# Universal Multiple-Octet Coded Character Set UCS

#### ISO/IEC JTC1/SC2/WG2/IRG N2013

Date: 2014-05-21

Source: CJK editorial group Misc Editorial Report(Ext. E, UNC, IWDS, IRG Title: PnP) Meeting: IRG#42, Qingdao, China Status: To be Approved by IRG plenary Actions required To be followed by IRG members Distribution: **IRG** Medium: Electronic Page: 4

Editors from China, HKSARG, Japan, R.O.Korea, TCA, Vietnam, US and Unicode Consortium met during IRG#42. Representatives of SAT and an expert from UK attended the meetings. The editorial group discussed the following issues.

# 1. IRG PnP issues

4

#### **References:**

Appendix:

- IRGN1966 Suggestion to establish rule sharing document of large file size (Japan)
- IRGN2003 Website for long IRG documents (IRG Rapporteur), and feedbacks
- IRGN2004 Issues Regarding the UNC Process (Unicode)
- IRGN2006 *Document format/processing suggestions* (Ken Lunde), and feedbacks
- IRGN2016 IRG Principles and Procedures Version 7draft 1 The editorial group discussed IRGN 1966, IRGN2003, IRGN2004, IRGN2006 and their feedbacks then agreed to the following:
- 1) All static documents submitted after IRG#42 shall be in PDF form. For easy review across different platforms, the additional MS Word files are welcome to be submitted to the IRG Rapporteur.
- 2) All IRG large files shall be hosted on Google drive. For easy browsing and downloading in mainland of China, a mirror drive on <a href="https://www.360.cn">www.360.cn</a> is used.
- 3) The following sentences shall be added to IRG PnP for UNC submission at the corresponding location: "Evidence of current use

is not in and of itself evidence of urgent need. The type of use also needs to be taken into account. For example, requirements of government, industry, science, or scholarship would generally be taken as evidence of urgent need."

- 4) Time table of IRG PnP:
  - ➤ 2014-06-19: IRG members' chief editors give feedbacks to IRG Rapporteur
  - ➤ 2014-06-29, IRG Rapporteur produce the confirmed version for submission to WG2

# 2. UNC issues

#### **References:**

- IRGN1954R Proposal to Encode Chinese Characters Used for Transcribing Slavonic
- IRGN1988 Additional Request for the 3 China's UNCs (China), and feedbacks
- IRGN2005 *UTC/US Urgently-needed Character Submission* (UTC) The editorial group discussed IRGN1954R, IRGN1988, IRGN2005 and their feedbacks then agreed to the following:
- 1) The 3 UNCs in IRGN1988 are suggested to be encoded at the end of CJK block, i.e., U+9Fxx. Consequently, the related characters shall be moved out from CJK F.
- 2) The characters in IRGN1945R and IRGN2005 can be proposed to WG2 as UNCs for consideration.

# 3. Dis-unification of U+4CA4

#### **References:**

- IRGN1967 Request to Dis-unify H-9D73 with GS-224D under the Encoded Character U+4CA4 (HKSAR)
- IRGN1989 A Reminder of IRGN1967 (HKSAR)

The editorial group decided to keep the simplified form of U+4CA4 at its current location and asked WG2 to assign another code point for the traditional form.

Note: Current shapes and code point is as below.

4CA4 鱼 195'.10 鳕

<u>ണ</u> H-9D73

# 4. T glyph of U+8B04

#### **References:**

• IRGN1994 Representative Glyph Error Report for U+8B04 T-Source (Individual), and feedbacks

The editorial group reviewed IRGN1994 and its feedbacks, and agreed that TCA would submit a corrected font to UCS Project Editor during IRG#42.

Note: Current T shape is as below, the corrected shape will be similar to G and H shapes.



#### 5. Unification of U+2827C

#### **References:**

• IRGN2015 *U*+2827*C* unification issue

The editorial group reviewed IRGN2015 and decided to keep unification of T shape and H shape. It does not imply that 悪 and 惡 shall be unified as components, unless agreed by IRG in future.

Note: Current shapes are as below.



# 6. UCV and NUC issues

#### **References:**

- IRGN1990 IWDS UCV to be confirmed at IRG42, and feedbacks
- IRGN1991 IWDS New Version NUC to be confirmed at IRG42, and feedbacks

The editorial group reviewed and discussed IRGN1990, IRGN1991 and their feedbacks. The editorial group asked Mr. Taichi Kawabata to correct the files and make additions as recorded in the 4 appendixes of IRGN2013. Examples from SuperCJK can be used as examples in IRG Working Documents series. The editorial group set time table as blow:

- ➤ 2014-06-27: Mr. Kawabata distributes revised UCV and NUC lists.
- ➤ 2014-07-18: IRG members' chief editors give feedbacks.
- ➤ 2014-08-01: Mr. Kawabata distributes confirmed lists.
- ➤ 2014-10-03: Mr. Kawabata distributes new versions.
- ➤ 2014-11-01: IRG members' chief editors give feedbacks.

# 7. Other issues

#### **References:**

• IRGN1983(WG2N4558R) Request of Changing One CJK\_C Source and Glyph (China)

IRG editorial group noted.

• IRGN1984 *Annex S source separation example* (TCA) IRG editorial group noted.

• IRGN1987(WG2N4564) Disposition of comments on ISO/IEC DIS 10646 4th edition (UCS Project Editor) IRG editorial group noted.

• IRGN2007 Possible Non-Cognate Unifications in CJK Compatibility Ideographs (Individuals)

The editors will review it and give feedbacks by 2014-11-07.

- IRGN1986(WG2N4544) Representation of CJK ideograph glyphs (UCS Project Editor)
- IRGN2008 *Concern on WG2 N4544* (Japan) IRGN1986 and IRGN 2008 will be further studied.

Appendix1: NUCV Review and discussion record

Appendix2: UCV Review and discussion record

Appendix3: NUCV New and discussion record

Appendix4: UCV New and discussion record

(Recorded by Mr. Toshiya Suzuki, Ms. Wei Lin-mei, Ms. Yam Po-king)

# IRGN2009A (UCV Review)

The IRG agrees to revise the UCS Ideograph Unifiable Component Variations List (IRG N1990) to incorporate the following suggested revisions:

	UCV	UCV	Disunified List	Unified List/Compatibilities	Comments Status
No	No				
1.	28	小小	SC19		The second example is
			5F53 <u>\(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}2\) \(\frac{1}{2}\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(\frac{1}2\) \(</u>		incomplete. It is suggested to add back
					the missing glyph of
					U+2E8C
					NIZ
					2E8C
2.	53	月月月	4436 B1 130.12 B233AF B1 74.16 B		Inappropriate
		月	G3-1071 14-5284 UCS2003 G4K		example.
					The two characters are
					disunified most
					probably due to
					different upper-right
					components.
3.	60	ア 戸 尿		2149B 墀 墀	Inappropriate
		, , , , , ,		± 32.14 上年 上年 UCS2003 TF-5966	example. U+2149B
					is single-sourced.

4.	70	告告		52C2 ±1 19.7 GE-2354 HBZ-CDF3 T2-2935 K2-2534	Inappropriate example. None of the glyphs has the component 告.
5.	73	周周		8ABF    149.8	Inappropriate examples. None of the glyphs has the component
6.	96	山屮屮	284CF		Inappropriate example. None of the glyphs has the component  or
7.	119	儿几		5748 ± 32.4 G3-330F	Inappropriate example. Both glyphs are the same.

8.	123	巳巳					456B 99 140,16 GKX-1067.22 T7-5468 JA-264E	2F9B2 99 140.16 НЗ-8FA8	Inappropriate example. None of the glyphs has the component   .	
9.	126	<b>本本</b>					66D3 H 72.13 GE-2024  T4-5641	K1-7238	Inappropriate example. None of the glyphs has the component 4.	
10.	134		2699D 日 134.11 中文 UCS2003	269A7 日 134.12	(F)	5 T5-6928			Inappropriate example. U+2699D comprises none of the  UCVs 异草氯.  It is suggested to either delete U+2699D from the Disunified List and move U+269A7 to the Unified List, or change the UCVs to 平洋瀉.	

11.	143	亡亡	5FD8 ♠ 61.3	G0-4D7C		T1-4A33 J0-4B3	A K0-584E	V1-547C	Inappropriate example. None of the glyphs has the component . They only demonstrate the unification of . and .
12.	146	入人	9269 金 167.5	<b>妥</b> G5-75	45	14-4143	<b></b> 11-6368	<b>%</b> K2-6843	Inappropriate example. None of the glyphs has the component .

13.	148	內内	5185 □ 13.2	G0-445A	T3-2148 J0-4662	2F814	Inappropriate example. None of
							the glyphs has the
							component of .
							It is suggested to
							replace them with
							U+5167 and
							U+2F814:
							5167
							2F814

14.	159	邢 珊	4301 <sup>(K)</sup> 120.9	2F96D (F-5137)	Due to glyph modification, U+4301 now looks exactly the same as U+2F96D. The two characters are no longer appropriate unification examples. It is suggested to either remove this pair of examples or indicate that there has been a change of glyph.	
15.			8985 III 146.7 G3-6060 HB2-DFFA T2-4741	<b>受力</b> K2-SF54	Inappropriate example. None of the glyphs has the component	
16.	168	白白白	8204 El 134.6 GO-742A HB2-DB57 T2-3F3C	J4-755E K2-5644	Inappropriate example. None of the glyphs has the component $\Box$ or	

17.	185	熏熏	81D0  5  130.14 G3-4E22 HB2-F0A1 T2-6208	K2-8831	Inappropriate example. None of the glyphs has the component
18.	186	東東	22505 7 60.8 UCS.2003 GKX-6398.09	2F89C 7 60.9 173.3565	The example of U+22505 should be replaced by U+ 5F9A  5F9A
19.	189	免免	4FDB	JO-505B K1-6041  K1-606F V1-5547	Inappropriate examples. None of the glyphs has the component   .

20.	197	市			The first two UCVs look exact the same. It is suggested to replace one of them	
21.			6601 H 72.4 GE-2C5B T3-2942	K2-3850	Inappropriate example. None of the glyphs has the component  or	
22.	199	艮艮	97FF 180.11 G1-4F9C HB1-C554 T1-7B40 J0-3641 K0-7A42 V	FACA † 180.11 KP1-866A	Inappropriate examples. None of the glyphs has the component .	
23.	202a	恭 恭			The UCVs look exactly the same. It is suggested to replace one of them with	

24.	204	成成	Fig. 172.7 GO-BA49 HB2-DTD4 12-27-95 JO-SA70 KO-8079 Inappropriate examples. None of the glyphs has the glyphs has the component .
25.	206	止止	5634 LI 30.12  GO-576C HB1-BC4C T1-6C36 J0-536C KO-6E4  Inappropriate examples. None of the glyphs has the  Component L  Component L  SON THE HB1-BC4C T1-6C36 J0-536C KO-6E59 V1-577B  TD2B π 120.5 GO-574F HB1-BSB5 T1-613B J0-3B67 KO-6B39 V1-6255  BD07 JI 154.12 G3-485A HB2-F349 T2-6735 J0-6C56 KO-6B4B  Inappropriate examples. None of the glyphs has the  component L  Component L  SON THE HB1-BC4C T1-6C36 J0-3B67 KO-6B3B  V1-6C75
26.	213	兓兓	7C2A (1) 118.12 G0-7422 HB1-C2AF T1-7679 J0-6451 K0-6058 V1-6232 Examples. None of the glyphs has the glyphs has the component  Comp
27.	223	ゲロ ケマ ケマ	Inappropriate example. U+7A77 is single-sourced.

28.	227	賣賣	5B3B 女 38.15 74C4 玉 96.15	<b>少</b>	13-575E	嬗	Inappropriate examples. None of the glyphs has the component .	
29.	247	叉叉	249BC ± 96.9 UCS200		249E9 ± 96.9 Ucs	ES GHZ21150.04	U+249BC and U+249E9 are exactly the same.	

	1	Т				
30.	290	兖兗	8412 <sup>99</sup> 140.8	26CC6		The glyph of T2-3F47 has been modified
						from 2-3139 (ISO/IEC
						10646:2003(E)) to
						元 T2-3F47 . U+8412 and
						U+26CC6 are no
						longer good examples
						to demonstrate the
						disunification. It is
						suggested to either
						move U+8412 to the
						Unification List or
						indicate that there has
						been a change of
						glyph.
31.	302	<b>滿                                    </b>			8954 准 基	Inappropriate
					末 145.11 <b>1</b>	example. None of the
					אייסטינו ויסטאט ויסטיסא	glyphs has the
						component or
						<b></b>

32.	309	取取		Inappropriate example. None of the glyphs has the component 取.	
33.	312	土士	58AB ± 12-12 G6-3722 H82-EMA T2-4F71 J0-6453 K1-6052 V0-345A  **T-4F7A**  **T-	Inappropriate example. None of the glyphs has the component \(\frac{1}{2}\).	
34.	318	圖		S716	
35.	324	賴賴賴		Duplicated examples. It is suggested to delete one of them.	

36.	334	廩廪		4572 # 140.16	G3-8852	T4-8438	<b>高</b> K3-3131	Inappropriate example. None of the glyphs has the component
37.		寽寽 <b>?</b> 寽	9171 154.6 G0-3034 91A4 1 164.10 GE-4124					Inappropriate example. U+9171 comprises none of the UCVs.
38.	407	11年		2A6AB 龜 213.4	UCS2003	GHZ-74809.08	T7-5749	Inappropriate example. None of the glyphs has the component

## IRGN2009A (NUCV Review)

The IRG agrees to revise the UCS Ideograph Non-Unifiable Component Variations List (NUCV) (IRG N1991) to reflect the following suggested revisions:

	NUCV	NUCV	Disunified List	Unified List/Compatibilities	Comments Status
1.	<b>No</b> 325	閒間	開 開 開 開 開 開 開 開 開 開 開 開 用 用 用 用 用 用 用		The two characters are exactly the same. It is suggested to change one of them to  9593
2.	333a	禀稟		4572 14 140.16 G3-0852 T4-0436 K3-3131	Inappropriate example.  None of the glyphs has the component
3.	401	<b>免</b>		3AB1 文 67.9 (GKX-0477.13 T3-414F)  25805 禾 115.9 (UCS2003 GKX-0856.12 T5-482E)  259BA 穴 116.9 (UCS2003 GKX-0867.03 T5-4832	Inappropriate examples. None of the glyphs has the component 央 or 契.

4.	405	23040 ± 69.25  UCSSORS  GHC2148111  242AE ± 86.8  UCSSORS  T5-3PM  27959 9: 164.22  UCSS  UCSS  UCSS  UCSS  UCSS  UCSS  UCSS  UCSS  UCSS	Inappropriate examples. The first pair of characters share the same component, while the second pair the same
			component 攵.

# IRGN2009B (UCV New)

The IRG agrees to revise the UCS Ideograph Unifiable Component Variations List (IRG N1990) to incorporate the following new suggestions:

Item No	UCV No	UCV	Disunified List	Unified List/Compatibilities	Comments Status
1.	15	歲歳	596F 大 37.13		Inappropriate example. U+596F and U+21693 demonstrate the disunification of
2.		眾 眾 眾 罪 眾		761D 字 104.10	It is suggested to add to the list of UCVs.

3.	33	羽羽		It is suggested to add additional components
				되되 and 최종 to
				the component
				list 羽 羽 .
				Please refer to word
				examples such
				as GE-392D and J0-6643.
				%Please note
				and and
				সুসু রূর
4.	38	半半半	9816 頁 181.5	It is suggested to add
		TTT	G5-5F78 HB2-E4CB T2-4F33 J1-6779 K1-613E	‡ to the list of
				UCVs.

5.	46	糸糸		It is suggested to add an additional
				component 糸 to
				the component list
				糸 糸. Please
				refer to the word
				example such
				糸 as <sup>G0-7469</sup> .
				%Please note ≸
				and 杀.

6.	55	凡卂玐	7162 火 86.9 学 学 学 学 学 学 学 G1-5084 HB2-DE72 T2-4458 J0-5F69 K1-5851  8A0A ※ 149.3 計 計 計 記 記 記 記 G1-5136 HB1-8054 T1-5839 J0-3F57 K0-6372 V2-8F7D  8FC5 ※ 162.3 記 記 記 記 記 記 記 記 記 記 記 記 記 記	It is suggested to add 天 to the list of UCVs.
7.	63	广广		It is suggested to add Unified List examples as follows:

8.	98	臿重重			It is suggested to add additional components
9.	106	刄刃刃	5203 7J 18.1	<u>J</u>	It is suggested to add  To the list of UCVs.
10.	128	吕吕		382F = 49.2	It is suggested to add  to the list of UCVs.
11.	161	題 題 題 題	9B2C 門 191.14 GE-4663 T3-612E		It is suggested to add to the list of UCVs.

12.	218	<b>         </b>		264C3 £ 125.12 UCS2003 GKX-0961.15 T7-3158 264C6 £ 125.11 UCS2003 GHZ-42782.10	Inappropriate example. None of the glyphs has the component
13.	256	友发发	39DE		It is suggested to add  to the list of UCVs.
14.	305			87B7 虫 142.11 虫 142.11 由 152.5F34	Inappropriate example. None of the glyphs has the relative length of strokes as

15.	315	為爲		It is suggested to add an additional component to the component list.  Please refer to the word example such as GKX-1360.18.	
16.	337	亷 亷	71EB 火 86.13	Inappropriate example. U+71EB and U+24484 demonstrate the disunification of	

17.	360 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5DE4 «« 47.12	<b>SS</b> <b>DD</b> <b>G5-4165</b>	T3-486C	11-387E	K2-2F75	It is suggested to add to the list of	
							UCVs.	

### IRGN2009B (NUCV New)

The IRG agrees to revise the UCS Ideograph Non-Unifiable Component Variations List (NUCV) (IRG N1991) to incorporate the following new suggestion:

Item No.	NUCV No	NUCV	Disunified List	Unified List/ Compatibilities	Comments	Status
1	264a	吉吉	7E20 新 120.10 索文 家文		Inappropriate example. U+7E20 and U+23ABA demonstrate the disunification of and the disunification of and the disunification of the list of NUCVs.	