



ISO/IEC JTC 1/SC 2  
Coded character sets  
Secretariat: JISC (Japan)

**Document type:** Summary of Voting/Table of Replies

**Title:** Summary of Voting on ISO/IEC DIS 10646 (Ed.4), Information technology -- Universal Coded Character Set (UCS)

**Status:** This document is forwarded to WG 2 for disposition of comments. WG 2 is requested to prepare a disposition of comments report, revised text and a recommendation for further processing.

**Date of document:** 2014-01-17

**Source:** SC 2 Secretariat

**Expected action:** INFO

**No. of pages:** 12

**Email of secretary:** [kimura@itscj.ipsj.or.jp](mailto:kimura@itscj.ipsj.or.jp)

**Committee URL:** <http://isotc.iso.org/livelink/livelink/open/jtc1sc2>

## Ballot Information

<b>Reference</b>	ISO/IEC DIS 10646 (Ed 4)	<b>Committee</b>	ISO/IEC JTC 1/SC 2
<b>Edition number</b>	4		
<b>English title</b>	Information technology -- Universal Coded Character Set (UCS)		
<b>French title</b>	Technologies de l'information -- Jeu universel de caractères codés (JUC)		
<b>Start date</b>	2013-10-14	<b>End date</b>	2014-01-14
<b>Opened by ISO/CS on</b>	2013-10-14 00:08:45	<b>Closed by ISO/CS on</b>	2014-01-16 00:20:40
<b>Status</b>	Closed		
<b>Voting stage</b>	Enquiry	<b>Version number</b>	1
<b>Note</b>			

## Result of voting

**P-Members voting: 14 in favour out of 16 = 88 % (requirement  $\geq$  66.66%)**

*(P-Members having abstained are not counted in this vote.)*

**Member bodies voting: 2 negative votes out of 18 = 11 % (requirement  $\leq$  25%)**

***Approved***

Votes by members					
Country	Member	Status	Approval	Disapproval	Abstention
Armenia	SARM	P-Member	X		
Australia	SA	P-Member			X
Austria	ASI	P-Member			X
Belgium	NBN	P-Member			X
Canada	SCC	P-Member	X		
China	SAC	P-Member	X		
Côte d'Ivoire	CODINORM	P-Member			
Czech Republic	UNMZ	P-Member	X		
Denmark	DS	P-Member			X
Finland	SFS	P-Member	X		
France	AFNOR	P-Member	X		
Germany	DIN	P-Member			X
Hungary	MSZT	O-Member	X		
India	BIS	P-Member			X
Ireland	NSAI	P-Member		X *	
Italy	UNI	P-Member	X		
Japan	JISC	P-Member	X *		
Kazakhstan	KAZMEMST	P-Member			X
Korea, Republic of	KATS	P-Member	X		
Lebanon	LIBNOR	P-Member			X
Malaysia	DSM	P-Member			X
Malta	MCCAA	P-Member			X
Netherlands	NEN	P-Member			X
Nigeria	SON	P-Member	X		
Norway	SN	P-Member	X		
Pakistan	PSQCA	P-Member	X		
Poland	PKN	O-Member			X
Russian Federation	GOST R	P-Member	X		
Singapore	SPRING SG	P-Member			X
Slovenia	SIST	O-Member			X
South Africa	SABS	P-Member			X
Spain	AENOR	P-Member			X
Sweden	SIS	P-Member			X
Switzerland	SNV	P-Member			X
Ukraine	DTR	O-Member	X		
United Arab Emirates	ESMA	P-Member			X
United Kingdom	BSI	P-Member	X *		
United States	ANSI	Secretariat		X *	
Zimbabwe	SAZ	P-Member			
<b>P-Member TOTALS</b>			14	2	17

Total of P-Members voting: 16			
<b>TOTALS</b>	16	2	19
(*) A comment file was submitted with this vote			

Comments from Voters			
<b>Ireland</b>	<b>NSAI</b>	<b>P-Member</b>	<a href="#">ISO_IEC DIS 10646 (Ed 4)_NSAI.doc</a>
<b>Japan</b>	<b>JISC</b>	<b>P-Member</b>	<a href="#">ISO_IEC DIS 10646 (Ed 4)_JISC.doc</a>
<b>United Kingdom</b>	<b>BSI</b>	<b>P-Member</b>	<a href="#">ISO_IEC DIS 10646 (Ed 4)_BSI.doc</a>
<b>United States</b>	<b>ANSI</b>	<b>Secretariat</b>	<a href="#">ISO_IEC DIS 10646 (Ed 4)_ANSI.doc</a>

## 5 Template for comments and secretariat observations

Date: 14 January 2014	Document: <b>ISO/IEC JTC 1/SC 2</b> – <b>DIS 10646</b>	Project:
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MB/ NC <sup>1</sup>	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment <sup>2</sup>	Comments	Proposed change	Observations of the secretariat
IE					Disapproval with Comments Today the Comments have been submitted by e-mail to the Secretary ISO/IEC JTC 1/SC 2		

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2 **Type of comment:** **ge** = general **te** = technical **ed** = editorial

# Irish comments on ISO/IEC DIS 10646:2014

Reference: DIS 10646

JTC1 Ballot Closes: 2014-01-14

Date: 2014-01-12

Ireland **disapproves** the draft with the editorial comments given below. Acceptance of these comments and appropriate changes to the text will change our vote to approval.

**E1. Page 1254, Row 10C8: Old Hungarian.** After consultation with colleagues in Hungary, Ireland recognizes that modern orthographic use of a few of the Old Hungarian letters differs somewhat from that of the primary-source manuscripts. Ireland requests the addition of the following informative notes to clarify some modern usage:

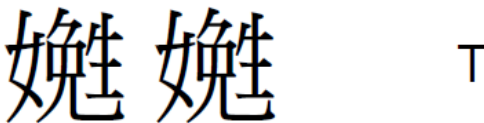
- Ÿ 10CA7 OLD HUNGARIAN CAPITAL LETTER ENT
  - *also used for Ant and Int*
- Ǫ 10CAC OLD HUNGARIAN CAPITAL LETTER NIKOLSBURG UE
  - = Ũ
  - *also used for Ö*
  - *used for U with double acute in Sándor Forrai's orthography*
- ḥ 10CAD OLD HUNGARIAN CAPITAL LETTER RUDIMENTA UE
  - = Ũ, U with double acute
  - *used for Ü in Sándor Forrai's orthography*
- Ÿ 10CE7 OLD HUNGARIAN SMALL LETTER ENT
  - *also used for ant and int*
- ǫ 10CEC OLD HUNGARIAN SMALL LETTER NIKOLSBURG UE
  - = ü
  - *also used for ö*
  - *used for u with double acute in Sándor Forrai's orthography*
- ḥ 10CED OLD HUNGARIAN SMALL LETTER RUDIMENTA UE
  - = ü, u with double acute
  - *used for ü in Sándor Forrai's orthography*

**E2. Page 1254, Row 10C8: Old Hungarian.** Ireland believes that the glyphs of two letters (four characters) should be modified slightly. 10C8B OLD HUNGARIAN CAPITAL LETTER EE and 10CCB OLD HUNGARIAN SMALL LETTER EE are the casing forms of a modern letter, devised in the 20th century, and their glyphs should be shorter, to harmonize with the preferences of modern users. The glyph for 10C93 OLD HUNGARIAN CAPITAL LETTER EK and 10CD3 OLD HUNGARIAN SMALL LETTER EK is drawn rather shorter than other letters in the Nikolsburg and Rudimenta manuscripts (see N4268R figures 4 and 5) but in the Bologna manuscript and elsewhere in the Rudimenta it is drawn more or less the same height as other letters (see N4268R figures 2 and 3). Modern users tend to prefer the larger letter, and as this shape is attested in the primary materials as well, Ireland requests that the glyphs of the four characters be changed to the glyphs as shown below, namely:

From this set of glyphs:  to this set of glyphs: 

## Template for comments and secretariat observations

Date:	Document:	Project:
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MB/ NC <sup>1</sup>	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment <sup>2</sup>	Comments	Proposed change	Observations of the secretariat
JP		2.2 and many others		ed	First character of “Clause” is capitalized.	Change to lower case character.	
JP		23.2		te	In CJKsrc.txt file, UCS code point is described as the format of “U+hhhh” or “U+hhhhh”. This is not consistent with other UCS code point format “hhhh” or “hhhhh”, for example, in 22.4.	Change the format to “hhhh” or “hhhhh” in CJKsrc.txt.	
JP		31.3	Code Chart for CJK Extension E	te	(This is to confirm the resolution IRG M41.2 from IRG meeting #41 in Tokyo.)  As described in IRG N1957, there are glyph errors in CJK Extension E code table as for U+2C0D1 and U+2C7D3.	Make sure to correct the glyphs shown as IRGN1977 with reflecting the feedback to this document if any.	
JP		Annex A		ed	The title of A.6.12 is “312 Unicode 6.3”.	Change to “313 Unicode 6.3”	
JP		Annex F		ed	“sub-clause” has a dash, although other “subclause” does not.	Keep them consistent.	
JP		Annex S		te	(This is same comment as what JP commented at CD ballot of ISO/IEC 10646 4 <sup>th</sup> edition.)  The following pair taken from S.3 is for a source separation caused by T source.  <div style="text-align: center;">  </div> <div style="text-align: center;"> <p>5B0E 5B14</p> </div> This figure should be taken from 2003 edition in order to preserve the original intention from the early days as follows.	Use the figure from 2003 edition.	

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					<p>媿媿 T</p> <p>5B0E 5B14</p> <p>Here, a shape with a dot is on 5B14, and that without is on 5B0E.</p>		

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## Template for comments and secretariat observations

Date: December 2013	Document: ISO/IEC/DIS 10646	Project:
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MB/NC <sup>1</sup>	Line number (e.g. 17)	Clause/ Subclause (e.g. 3.1)	Paragraph/ Figure/ Table/ (e.g. Table 1)	Type of comment <sup>2</sup>	Comments	Proposed change	Observations of the secretariat
GB		4.12	NOTE 2	ed	"Unlike previous editions of ISO/IEC 10646, this International Standard no longer uses implementation levels." Not all previous editions use implementation levels (2nd and 3rd eds. do not).	Reword as "Unlike some previous editions of ISO/IEC 10646, this International Standard does not use implementation levels." or similar.	
GB		16.6.3	NOTE 2	ed	"This International Standard incorporates by reference the variation sequences listed in version 2010-11-14 of the Ideographic Variation Database, as described at <a href="http://www.unicode.org/ivd/data/2010-11-14/">http://www.unicode.org/ivd/data/2010-11-14/</a> ." The version of the IVD referenced should be 2012-03-02.	Amend to "This International Standard incorporates by reference the variation sequences listed in version 2012-03-02 of the Ideographic Variation Database, as described at <a href="http://www.unicode.org/ivd/data/2012-03-02/">http://www.unicode.org/ivd/data/2012-03-02/</a> ."	
GB		21	NOTE 4	ed	"Note 4" is followed by two hyphens.	Remove the extra hyphen.	
GB		24.2		ed	"An entity names shall consist only of the following characters". "entity names" should be singular.	Change to "An entity name shall consist only of the following characters".	
GB		31.3		ed	"Standardized variation sequences preceded by U+2053 ~ SWUNG DASH, when this character is used as a base character in such a variation sequence." The character given between "U+2053" and "SWUNG DASH" is U+007E ~ TILDE not U+2053 □ SWUNG DASH. To avoid confusion a swung dash should be used here, as is the case in the code charts.	Change to "Standardized variation sequences preceded by U+2053 □ SWUNG DASH, when this character is used as a base character in such a variation sequence."	
GB		16.6.2, 22.4, 23.2, A.4.2, Annex G, Annex R		ed	These sections all specify that "The content linked to is a plain text file, using ISO/IEC 646-IRV characters with LINE FEED as end of line mark". In fact all the linked files (Allnames.txt, CJKSrc.txt, EmojiSrc.txt, HanguiSy.txt, JIExt.txt, NUSI.txt, and UCSVariants.txt) are CR/LF terminated, and one file (NUSI.txt) has a BOM.	Ensure that all linked files are terminated with LINE FEED only and do not contain a Byte Order Mark.	

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US		Annex A.5.9		te.1	The U.S. requests a note be added to the text of A.5.9 288 MULTILINGUAL LATIN SUBSET, clarifying that the scope of this collection is limited to that defined in ISO/IEC 9995-3, and does not cover the repertoire needed for all languages using Latin-based orthographies. The 288 MLS collection covers the letters used to write some Native American languages, for example, but does not include U+0245 LATIN CAPITAL LETTER TURNED V and U+028C LATIN SMALL LETTER TURNED V, used by Oneida and Tepehuan.	Add a note that this collection is limited to ISO/IEC 9995-3, and does not cover all languages using Latin-based orthographies.	
US			Cuneiform	te.2	The U.S. requests the addition of one character to the Cuneiform block, U+12399 CUNEIFORM SIGN U U, as documented in WG2 N4493. This character was left out in error, according to a co-author of the original cuneiform proposals.	Add the character.	
US			Latin Extended-E	te.3	The U.S. requests the boundaries of the Latin Extended-E block be changed from 9 columns (U+AB30- U+ABBF) to 4 columns (U+AB30- U+AB6F). This requested change will result in a block of 5 contiguous columns, which would enable a set of 80 characters to be encoded in the BMP. This extended range would make it possible to include, for example, characters in a Cherokee Supplement block, so that the entire script could be located in the BMP. If this comment and te.4 are accommodated, we will change our vote to Yes.	Change the end of the Latin Extended-E block from U+ABBF to U+AB6F.	
US			Siddham	te.4	The U.S. requests the 6 Siddham letter variants (U+115E0-U+115E5) be removed, since alternative approaches have been raised (such as in WG2 N4490 and N4486), and questions remain on how to best represent these letters.	Remove the 6 Siddham letter variants (U+115E0-U+115E5)	

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					For these reasons, we deem these characters not mature for encoding. If this comment and te.3 are accommodated, we will change our vote to Yes.		
US			Miscellaneous Symbols and Arrows	te.5	The U.S. requests a formal name alias be added for U+2B81 UPWARDS TRIANGLE-HEADED ARROW LEFTWARDS DOWNWARDS OF TRIANGLE-HEADED ARROW.  The name alias should be: UPWARDS TRIANGLE-HEADED ARROW LEFTWARDS OF DOWNWARDS TRIANGLE-HEADED ARROW. The formal name alias will correct an error in the names list.	Add the formal name alias for U+2B81 as noted.	
US			Tamil	ed.1	The U.S. would prefer the Lohit Tamil font be used for Tamil in the 4th edition of ISO/IEC 10646, as requested in WG2 N4476. (The font can be seen in the Tamil and Tamil Supplements blocks in PDAM1.) The new font is more aesthetically pleasing than the current font.	Change the font.	
US			Latin Extended-E	ed. 2	The italicized comment above U+AB60 should be modified slightly from:  "These letters were used 1917-1927 in the official IPA-based Latin orthography of that era"  to:  "These letters were used from 1917 to 1927..."	Adjust the wording as described.	
US			Miscellaneous Symbols and Arrows	ed.3	Correct the spelling of "preferredd" in the italicized comment above U+2BEC in the names list.	Correct the spelling as noted.	
US			Sharada	ed.4	The first single-quote in the annotation at	Fix the single quote as noted.	

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					U+111CC (“used for writing ‘matra-vowels’”) should be turned the other direction.		
US			Musical Symbols	ed.5	Remove period after annotation on U+1D1DE MUSICAL SYMBOL KIEVAL C CLEF.	Remove the period after the annotation on U+1D1DE	
US			Siddham	ed.6	The italicized comment at the top of the names list, “The script is also known by the names ‘Siddhamatrika’ and ‘Kutila’” should have the words “and ‘Kutila’” removed, since “Kutila” is too generic a term. ‘Kutila’ means ‘curled, bent’ and is found, for example, in Nepal to refer to Rañjana.	Remove “and Kutila” from the italicized note at the top of the names list for Siddham, and change “names” to “name”.	
US			Ahom	ed.7	We recommend the font in the Ahom block be reviewed to correct clipping and winding errors.	Review and fix the font for winding errors and clipping.	
US			Early Dynastic Cuneiform	ed.8	We recommend the glyphs in the Early Dynastic Cuneiform be fixed so they do not extend outside the box area for the glyphs (cf. U+12484, U+12486, U+124AB, U+12535, etc.).	Review and fix the font so the glyphs do not extend outside the glyph boxes in the charts.	

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