Title: Finalized Mapping between Characters of ISO 5428 and ISO/IEC 10646-1 (UCS) Source: The Research Libraries Group, Inc. Status: L2 Member Contribution References: ISO/TC46/SC4/WG1 N 243, ISO/TC46/SC4/WG1 N 227 (revised 1998-05-29) and ISO/IEC JTC1/SC2 N3128 (Application for Registration No. 215) Authors: Joan M. Aliprand Action: For information Date: 2000-07-02

# 1. Background

On May 9, 2000, ISO/TC 46/SC 4/WG 1 reviewed documents that compared mappings of the characters of TC 46 character set standards and character sets which were sources for these standards to ISO/IEC 10646. Based on these comparative analyses, WG1 agreed on final mappings for eight of the TC 46 character set standards.

This document is a modification of *Analysis of Proposed Mapping between Characters of ISO 5428 and ISO/IEC 10646-1 (UCS)* prepared for the WG1 meeting (ISO/TC46/SC4/WG1 N 243) and available at <u>http://www.niso.org</u>.

# 2. Mapping of Characters

The following table shows the final WG1 decisions compared to N 227.

ISO 5428		Mappings		Status
Code	Name (plus annotation)	N 227	Final	
2/1	Grave	0300	0300	
2/2	Acute	0301	0301	
2/3	Diaeresis	0308	0308	
2/4	Circumflex	0342	0342	
2/5	Smooth breathing	0313	0313	
2/6	Rough breathing	0314	0314	

ISO 5428		Mappings		Status
Code	Name (plus annotation)	N 227	Final	
2/7	Iota subscript	0345	0345	
2/8-	Unassigned			
2/15				
3/0	Angle open quote	00AB	00AB	
3/1	Angle close quote	00BB	00BB	
3/2	Double open quote	201C	201C	Affirmed
3/3	Double close quote	201D	201D	Affirmed
3/4	Upper prime	0374	0374	
3/5	Lower prime	0375	0375	
3/6-	Unassigned			
3/10				
3/11	Raised dot. Greek	0387	0387	
	semicolon			
3/12-	Unassigned			
3/14				
3/15	Greek question mark	037E	037E	
4/0	Unassigned			
4/1	Alpha (Capital Letter)	0390	0391	Correction
4/2	Beta (Capital Letter)	0391	0392	Correction
4/3	Unassigned			
4/4	Gamma (Capital Letter)	0393	0393	
4/5	Delta (Capital Letter)	0394	0394	
4/6	Epsilon (Capital Letter)	0395	0395	
4/7	Stigma (Capital Letter)	03DA	03DA	
4/8	Digamma (Capital Letter)	03DC	03DC	
4/9	Zeta (Capital Letter)	0396	0396	
4/10	Eta (Capital Letter)	0397	0397	
4/11	Theta (Capital Letter)	0398	0398	

ISO 5428		Mappings		Status
Code	Name (plus annotation)	N 227	Final	
4/12	Iota (Capital Letter)	0399	0399	
4/13	Kappa (Capital Letter)	039A	039A	
4/14	Lambda (Capital Letter)	039B	039B	
4/15	Mu (Capital Letter)	039C	039C	
5/0	Nu (Capital Letter)	039D	039D	
5/1	Xi (Capital Letter)	039E	039E	
5/2	Omicron (Capital Letter)	039F	039F	
5/3	Pi (Capital Letter)	03A0	03A0	
5/4	Koppa (Capital Letter)	03DE		To be assigned
5/5	Rho (Capital Letter)	03A1	03A1	
5/6	Sigma (Capital Letter)	03A3	03A3	
5/7	Unassigned			
5/8	Tau (Capital Letter)	03A4	03A4	
5/9	Upsilon (Capital Letter)	03A5	03A5	
5/10	Phi (Capital Letter)	03A6	03A6	
5/11	Chi (Capital Letter)	03A7	03A7	
5/12	Psi (Capital Letter)	03A8	03A8	
5/13	Omega (Capital Letter)	03A9	03A9	
5/14	Sampi (Capital Letter)	03E0	03E0	
6/0	Unassigned			
6/1	Alpha (Small Letter)	03B0	03B1	Correction
6/2	Beta (Small Letter, beginning of the word)	03B1	03B2	Correction
6/3	Beta (Small Letter, middle of the word)	03D0	03D0	
6/4	Gamma (Small Letter)	03B3	03B3	
6/5	Delta (Small Letter)	03B4	03B4	
6/6	Epsilon (Small Letter)	03B5	03B5	

ISO 5428		Mappings		Status
Code	Name (plus annotation)	N 227	Final	
6/7	Stigma (Small Letter)	New	03DB	
6/8	Digamma (Small Letter)	New	03DD	
6/9	Zeta (Small Letter)	03B6	03B6	
6/10	Eta (Small Letter)	03B7	03B7	
6/11	Theta (Small Letter)	03B8	03B8	
6/12	Iota (Small Letter)	03B9	03B9	
6/13	Kappa (Small Letter)	03BA	03BA	
6/14	Lambda (Small Letter)	03BB	03BB	
6/15	Mu (Small Letter)	03BC	03BC	
7/0	Nu (Small Letter)	03BD	03BD	
7/1	Xi (Small Letter)	03BE	03BE	
7/2	Omicron (Small Letter)	03BF	03BF	
7/3	Pi (Small Letter)	03C0	03C0	
7/4	Koppa (Small Letter)	New		To be assigned
7/5	Rho (Small Letter)	03C1	03C1	
7/6	Sigma (Small Letter)	03C3	03C3	
7/7	Sigma (Small Letter, end of words)	03C2	03C2	
7/8	Tau (Small Letter)	03C4	03C4	
7/9	Upsilon (Small Letter)	03C5	03C5	
7/10	Phi (Small Letter)	03C6	03C6	
7/11	Chi (Small Letter)	03C7	03C7	
7/12	Psi (Small Letter)	03C8	03C8	
7/13	Omega (Small Letter)	03C9	03C9	
7/14	Sampi (Small Letter)	New	03E1	

# **3.** Comments on Specific Characters (for information)

# Archaic Letter Koppa

The koppa is shown in the code charts of *The Unicode Standard, Version 3.0* and the second edition of ISO/IEC 10646-1 as the alternative "lightning bolt" form. The "Q-like" form in ISO 5428 was considered an alternative glyph. However, subsequent evidence has been presented to support disunification of the two forms. WG1 agreed to remove the mappings for 5/4 Koppa (Capital Letter) and 7/4 Koppa (Small Letter) in anticpation of action by ISO/IEC JTC1/SC2/WG2.

# **Unification of Quotation Marks through Mapping**

ISO 5426 and ISO 5428 contain double quotation marks which are inversions of each other: 2/10 Double open quote and 3/10 Double close quote in ISO 5426, and 3/2 Double open quote and 3/3 Double close quote in ISO 5428. The ISO 5428 character 3/2 Double open quote resembles U+201F DOUBLE HIGH-REVERSED-9 QUOTATION MARK, a "glyph variant of 201C." There is no close Unicode/10646 match for the Double close quote at position 3/3. ISO/TC46/SC4/WG1 N 227 maps both pairs to the same characters: U+201C LEFT DOUBLE QUOTATION MARK and U+201D RIGHT DOUBLE QUOTATION MARK. This common mapping eliminates the unique appearance of the quotation marks in the ISO 5428, as well as the ability to identify the source character set after data conversion.

WG1 affirmed its mapping of the Double quote characters to U+201C LEFT DOUBLE QUOTATION MARK and U+201D RIGHT DOUBLE QUOTATION MARK.