### ISO/IEC JTC1/SC2/WG2 IRG N2273

Replaces L2/17-386

Date: 2018-01-04

Source: Tao Yang, Eiso Chan, Wang Yifan

Meeting: IRG#49, San Jose, USA

UTC#154

Title: Proposal of 4 IDCs

Status: Individual

Actions required: To be considered by IRG & UTC

Distribution: IRG

Medium: Electronic

Pages: 12 Appendixes: 4

4 new IDCs are in need for describing the following characters. Using them may reduce the quantity of unnecessary and irregular components for IDS.

### 1. Unicode Properties

2FFC; IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM

RIGHT; So; 0; ON; ;; ;; N; ;; ;

2FFD; IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM

LOWER RIGHT; So; 0; ON; ; ; ; ; N; ; ; ;

2FFE; IDEOGRAPHIC DESCRIPTION CHARACTER HORIZONTAL

REFLECTION; So; 0; ON; ; ; ; ; N; ; ; ;

2FFF; IDEOGRAPHIC DESCRIPTION CHARACTER ONE HUNDRED

EIGHTY DEGREE ROTATION; So; 0; ON; ;; ;; N; ;; ;;

Script=Common

Proposed Code Points	2FFC	2FFD	2FFE	2FFF
PUA	A0000	A0001	A0002	A0003
Character Names	IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM RIGHT	IDEOGRAPHIC DESCRIPTION CHARACTER SURROUND FROM LOWER RIGHT	IDEOGRAPHIC DESCRIPTION CHARACTER HORIZONTAL REFLECTION	IDEOGRAPHIC DESCRIPTION CHARACTER ONE HUNDRED EIGHTY DEGREE ROTATION
Glyph			$\longleftrightarrow$	

### 2. IDS Syntax

 $IDS ::= <\!Unary\_Symbol\!><\!IDS1\!> \mid <\!Binary\_Symbol\!><\!IDS1\!> \mid$ 

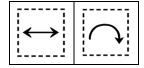
<Ternary\_Symbol>< IDS1>< IDS1>< IDS1>

 $< IDS \, 1> ::= < IDS> \, | \, < Ideograph\_Component>$ 

<Ideograph\_Component> ::= coded\_ideograph | coded\_radical |

coded\_component

<Unary\_Symbol> ::=



<Binary\_Symbol> ::=

1 2	1 2	1[2]		12	1 2
2 1		2	1 2	2 1	

<Ternary\_Symbol> ::=



# 3. Ideographic Description Character Surround from Right

Code	Character	IDS
NC <sup>1</sup>	叉	□叉、
NC	田田	
NC	釆	二工釆
NC	乙	
NC	丙	三二丙
NC	丁	<b>国</b>
NC	□	
NC	番	一二二番
NC	明	耳口
NC	冱	三互〉

 $<sup>^1\,</sup>$  NC: New character, collected by the Project "Chinese Character Repertoire".  $3\,/\,12$ 

# 4. Ideographic Description Character Surround from Lower Right

Code	Character	IDS
NC	卢	
NC	斯	
U+7742	睂	□□□□大目
U+25171	眉	
U+2519E	問	
U+24401	炭	□□□□□□火
NC	实	一一一大、
NC	尾	
U+6C37	氷	□水、
NC	ナ	□ナ <b>、</b>
U+2669D	脉	□月□水、

U+2097C	井	
U+20DF3	<b></b>	□□处日口 □□ <b>业</b> 日口
U+2298F	戈	旦戈十
U+22992	戋	<b>三</b>
U+22994	土	<b>旦</b> 戈才
NC	立	旦戈旦・ソ
NC	71	旦戈兀
NC	坣	□ <b>戈</b> 屮
U+39B0	父	旦戈从
U+8CAE	貮	具一大二二
U+5F10	美	二二十二二
U+6B66	武	山一十二二

NC	载	□□戈大□口壬
U+38A4	犬	二二十九
U+39B1	我	二二之一土
U+2BEF2	忿	□□戈人仌
U+2192A	孅	□女□□戈′′生
U+21B76	武	回してツ且
U+22387	業	二二十十手
U+229B1	武	一旦之一日
U+229E4	戜	□□戈大呈
U+24CC0	丝	□□ 戈
U+254DB	碱	□ 石 □ □ 戈 一 幺
U+276E6	赵	□□戈市衣

U+27D92	戝	□□戈口貝
U+27F6B	႕	□走□□ <b>戈</b> 口日
NC	載	
NC	載	車

# 5. Ideographic Description Character Horizontal Reflection

Code	Character	IDS
U+23944	五	₩Ē
U+23957	<u>井</u>	上一上
U+23960	址	□→止止
U+20141		$\leftrightarrow$ $\Box$
U+2009C	Ī	□丿₩止
U+2456A		→目

U+25E28	米	→米
U+268E9	臣且	□臣↔臣
U+81E6	亜	□→臣臣
U+81E9	聖	□□□□臣臣夰
U+22374	型匠	□□→匝匝廾
U+28F5D	自目	■自□廿月→自
U+28F61	制	Ⅲ皀家☆皀
NC	則	$\leftrightarrow \square$
U+28668		
U+286DC	巴巴	
NC	Ë	⇔号
U+2BE2C	号号	□号↔号

# 6. Ideographic Description Character One Hundred Eighty Degree Rotation

Code	Character	IDS
U+20114	<del></del>	一子
U+2010F		□了
U+221B4	红	<b>三</b> 幺○了
NC	類	□
NC	尽	可或○或
NC	鬞	或○或
NC	墓	或○或
U+22A0B	夏	或○或
U+23952	TL.	一一上上
NC	荆	<b>一</b> 虎

NC	號	
NC	剧	虎  虎
U+27E42	户	虎  虎貝
U+2C88C	彪	虎虎虎見
NC	相	二十二月月

#### ISO/IEC JTC 1/SC 2/WG 2

#### PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 106462

Please fill all the sections A, B and C below.

 $Please\ read\ Principles\ and\ Procedures\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Procedures\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ and\ Document\ (P\ \&\ P)\ from\ \underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/principles.html}\ for\ guidelines\ for\ gui$ details before filling this form.

 $\textbf{Please ensure you are using the latest Form from $\underline{http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.} . } \\$ See also <a href="http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html">http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html</a> for latest *Roadmaps*.

#### A. Administrative

1. <b>Title:</b>	Proposal of 4 IDCs			
2. Requester's name:		g, Eiso Chan, Wang Yifan		
3. Requester type (Member body/L	aison/Individual contribution):	Individual contri		
4. Submission date:	bmission date: 2018-			
5. Requester's reference (if applicable)	ole):	SO/IEC JTC 1/SC 2/WG 2/IRG N227.	3	
6. Choose one of the following:				
This is a complete propo			Yes	
(or) More information w	ill be provided later:			
B. Technical – General				
1. Choose one of the following:				
a. This proposal is for a new	w script (set of characters):		No	
Proposed name of se				
	ion of character(s) to an existing b		Yes	
Name of the existing	g block:	Ideographic Description Characte	rs	
2. Number of characters in proposa	l:		4	
3. Proposed category (select one fro	om below - see section 2.2 of P&P	document):		
A-Contemporary Y B.	1-Specialized (small collection)	B.2-Specialized (large coll	ection)	
	Attested extinct	E-Minor extinct		
F-Archaic Hieroglyphic or Ide	ographic	G-Obscure or questionable usage s	ymbols	
4. Is a repertoire including characte	r names provided?		Yes	
a. If YES, are the names in accordance with the "character naming guidelines"				
in Annex L of P&P	document?		Yes	
b. Are the character shapes	attached in a legible form suitable	for review?	Yes	
5. Fonts related:				
<ol> <li>a. Who will provide the app</li> </ol>	propriate computerized font to the	Project Editor of 10646 for publishing	the standard?	
	Dr. Ken l			
b. Identify the party granting		he editors (include address, e-mail, ftp	o-site, etc.):	
	Dr. Ken Lunde(lund	de@adobe.com)		
6. References:				
	character sets, dictionaries, descrip			
b. Are published examples of use (such as samples from newspapers, magazines, or other sources)				
of proposed characters atta	ched?			
7. Special encoding issues:				
Does the proposal address other aspects of character data processing (if applicable) such as input,				
presentation, sorting, search	ning, indexing, transliteration etc.	(if yes please enclose information)?		
Q Additional Information:				

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard http://www.unicode.org for such information on other scripts. Also see Unicode Character Database ( http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

<sup>&</sup>lt;sup>2</sup> Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

### C. Technical - Justification

C. Ictimical - Justification	
1. Has this proposal for addition of character(s) been submitted before?	No
If YES explain	
2. Has contact been made to members of the user community (for example: National Body,	
user groups of the script or characters, other experts, etc.)?	No
If YES, with whom?	
If YES, available relevant documents:	
3. Information on the user community for the proposed characters (for example:	
size, demographics, information technology use, or publishing use) is included?	Yes
Reference: ISO/IEC JTC 1/SC 2/WG 2/IRG N2273	
4. The context of use for the proposed characters (type of use; common or rare)	common
Reference:	
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference:	
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely	
in the BMP?	Yes
If YES, is a rationale provided?	Yes
If YES, reference:	
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	Yes
8. Can any of the proposed characters be considered a presentation form of an existing	
character or character sequence?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either	
existing characters or other proposed characters?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
10. Can any of the proposed character(s) be considered to be similar (in appearance or function)	
to, or could be confused with, an existing character?	No
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
11. Does the proposal include use of combining characters and/or use of composite sequences?	No
If YES, is a rationale for such use provided?	
If YES, reference:	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?	
If YES, reference:	
12. Does the proposal contain characters with any special properties such as	
control function or similar semantics?	No
If YES, describe in detail (include attachment if necessary)	
13. Does the proposal contain any Ideographic compatibility characters?	No
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference:	