

# ISO/IEC JTC 1/SC 2 N 5004

ISO/IEC JTC 1/SC 2 "Coded character sets"

Secretariat: **JISC** 

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# ISO/IEC JTC 1/SC 2/WG 2/IRG Meeting #65 Recommendations, 2025-10

Document type	Related content	Document date	Expected action
Meeting / Other		2025-10-01	INFO

## **Description**

This document is circulated for information.



# ISO/IEC JTC 1/SC 2/WG 2/IRG N2826 ISO/IEC JTC 1/SC 2/WG 2 N5345 ISO/IEC JTC 1/SC 2 N5004

# **Ideographic Research Group**

Title: IRG Meeting #65 Recommendations and Action Items

**Source:** Ken Lunde, IRG Convenor **Location:** Guangzhou, China (Hybrid)

Date: 2025-10-16

**Meeting Dates:** 2025-10-13/17

IRG Meeting #65, which was attended by experts from China, Republic of Korea (ROK), Hong Kong SAR, Macao SAR, SAT Daizōkyō Text Database Committee, TCA, UK, US, UTC, and Vietnam, along with individual experts, has made the following recommendations and action items:

# Recommendation IRG M65.01: Future Meeting Schedule

**Unanimous** 

The following is the future IRG meeting schedule:

- IRG Meeting #66: Virtual (Webex), 2026-03-16/20 approved by WG 2
- IRG Meeting #67: Tōkyō, Japan (hybrid), 2026-10-12/16 hosting by SAT approved by WG 2
- IRG Meeting #68: Virtual (Webex), 2027-03-15/19 approved by WG 2
- IRG Meeting #69: Fall 2027 seeking host

As a reminder, the Spring meeting is virtual (Webex), and the Fall meeting is hybrid, which requires a host for in-person attendees. If there is no host, the meeting shall be virtual (Webex).

#### Recommendation IRG M65.02: Confirmation of UCV and NUCV Lists

Document References: IRG N2813 & IRG N2828

**Unanimous** 

The IRG confirmed the new or updated UCV and NUCV examples in document IRG N2813 that was produced after IRG Meeting #64. The confirmed document was posted to the IWDS page by the IRG Convenor on 2025-10-13.

## Recommendation IRG M65.03: Updated UCV and NUCV Lists

Document References: IRG N2827 & IRG N2828

**Unanimous** 

The IRG accepts the new and updated UCV and NUCV examples in Appendix B of document IRG N2827, with two cases requiring further discussion.

#### **Action Items:**

- 2025-11-28: The IWDS Editor prepares updated UCV and NUCV lists as document IRG N2886
- 2026-01-02: IRG experts review document IRG N2886 and submit feedback to the IRG Convenor and IWDS Editor
- 2026-01-30: The IWDS Editor submits document IRG N2886R, if necessary

 2026-02-27: IRG experts provide to the IRG Convenor and IWDS Editor any remaining feedback on document IRG N2886 or IRG N2886R for confirmation during IRG Meeting #66

Recommendation IRG M65.04: IRG Working Set 2024

Document References: IRG N2809, IRG N2810 & IRG N2827

**Unanimous** 

The IRG reviewed the feedback and responses in IRG Working Set 2024 Version 3.0, and agreed to produce IRG Working Set 2024 Version 4.0 based on conclusions that are recorded in document IRG N2827.

The following is the IRG Working Set 2024 Version 4.0 working schedule:

#### **Action Items:**

- 2025-11-28: 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
- 2025-12-26: The ORT Manager releases IRG Working Set 2024 Version 4.0 online via the ORT and as document IRG N2887 with an attached attributes file in Excel format 4 weeks
- 2026-02-06: The IRG Editors submit comments online via the ORT 6 weeks
- 2026-02-27: The ORT Manager releases Consolidated Comments online and as document IRG
- N2888 3 weeks
- 2026-03-13: Submitters provide responses to comments online via the ORT Friday before IRG Meeting #66

Recommendation IRG M65.05: Disunification of U+980B, U+FACB & U+2F9FF Document References: IRG N2767, IRG N2765, IRG N2786, IRG N2828, IRG N2834, IRG N2861 & IRG N2865

Unanimous

The IRG recommends that the disunification of U+980B, U+FACB, and U+2F9FF, as proposed in documents IRG N2834 and IRG N2865, be accepted, and that its disunified forms, KP-source ideograph KP1-869A at U+FACB and T-source ideograph T6-6430 at U+2F9FF, be encoded at the existing code point U+2EA07 in the CJK Unified Ideographs Extension F block. Document IRG N2861 (see Recommendation IRG M65.14) includes as a PDF attachment a TrueType font that provides the new T-source representative glyph for U+2EA07.

#### **Action Items:**

• 2025-10-31: CheonHyeong SIM submits to WG 2 a TrueType font that includes a KP-source representative glyph for U+2EA07

Recommendation IRG M65.06: Disunification of U+6B25

Document References: IRG N2730, IRG N2743, IRG N2805R2, IRG N2828, IRG N2876R2 & IRG N2889R2

Unanimous

The IRG recommends that the disunification of U+6B25, as proposed in Section 2 of document IRG N2889R2, be accepted, and that its disunified form, G-source ideograph GCESI-00550, be encoded at code point U+2B81E at the end of the CJK Unified Ideographs Extension D block. The document includes as a PDF attachment a TrueType font that provides the G-source representative glyph at GID+207.

#### Recommendation IRG M65.07: China Horizontal Extension

Document References: IRG N2828 & IRG N2877R3

**Unanimous** 

The IRG recommends that China's 597-ideograph horizontal extension, as proposed in document IRG N2877R3, be accepted. The document includes as a PDF attachment a TrueType font that provides the new G-source representative glyphs.

Recommendation IRG M65.08: TCA Horizontal Extension

Document References: IRG N2828 & IRG N2879R2

**Unanimous** 

The IRG recommends that TCA's 163-ideograph horizontal extension, as proposed in document IRG N2879R2, be accepted. The document includes as a PDF attachment a TrueType font that provides the new T-source representative glyphs.

## Recommendation IRG M65.09: Hong Kong SAR Horizontal Extension

Document References: IRG N2828 & IRG N2849R

**Unanimous** 

The IRG recommends that Hong Kong SAR's horizontal extension of U+35E9 in the CJK Unified Ideographs Extension A block with H-source reference HD-35E9, as proposed in document IRG N2849R, be accepted. The document includes as a PDF attachment a TrueType font that provides the new H-source representative glyph for U+35E9.

#### Recommendation IRG M65.10: ROK Horizontal Extension

Document References: IRG N2772R, IRG N2805R2, IRG N2828 & IRG N2873

**Unanimous** 

The IRG recommends that ROK's horizontal extension of U+2B058 in the CJK Unified Ideographs Extension C block with K-source reference K6-1126, as proposed in Section 3.2 of document IRG N2873, be accepted.

#### **Action Items:**

 2025-10-31: ROK submits to WG 2 a TrueType font that includes a new K-source representative glyph for U+2B058

## Recommendation IRG M65.11: Revised G-Source References

Document References: IRG N2788, IRG N2803R2, IRG N2808R2, IRG N2828, IRG N2835R, IRG N2837, IRG N2838, IRG N2840, IRG N2851, IRG N2853, IRG N2855, IRG N2863, IRG N2864R, IRG N2868, IRG N2869, IRG N2871, IRG N2874R & IRG N2876R2

#### **Unanimous**

The IRG recommends that the 1,719 G-source reference changes, as proposed in documents IRG N2808R2 (163), IRG N2864R (1,538), IRG N2874R (3), and IRG N2876R2 (15), be accepted. Note that document IRG N2874R includes two G-source reference changes that are already covered in document IRG N2864R. As noted on page 2 of document IRG N2808R2, this includes changes to the Description of the "G7" source prefix. And, as noted in Sections 2 and 3 of document IRG N2864R, this includes changes to the Descriptions of the "GCH," "GCY," "GHC," and "GXC" source prefixes, and changes to the Syntax of the "GCH," "GCY," and "GHC" source prefixes, respectively.

# Recommendation IRG M65.12: Revised G-Source Representative Glyphs

Document References: IRG N2730, IRG N2828, IRG N2838, IRG N2840, IRG N2843, IRG N2844R, IRG N2845, IRG N2851, IRG N2853, IRG N2855, IRG N2869, IRG N2871, IRG N2874R, IRG N2875, IRG N2876R2, IRG N2884 & IRG N2889R2

#### **Unanimous**

The IRG recommends that the 114 G-source representative glyph changes, as proposed in documents IRG N2844R (18), IRG N2874R (4), IRG N2875 (16), IRG N2876R2 (19), and Section 1 of IRG N2889R2 (57), be accepted. The TrueType font that is a PDF attachment of all five documents is identical, and provides all of the updated G-source representative glyphs.

# Recommendation IRG M65.13: Revised T-Source References

Document References: IRG N2828, IRG N2860, IRG N2861 & IRG N2880

**Unanimous** 

The IRG recommends that the nine T-source reference changes, as proposed in documents IRG N2861 (6) and IRG N2880 (3), be accepted.

# Recommendation IRG M65.14: Revised T-Source Representative Glyphs

Document References: IRG N2519, IRG N2828, IRG N2842, IRG N2860, IRG N2861 & IRG N2880

#### **Unanimous**

The IRG recommends that the 16 T-source representative glyph changes, as proposed in documents IRG N2842 (1), IRG N2861 (12), and IRG N2880 (3), be accepted. Document IRG N2861 includes as a PDF attachment a TrueType font that provides its 12 updated T-source representative glyphs, along with the one updated T-source representative glyph mentioned in document IRG N2842. Document IRG N2880 includes as a PDF attachment a TrueType font that provides its three updated T-source representative glyphs.

# Recommendation IRG M65.15: Revised K-Source References

Document References: IRG N2828, IRG N2858 & IRG N2872

#### **Unanimous**

The IRG recommends that the 11 K-source reference changes, as proposed in document IRG N2872, be accepted.

# Recommendation IRG M65.16: Revised K-Source Representative Glyphs Document References: IRG N2772R, IRG N2805R2, IRG N2828 & IRG N2873

**Unanimous** 

The IRG recommends that the K-source representative glyph change for U+25A2B, as proposed in document IRG N2873, be accepted.

#### **Action Items:**

• 2025-10-31: ROK submits to WG 2 a TrueType font that includes an updated K-source representative glyph for U+25A2B

#### Recommendation IRG M65.17: J-Source Issues

Document References: IRG N2040, IRG N2676, IRG N2722, IRG N2780, IRG N2804, IRG N2828, IRG N2846, IRG N2848, IRG N2859 & IRG N2870

#### **Unanimous**

In light of document IRG N2870 from Japan, which is in response to document IRG N2859, the IRG recommends taking no action for the referenced documents. IRG experts are invited to prepare and submit documents for revisiting these issues with Japan.

## Recommendation IRG M65.18: S-Source Issues

Document References: IRG N2828, IRG N2854 & IRG N2891

#### **Unanimous**

IRG experts were unable to reach a conclusion as to whether SAT-60289 should be moved from U+2E30B to U+809E. The IRG tasked the IRG Convenor to forward document IRG N2891 to Japan to solicit their expert feedback, and recommends that SAT submit an updated version of document IRG N2891, IRG N2891R, for further discussion during IRG Meeting #66.

#### **Action Items:**

- 2025-10-31: The IRG Convenor forwards document IRG N2891 to Japan to solicit their expert feedback
- 2026-02-27: SAT submits document IRG N2891R for further discussion during IRG Meeting #66

# Recommendation IRG M65.19: Establishing a Normative IRG Source for Singapore (SG) Document References: IRG N2545, IRG N2828 & IRG N2841

#### **Unanimous**

The IRG recommends that a new normative IRG source for Singapore (SG), *kIRG\_SGSource*, as proposed in document IRG N2841, be established, which would allow 226 existing G-source references and representative glyphs with the "GS" source prefix to be moved to the new *kIRG\_SGSource* property with the "SG" source prefix as described in the document. The IRG further recommends that the author of document IRG N2841 prepare and submit to WG 2 a formal proposal for establishing a new normative *kIRG\_SGSource* property, and to make it available for IRG review during IRG Meeting #66.

#### **Action Items:**

- 2026-02-27: The author of document IRG N2841 prepares and submits to the IRG and WG 2 a formal proposal to establish a new normative *kIRG\_SGSource* property
- 2026-02-27: The IRG Convenor forwards to Singapore the above mentioned document to solicit their expert feedback

# Recommendation IRG M65.20: Updated IRG Disunified Ideographs

Document References: IRG N2811 & IRG N2828

#### **Unanimous**

The IRG requests the IRG Chief Editor to prepare document IRG N2892 as a draft for the updated list of IRG disunified ideographs since IRG Meeting #45, and further requests that IRG experts review the document and submit feedback.

#### **Action Items:**

- 2025-12-19: The IRG Chief Editor submits document IRG N2892 for review by IRG experts
- 2026-01-30: IRG experts review document IRG N2892 and submit feedback to the IRG
- 2026-02-27: The IRG Chief Editor submits document IRG N2892R, if necessary, based on feedback from IRG experts, for confirmation during IRG Meeting #66

## Recommendation IRG M65.21: IRG P&P Update

Document References: IRG N2652, IRG N2711, IRG N2713, IRG N2714R, IRG N2715R, IRG

N2734, IRG N2767, IRG N2791 & IRG N2828

## **Unanimous**

The IRG recommends that IRG experts review IRG P&P Version 18, Draft 1 (aka document IRG N2850), with special attention given to the sections that include a **Review Note from IRG Convenor**. The IRG further recommends that the IRG Convenor consider and incorporate any feedback into subsequent drafts per the schedule below, for confirmation during IRG Meeting #66:

#### **Action Items:**

- 2025-11-28: IRG experts review document IRG N2850 and submit feedback to the IRG Convenor
- 2025-12-19: The IRG Convenor incorporates feedback into document IRG N2850R (aka IRG P&P Version 18, Draft 2)
- 2026-01-30: IRG experts review document IRG N2850R and submit any remaining feedback to the IRG Convenor
- 2026-02-27: The IRG Convenor incorporates any remaining feedback into document IRG N2850R2 (aka IRG P&P Version 18, Draft 3), if necessary, for confirmation during IRG Meeting #66

#### Recommendation IRG M65.22: Consolidated SC & FS Guidelines

Document References: IRG N954AR, IRG N1105, IRG N2171, IRG N2221, IRG N2828 & IRG N2862

#### **Unanimous**

The IRG recommends that IRG experts review document IRG N2862, which replaces and supplements all previous documents that prescribed SC (*Stroke Count*) and FS (*First Stroke*) values — documents IRG N954AR, IRG N1105, IRG N2171, and IRG N2221 — and provide feedback to its author per the schedule below, for confirmation during IRG Meeting #66 with a new IRG document number:

#### **Action Items:**

- 2025-11-28: IRG experts review document IRG N2862 and submit feedback to its author
- 2025-12-19: The author incorporates feedback into document IRG N2862R
- 2026-01-30: IRG experts review document IRG N2862R and submit any remaining feedback to its author
- 2026-02-27: The author incorporates any remaining feedback into document IRG N2862R2, if necessary, for confirmation during IRG Meeting #66

## Recommendation IRG M65.23: Encoding CJKV Components

Document References: IRG N2645, IRG N2702, IRG N2728, IRG N2739, IRG N2740, IRG N2733R, IRG N2765, IRG N2799, IRG N2828, IRG N2852, IRG N2878R & IRG N2890

#### Unanimous

The IRG reviewed document IRG N2878R that proposes to encoded two separate blocks named "CJK Unified Ideographs Jianzi Musical Notation Components" (2FA20..2FA98; block: 2FA20..2FA9F) and "CJK Unified Ideographs Components" (2FAA0..2FC0E; block: 2FAA0..2FC0F) with 121 and 367 components, respectively. The former block is considered complete given that it is based on a fixed and known repertoire, but the latter block is considered the first block for encoding CJKV components, with one or more additional CJKV component blocks to be encoded in the future. The document authors noted that the IRG source references for the latter block, along with the non-G representative glyphs of both blocks, are tentative but otherwise complete. The IRG recommends that the document authors finalize the IRG source references, along with the *kRSUnicode* and *kTotalStrokes* property data, and update the non-G representative glyphs before the end of the year.

#### **Action Items:**

2025-12-19: The authors of document IRG N2878R prepare and submit to the IRG an "R2" version that
includes final attribute data (IRG sources, kRSUnicode, and kTotalStrokes) and final representative
glyphs

Recommendation IRG M65.24: CJK Hybrid Characters

Document References: IRG N2792, IRG N2828, IRG N2866R2, IRG N2867R, IRG N2885R & IRG N2893

**Unanimous** 

The IRG discussed the contributions in documents IRG N2866R2 and IRG N2867R, along with the feedback in documents IRG N2885R and IRG N2893, and the consensus among IRG experts is to delegate the encoding of CJK hybrid characters — with the exception of the large number of well-attested Korean ideographs that include phonetic components based on Hangul — to WG 2 with oversight by the IRG. In other words, the IRG will determine whether a particular character is encoded in a CJK Unified Ideographs extension block or in a separate block for CJK hybrid characters.

The definition of CJK hybrid character includes, but is not limited to, Han-like characters that include Latin, Hiragana, Katakana, or Bopomofo characters as components, even if such components are manifested as Han components. Such characters should be encoded in a block that is separate from CJK Unified Ideographs extension blocks, meaning not in Plane 2 nor in Plane 3. Furthermore, if the Unicode Technical Committee wishes to assign properties to such characters in the Unihan database, the subsequent IRG review process can include discussions about the rules for assigning property values, such as IRG source references, Kangxi radical assignments, number of strokes, readings, and so on.

#### In Memoriam

IRG experts are grieving and are deeply saddened by the unexpected loss of Mr Andrew West (魏安). As a representative of the UK, he submitted nearly 4,000 ideographs in the four most recent IRG working sets, and maintained the *BabelStone Han* TrueType font and an IDS database. Andrew will be missed by us all. May he rest in peace.

# **Appreciation**

The IRG expresses its sincerest thanks and appreciation to the IRG Meeting #65 host, the College of Chinese Language and Culture of Jinan University (暨南大学华文学院), which included an encouraging welcome speech on the first day by Professor HOU Xingquan (侯兴泉) and hosting a wonderful and authentic Chinese welcome dinner on the evening of the third day.

The IRG also recognizes the efforts of members of the College of Chinese Language and Culture of Jinan University — Mr CAO Qinming (曹钦明) and Ms HUANG Yu (黄瑜), along with the Office of Research and Graduate Affairs Administration (研究生与科研管理办公室) — who provided excellent logistics and hospitality during the meeting.

The IRG also expresses its sincere thanks to the Unicode Consortium for hosting the IRG home page and document register, to Apple for hosting the meeting using Webex, and to Mr Henry CHAN for developing and continuing to improve the Online Review Tool (ORT) that has proven to be crucial for reviewing IRG working sets in a very efficient and effective manner.

#### **End of Document**