

**Universal Multiple-Octet Coded Character Set  
International Organization for Standardization**

**Doc Type:** ISO/IEC JTC1/SC2/WG2/IRG  
**Title:** Proposed kIICore Changes & Additions  
**Source:** Ken Lunde (Adobe) & Jaemin Chung  
**Status:** Individual Contribution  
**Action:** For consideration by IRG  
**Date:** 2018-05-04

This is a revision of the original proposal (aka IRG N2298 & L2/18-066) that incorporates feedback from discussions during UTC #155, along with feedback from Jaemin Chung (aka L2/18-071).

As documented in a recent five-part series on the [CJK Type Blog](#), we propose the following changes be made to the kIICore property, which are based on obvious omissions (untagged KS X 1001 ideographs) or updated versions of regional standards that clearly influence IICore (Japan’s Jōyō Kanji and HKSCS-2016):

1. The latest IICore, [Version 2.2](#) (June 2004), has been stable for nearly 15 years. As a result, and for the purpose of backward compatibility, we personally feel that existing IICore ideographs—even if they were included in error— should be preserved.
2. Per the [Exploring IICore—Part 1](#) article, add the “K” source tag to the following 14 IICore ideographs, because they are the only ideographs among the 4,620 in the KS X 1001 standard that do not already have the “K” source tag:

Ideograph	Proposed kIICore	Ideograph	Proposed kIICore
塞 U+585E	AGTJH <b>K</b> MP	滲 U+6E17	AG <b>K</b>
獎 U+596C	A <b>K</b> P	耆 U+8009	A <b>K</b> P
復 U+5FA9	ATJH <b>K</b> MP	胃 U+80C4	AGTJ <b>K</b> P
慄 U+6144	ATJH <b>K</b> MP	詰 U+8A70	ATJH <b>K</b> MP
戀 U+6200	ATH <b>K</b> MP	諾 U+8AFE	ATJH <b>K</b> MP
撚 U+649A	ATJH <b>K</b> MP	輦 U+8F26	ATJH <b>K</b> P
栗 U+6817	AGTJH <b>K</b> MP	默 U+9ED8	AGTH <b>K</b> MP

3. Per the [Exploring IICore—Part 2](#) article, add the “J” source tag to the following two (2) IICore ideographs, because they were added to Japan’s Jōyō Kanji (常用漢字) at the end of 2010:

Ideograph	Proposed kIICore	Ideograph	Proposed kIICore
剝 U+525D	AT <b>J</b> H <b>K</b> MP	頰 U+9830	AT <b>J</b> H <b>K</b> MP

4. Per the [Exploring IICore—Part 4](#) article, add the “H” and “M” source tags to the following 10 IICore ideographs, because they are included in HKSCS-2016 and their Big Five counterparts are tagged “H” and “M” (Macao SAR follows Hong Kong SAR in this regard):

Ideograph	Proposed kIICore	Ideograph	Proposed kIICore
兑 U+5151	AG <b>H</b> M	脱 U+8131	AG <b>J</b> <b>H</b> M
媪 U+5AAA	CG <b>H</b> M	蛻 U+8715	AG <b>H</b> M
悦 U+60A6	AG <b>J</b> <b>H</b> M	說 U+8AAC	A <b>J</b> <b>H</b> M
愠 U+6120	CG <b>H</b> M	銳 U+92ED	A <b>J</b> <b>H</b> M
稅 U+7A0E	AG <b>J</b> <b>H</b> M	閱 U+95B2	A <b>J</b> <b>H</b> M

5. Per the [Exploring IICore—Part 2](#) and [Part 4](#) articles, add the following six (6) ideographs to IICore as Category “A,” because they were added to Japan’s Jōyō Kanji (常用漢字) at the end of 2010 (tagged “J”), for compatibility with Big Five (tagged “T”), or they are included in HKSCS-2016 and have Big Five counterparts (tagged “H”):

Ideograph	Proposed kIICore	Ideograph	Proposed kIICore
告 U+543F	<b>AH</b>	蘊 U+85F4	<b>AH</b>
彝 U+5F5E	<b>AT</b>	醞 U+9196	<b>AH</b>
氫 U+6C32	<b>AH</b>	叱 U+20B9F	<b>AJ</b>

6. Per [L2/18-071](#), the “K” source tag should be removed from the following 60 IICore ideographs, because they are outside the scope of the KS X 1001 standard, and no one in Korea (ROK) can provide justification as to why they were included in the first place (no documents or reports can be found):

Ideograph	Current	Proposed	Ideograph	Current	Proposed
俐 U+4FD0	AGTJH <b>KM</b>	AGTJHM	漳 U+6F33	AGTH <b>KM</b>	AGTHM
儻 U+5110	ATH <b>KM</b>	ATHM	漾 U+6F3E	AGTH <b>KM</b>	AGTHM
册 U+518C	AG <b>K</b>	AG	炆 U+7086	BTH <b>KM</b>	BTHM
胄 U+5191	ATJH <b>K</b>	ATJH	獎 U+734E	ATH <b>KM</b>	ATHM
眩 U+545F	BJ <b>K</b>	BJ	玕 U+7395	BT <b>K</b>	BT
咏 U+548F	AGTJ <b>K</b>	AGTJ	璵 U+7471	BT <b>K</b>	BT
厘 U+5795	BG <b>K</b>	BG	璦 U+7473	ATJ <b>K</b>	ATJ
垸 U+57B8	BG <b>K</b>	BG	璦 U+74B1	BT <b>K</b>	BT
堍 U+582D	BT <b>K</b>	BT	璦 U+74B8	BT <b>K</b>	BT
壞 U+587D	AT <b>K</b>	AT	畫 U+756B	ATH <b>KM</b>	ATHM
夫 U+592C	BG <b>K</b>	BG	祕 U+7955	ATH <b>K</b>	ATH
奘 U+5958	AGTJH <b>K</b>	AGTJH	禛 U+799B	BT <b>K</b>	BT
媧 U+59DE	BG <b>K</b>	BG	离 U+79BB	AG <b>K</b>	AG
媻 U+5A77	AGTH <b>KM</b>	AGTHM	荃 U+8343	AGTH <b>KM</b>	AGTHM
媾 U+5A84	BT <b>K</b>	BT	譏 U+8B7F	BT <b>K</b>	BT
媼 U+5A9C	BT <b>K</b>	BT	豐 U+8C50	ATH <b>KM</b>	ATHM
媾 U+5ABC	ATJH <b>KM</b>	ATJHM	適 U+9052	BG <b>K</b>	BG
愜 U+6103	BJ <b>K</b>	BJ	鈕 U+9215	ATJH <b>KM</b>	ATJHM
聆 U+6624	AT <b>K</b>	AT	鉶 U+924D	AT <b>K</b>	AT
暫 U+6662	BTJ <b>K</b>	BTJ	鉶 U+9251	ATH <b>KM</b>	ATHM
杙 U+674B	BT <b>K</b>	BT	鉶 U+927C	AT <b>K</b>	AT
杠 U+6760	AGT <b>K</b>	AGT	鉶 U+92D5	BT <b>K</b>	BT
柿 U+67FF	AGTJH <b>KM</b>	AGTJHM	錕 U+9315	ATH <b>K</b>	ATH
栳 U+681E	BJ <b>K</b>	BJ	鏹 U+93F5	BTH <b>KM</b>	BTHM
桃 U+6844	BT <b>K</b>	BT	鑲 U+9436	BT <b>K</b>	BT
檣 U+6A7F	AJ <b>K</b>	AJ	鑲 U+943A	ATH <b>KM</b>	ATHM
檠 U+6AA0	AGT <b>K</b>	AGT	隼 U+96BC	AGTJ <b>K</b>	AGTJ
汙 U+6C84	BGT <b>K</b>	BGT	靚 U+975A	BTH <b>KM</b>	BTHM
涼 U+6DBC	ATJH <b>KM</b>	ATJHM	頤 U+9824	ATJH <b>KM</b>	ATJHM
滲 U+6EF2	ATJH <b>KMP</b>	ATJHMP	默 U+9ED9	AJ <b>K</b>	AJ

7. Also per [L2/18-071](#), and as a result of the discussions that transpired during UTC #155, the “K” source tag should be changed to “X” for the following 78 IICore ideographs that would have been left tag-less as a

result of removing the “K” source tag, because they are also outside the scope of the KS X 1001 standard, and no one in Korea (ROK) can provide justification as to why they were included in the first place (no documents or reports can be found):

Ideograph	Current	Proposed	Ideograph	Current	Proposed
悒 U+3960	CK	<b>CX</b>	禧 U+6A72	CK	<b>CX</b>
秭 U+4137	CK	<b>CX</b>	泮 U+6CD9	CK	<b>CX</b>
翳 U+4A12	CK	<b>CX</b>	涎 U+6D8F	CK	<b>CX</b>
顛 U+4AB8	CK	<b>CX</b>	澑 U+6EB5	CK	<b>CX</b>
泌 U+4F56	CK	<b>CX</b>	灌 U+6F0C	CK	<b>CX</b>
係 U+4FD9	CK	<b>CX</b>	潤 U+6F63	CK	<b>CX</b>
冏 U+518F	CK	<b>CX</b>	焇 U+70D3	CK	<b>CX</b>
垌 U+578C	CK	<b>CX</b>	焜 U+7180	CK	<b>CX</b>
垞 U+579E	CK	<b>CX</b>	頰 U+71B2	CK	<b>CX</b>
埤 U+57FB	CK	<b>CX</b>	熾 U+7214	CK	<b>CX</b>
堦 U+5823	CK	<b>CX</b>	珧 U+73BF	CK	<b>CX</b>
堦 U+5890	CK	<b>CX</b>	琬 U+73D7	CK	<b>CX</b>
堦 U+58A1	CK	<b>CX</b>	琅 U+73E2	CK	<b>CX</b>
套 U+593D	CK	<b>CX</b>	琮 U+73EB	CK	<b>CX</b>
婀 U+59B8	CK	<b>CX</b>	琤 U+73F5	CK	<b>CX</b>
媵 U+5A0D	CK	<b>CX</b>	瑀 U+73F8	CK	<b>CX</b>
媵 U+5A2B	CK	<b>CX</b>	璩 U+741F	CK	<b>CX</b>
媵 U+5A60	CK	<b>CX</b>	璫 U+7445	CK	<b>CX</b>
媵 U+5A64	CK	<b>CX</b>	璫 U+7446	CK	<b>CX</b>
媵 U+5A93	CK	<b>CX</b>	璫 U+744C	CK	<b>CX</b>
媵 U+5AB4	CK	<b>CX</b>	璫 U+747D	CK	<b>CX</b>
媵 U+5AD9	CK	<b>CX</b>	璫 U+74A4	CK	<b>CX</b>
媵 U+5AE4	CK	<b>CX</b>	璫 U+74D3	CK	<b>CX</b>
媵 U+5D44	CK	<b>CX</b>	砭 U+7807	CK	<b>CX</b>
录 U+5F54	CK	<b>CX</b>	柚 U+79DE	CK	<b>CX</b>
恣 U+5FDE	CK	<b>CX</b>	穊 U+7A66	CK	<b>CX</b>
慤 U+615C	CK	<b>CX</b>	耇 U+8008	CK	<b>CX</b>
慤 U+6193	CK	<b>CX</b>	蝻 U+8740	CK	<b>CX</b>
扞 U+62AE	CK	<b>CX</b>	譚 U+8ADD	CK	<b>CX</b>
敗 U+6543	CK	<b>CX</b>	賸 U+8CF0	CK	<b>CX</b>
昊 U+65F2	CK	<b>CX</b>	暉 U+8CF1	CK	<b>CX</b>
眩 U+6621	CK	<b>CX</b>	鉈 U+9250	CK	<b>CX</b>
暘 U+6679	CK	<b>CX</b>	鉨 U+9277	CK	<b>CX</b>
瞽 U+668B	CK	<b>CX</b>	鋳 U+92E5	CK	<b>CX</b>
矚 U+66A3	CK	<b>CX</b>	鎔 U+9327	CK	<b>CX</b>
招 U+67D6	CK	<b>CX</b>	鍍 U+9351	CK	<b>CX</b>
栻 U+683B	CK	<b>CX</b>	鏞 U+93CB	CK	<b>CX</b>
程 U+686F	CK	<b>CX</b>	鏗 U+9442	CK	<b>CX</b>
櫛 U+6A5A	CK	<b>CX</b>	阨 U+962D	CK	<b>CX</b>

8. The data file named “unihan-changes.txt” that is an attachment to this document provides the changes and additions to the Unihan Database as described in Sections 2 through 7 of this proposal. Of the 170 records, 26 are for adding one or two source tags, six are new records, 60 have the “K” source tag removed, and 78 have the “K” source tag replaced by the new “X” source tag.
9. Per Section 7, the Syntax field of the kllCore property as described in [UAX #38](#) should be changed to the following in order to accommodate the new “X” source tag that is used to provide a source when an existing sole source has been removed:  
[ABC] ( [GHJKMPT] {1, 7} | X)
10. Also per Section 7, the Description field of the kllCore property as described in [UAX #38](#) should be changed to reflect the new “X” source tag, such as by adding the following sentence: *The letter “X” is used as the source when the sole source has been removed.*

That is all.