post an erratum notice for the “Errata Fixed in Unicode 17.0.0” page about the correction of the T-source representative glyph for U+2752C, based on document IRG N2779R2 and Section 30 of document L2/25-090, for Unicode Version 17.0.

Current:

U+488C	kIRG_TSource	TF-2872
U+6BF5	kIRG_TSource	TF-3C3C
U+6BF6	kIRG_TSource	T3-653A
U+23CEB	kIRG_TSource	T4-2D71
U+24775	kRSUnicode	94.6
U+24775	kTotalStrokes	9
U+25864	kIRG_TSource	T5-563E
U+277F1	kIRG_TSource	T4-4734
U+2F9B4	kRSUnicode	141.6
U+2F9B7	kRSUnicode	142.4
U+2F9B7	kTotalStrokes	10
U+2F9FA	kRSUnicode	178.11
U+2F9FA	kTotalStrokes	19

Adjusted:

U+488C	kIRG_TSource	T4-2827
U+6BF5	kIRG_TSource	T3-653A
U+6BF6	kIRG_TSource	TF-3C3E
U+23CEB	kIRG_TSource	TA-5721
U+24775	kRSUnicode	94.7
U+24775	kTotalStrokes	10
U+25864	kIRG_TSource	TA-6E6F
U+277F1	kIRG_TSource	TB-254F
U+2F9B4	kRSUnicode	141.7
U+2F9B7	kRSUnicode	142.5
U+2F9B7	kTotalStrokes	11
U+2F9FA	kRSUnicode	178.12
U+2F9FA	kTotalStrokes	21

New:

U+688D	kIRG_TSource	T3-6249
U+20727	kIRG_TSource	TA-2738
U+21D14	kIRG_TSource	T3-6247
U+21F12	kIRG_TSource	TA-3E37
U+23D6D	kIRG_TSource	T4-2D71
U+25871	kIRG_TSource	T5-563E
U+275FC	kIRG_TSource	T5-7C58
U+277F5	kIRG_TSource	T4-4734
U+2CF02	kIRG_TSource	T7-6662
U+2DECD	kIRG_TSource	T7-6661
U+30E6C	kIRG_TSource	T5-7C53
U+3184B	kIRG_TSource	T7-6659

31) IRG N2798: Update of Vietnamese Glyphs with 𢵇 (nhung)

Comments: Per **Recommendation M64.13** and **Recommendation M64.16** in document IRG N2765, the IRG recommended accepting Vietnam’s horizontal extension of U+2CACD and the

eight V-source representative glyph changes in document IRG N2798. The WG therefore recommends that the UTC accept this proposal with Unicode Version 17.0 as the target.

The WG noted that Vietnam already provided an updated TrueType font to Michel Suignard.

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the horizontal extension of U+2CACD, along with the three `kIRG_VSource` property value changes, based on document IRG N2798 (Vietnam) and Section 31 of document L2/25-090, for Unicode Version 17.0.

Consensus: Accept the representative glyph changes for eight V-source ideographs, based on document IRG N2798 (Vietnam) and Section 31 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update ISO/IEC 10646's `CJKSrc.txt` data file to add and change `kIRG_VSource` property values, based on document IRG N2798 and Section 31 of document L2/25-090, and provide to Ken Lunde an updated `Unihan17.txt` data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated `Unihan17.txt` data file to update the Unihan database, based on document IRG N2798 and Section 31 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the representative glyph changes to eight V-source ideographs with an updated TrueType font provided by Vietnam, based on document IRG N2798 and Section 31 of document L2/25-090, for Unicode Version 17.0.

Current:

U+928A	<code>kIRG_VSource</code>	V0-4633
U+928A	<code>kVietnamese</code>	nhong
U+241F3	<code>kIRG_VSource</code>	V2-7B48
U+241F3	<code>kVietnamese</code>	nhũn
U+241FD	<code>kIRG_VSource</code>	VN-241FD

Remove:

U+241F3	<code>kVietnamese</code>	nhũn
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Adjusted:

U+928A	<code>kIRG_VSource</code>	VN-0928A
U+928A	<code>kVietnamese</code>	tuất
U+241F3	<code>kIRG_VSource</code>	VN-241F3
U+241FD	<code>kIRG_VSource</code>	V2-7B48

New:

U+241FD	<code>kVietnamese</code>	nhong
U+2CACD	<code>kIRG_VSource</code>	V0-4633
U+2CACD	<code>kVietnamese</code>	nhũn

32) IRG N2801: Vietnam Response to IRG N2795

Comments: Per **Recommendation M64.16** in document IRG N2765, the IRG recommended accepting the *kRSUnicode* and *kTotalStrokes* property value changes for U+32EBE in the Extension J block and the three V-source representative glyph changes in document IRG N2801.

The WG therefore recommends that the UTC accept this proposal with Unicode Version 17.0 as the target.

The WG noted that Vietnam already provided an updated TrueType font to Michel Suignard.

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the `kRSUnicode` and `kTotalStrokes` property value changes for U+32EBE, based on document IRG N2801 (Vietnam) and Section 32 of document L2/25-090, for Unicode Version 17.0.

Consensus: Accept the representative glyph changes for three V-source ideographs, based on document IRG N2801 (Vietnam) and Section 32 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update the `kRSUnicode` and `kTotalStrokes` property values of U+32EBE in ISO/IEC 10646's `CJKSrc.txt` data file, based on document IRG N2801 and Section 32 of document L2/25-090, and provide to Ken Lunde an updated `Unihan17.txt` data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated `Unihan17.txt` data file to update the Unihan database, based on document IRG N2801 and Section 32 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the representative glyph changes to three V-source ideographs with an updated TrueType font provided by Vietnam, based on document IRG N2801 and Section 32 of document L2/25-090, for Unicode Version 17.0.

Current:

U+32EBE	<code>kRSUnicode</code>	130.17
U+32EBE	<code>kTotalStrokes</code>	21

Adjusted:

U+32EBE	<code>kRSUnicode</code>	130.18
U+32EBE	<code>kTotalStrokes</code>	22

33) IRG N2803R2: Feedback on IRG N2788 IRG N2807: Feedback on IRG N2788/N2806

Comments: Per **Recommendation M64.14** in document IRG N2765, the IRG recommended accepting 12 of the 13 `kIRG_GSource` property value changes and the seven G-source representative glyph changes in documents IRG N2803R2 and IRG N2807. The documents include as PDF attachments TrueType fonts that include the updated representative glyphs. The WG therefore recommends that the UTC accept these proposals with Unicode Version 17.0 as the target.

The WG noted that among the G-source representative glyph changes, the ones for U+3ADA and U+66F6 would benefit from blue highlighting in the code charts.

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the 12 `kIRG_GSource` property value changes, based on document IRG N2803R2 (China) and Section 33 of document L2/25-090, for Unicode Version 17.0.

Consensus: Accept the representative glyph changes for seven G-source ideographs, based on documents IRG N2803R2 and IRG N2807 (China), and Section 33 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update the 12 kIRG_GSource property values in ISO/IEC 10646's CJKSrc.txt data file, based on document IRG N2803R2 and Section 33 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database, based on document IRG N2803R2 and Section 33 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the representative glyph changes to seven G-source ideographs with an updated TrueType font provided by China, and apply blue highlighting only to U+3ADA and U+66F6, based on documents IRG N2803R2 and IRG N2807, and Section 33 of document L2/25-090, for Unicode Version 17.0.

Current:

U+4200	kIRG_GSource	G3-6429
U+4A9E	kIRG_GSource	G5-7768
U+4E85	kIRG_GSource	GKX-0085.09
U+4FB4	kGB3	1893
U+4FB4	kIRG_GSource	G3-327D
U+5329	kIRG_GSource	GE-3270
U+5570	kIRG_GSource	GHZR-20691.09
U+58AB	kGB5	2302
U+58AB	kIRG_GSource	G5-3722
U+58FF	kIRG_GSource	GE-3541
U+5DC2	kGB5	3123
U+5DC2	kIRG_GSource	G5-3F37
U+7CA6	kIRG_GSource	GKX-0909.01
U+96DF	kGB3	2580
U+96DF	kIRG_GSource	G3-3970
U+23F7D	kIRG_GSource	GHZ-31737.08

Remove:

U+4FB4	kGB3	1893
U+58AB	kGB5	2302
U+5DC2	kGB5	3123
U+96DF	kGB3	2580

Adjusted:

U+4200	kIRG_GSource	GHZ-52973.13
U+4A9E	kIRG_GSource	G5-7767
U+4E85	kIRG_GSource	G8-2F7C
U+4FB4	kIRG_GSource	G5-313F
U+5329	kIRG_GSource	GGT-00003
U+5570	kIRG_GSource	G8-2F7D
U+58AB	kIRG_GSource	GKX-0239.03
U+58FF	kIRG_GSource	G5-3722
U+5DC2	kIRG_GSource	G3-3970
U+7CA6	kIRG_GSource	G8-2F7B
U+96DF	kIRG_GSource	G5-3F37
U+23F7D	kIRG_GSource	GKX-0651.04

New:

U+4FB4	kGB5	1731
U+58FF	kGB5	2302
U+5DC2	kGB3	2580
U+96DF	kGB5	3123

34) IRG N2805R2: Feedback on IRG N2743/N2747/N2772R/N2787/N2790

Comments: Per **Recommendation M64.10** and **Recommendation M64.14** in document IRG N2765, the IRG recommended accepting China's horizontal extension of U+2B73E, the *kRSUnicode* and *kTotalStrokes* property value changes for U+25A5A and U+3080C, and the 26 G-source representative glyph changes in document IRG N2805R2. The document includes as a PDF attachment a TrueType font that includes the updated representative glyphs. The WG therefore recommends that the UTC accept this proposal with Unicode Version 17.0 as the target.

The WG noted that among the G-source representative glyph changes, the one for U+25A5A, whose code chart excerpt is shown below, would benefit from blue highlighting in the Extension B code chart, because the addition of a final stroke in the revised representative glyph makes it no longer *strange*:

25A5A
立 117.4



G4K-28225

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Accept the horizontal extension of U+2B73E, along with the *kRSUnicode* and *kTotalStrokes* changes for U+25A5A and U+3080C, based on document IRG N2805R2 (China) and Section 34 of document L2/25-090, for Unicode Version 17.0.

Consensus: Accept the representative glyph changes for 26 G-source ideographs, based on document IRG N2805R2 (China) and Section 34 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update ISO/IEC 10646's CJKSrc.txt data file to add a new *kIRG_GSource* property value to U+2B73E and to change the *kRSUnicode* and *kTotalStrokes* property values of U+25A5A and U+3080C, based on document IRG N2805R2 and Section 34 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database, based on document IRG N2805R2 and Section 34 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CHARTS: Apply the representative glyph changes to 26 G-source ideographs with an updated TrueType font provided by China, and apply blue highlighting only to U+25A5A, based on document IRG N2805R2 and Section 34 of document L2/25-090, for Unicode Version 17.0.

Current:

U+25A5A	kRSUnicode	117.4
U+25A5A	kTotalStrokes	9
U+3080C	kRSUnicode	88.6
U+3080C	kTotalStrokes	10

Remove:

U+25A5A	kStrange	I
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Adjusted:

U+25A5A	kRSUnicode	117.5
U+25A5A	kTotalStrokes	10
U+3080C	kRSUnicode	88.5
U+3080C	kTotalStrokes	9

New:

U+2B73E	kIRG_GSource	GKX-0973.20
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35) IRG N2711: Proposal to allow only one kTotalStrokes property value

Comments: Per **Recommendation M64.18** in document IRG N2765, the IRG recommended accepting the proposal to change the syntax of the *kTotalStrokes* property to allow only one property value, and to adjust the four ideographs with multiple *kTotalStrokes* property values accordingly. The WG therefore recommends that the UTC accept this proposal with Unicode Version 17.0 as the target.

Recommendations: The WG recommends to the UTC the following disposition ⇒

Consensus: Accept the proposal to change the syntax of the informative kTotalStrokes property to allow only one property value, along with the four corresponding kTotalStrokes property value changes, based on document IRG N2711 (Lunde) and Section 35 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michel Suignard, CJK: Update the kTotalStrokes property values in ISO/IEC 10646's CJKSrc.txt data file, based on document IRG N2711 and Section 35 of document L2/25-090, and provide to Ken Lunde an updated Unihan17.txt data file, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Use the updated Unihan17.txt data file to update the Unihan database, based on document IRG N2711 and Section 35 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Update UAX #38 to change the syntax of the kTotalStrokes property to allow only one property value, based on document IRG N2711 and Section 35 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Whistler, RMG: Add mention of the syntax change of the kTotalStrokes property to the Beta review notes for Unicode Version 17.0, based on document IRG N2782 and as amended in Section 27 of document L2/25-090.

Current:

U+8303	kTotalStrokes	8 9
U+9AA8	kTotalStrokes	9 10
U+2010E	kTotalStrokes	1 2
U+2A060	kTotalStrokes	18 17

Adjusted:

U+8303	kTotalStrokes	9
U+9AA8	kTotalStrokes	10
U+2010E	kTotalStrokes	1
U+2A060	kTotalStrokes	18

New:

U+2A060	kAlternateTotalStrokes	17:V
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36) IRG N2715R: Proposal to update Annex K of IRG P&P

Comments: Per **Recommendation M64.18** in document IRG N2765, the IRG recommended accepting **6** as a new first residual stroke value when the first residual stroke of an ideograph is unclear. This change will be reflected in an update to the IRG Principles and Procedures document that is expected to be reviewed during IRG Meeting #65, and the same change should be reflected in Section 2.4 of UAX #45. The WG therefore recommends that the UTC authorize a Proposed Update of UAX #45 with Unicode Version 17.0 as the target.

Recommendations: The WG recommends to the UTC the following disposition ➡

Consensus: Authorize a Proposed Update of UAX #45, based on document IRG N2715R (Lunde) and Section 36 of document L2/25-090, for Unicode Version 17.0.

Action Item for Ken Lunde, CJK: Prepare a Proposed Update for UAX #45 to add 6 as a new first residual stroke value in Section 2.4, based on document IRG N2715R and Section 36 of document L2/25-090, for Unicode Version 17.0.

Action Item for Michelle Perham, UTC: Publish the PRI for the Proposed Update of UAX #45 to close on 2025-07-01, based on document IRG N2715R and Section 36 of document L2/25-090, for Unicode Version 17.0.

Other Topics

37) Small Seal Script

Comments: The last 30 minutes of the meeting were used to discuss the encoding of the Small Seal script in document [WG 2 N5306](#) (aka [L2/25-111](#)) and the following is a summary of the discussion:

- Fonts from multiple sources are available, which leads to the possibility of studying and making unification decisions across different sources. The unification/disunification principles and issues in the document need to be further discussed among experts, though a small number of new unification/disunification issues may be discovered in the future.
- The use of a semantic versus visual encoding principle is controversial, and needs consensus among experts. The semantic encoding uses the explanations provided in *Shuowen Jiezi* (說文解字) to establish relationships between glyphs in different sources, which can reveal the different treatment of items with the same readings and meanings. The visual encoding, on the other hand, analyzes the components and structure of each glyph, ensur-

ing that glyphs in each source will be encoded only once, and that the abstract shape can be generalized from the actual shapes found in multiple sources.

- Small Seal-related properties can be maintained in [UAX #60](#) or in a new UAX.

Recommendations: The WG recommends to the UTC the following disposition ➡

No UTC action is required.

38) IRG Document Migration Status

Comments: As of **2025-04-09**, the files associated with a total of **1,389** unique IRG document numbers have been migrated to the new [IRG Document Register](#) that is hosted by the Unicode Consortium. All documents for **IRG Meeting #31 and later**—document IRG N1489 and higher—have been migrated. This figure represents approximately **49%** of the unique IRG document numbers.

Recommendations: The WG recommends to the UTC the following disposition ➡

No UTC action is required.

39) Updated Provisional Unihan Database Properties

Comments: The purpose of this section is to provide a synopsis of adjustments that were made to provisional Unihan database properties by Ken Lunde since UTC Meeting #182, which are shown in the table below:

Property	Additions	Removals	Changes	Notes
kPhonetic	1796	0	31	Fine-tuning of property values with stakeholder via pull requests in the open source Unihan Database repository
kStrange	3	1	10	

Recommendations: The WG recommends to the UTC the following disposition ➡

No UTC action is required.

That is all.