Universal Multiple-Octet Coded Character Set
International Organization for Standardization
Organisation Internationale de Normalisation
Международная организация по стандартизации

Doc Type: **Working Group Document**
Title: **Proposal for encoding the Lydian script in the UCS**
Source: **Michael Everson**
Status: **Individual Contribution**
Action: **For consideration by JTC1/SC2/WG2 and UTC**
Date: **2005-04-27**

Lydian is a script used for writing the ancient Indo-European language of the same name used in Western Anatolia. While the language is attested from inscriptions and coins the end of the eighth century (or beginning of the seventh) until the third century BCE, longer well-preserved inscriptions date to the fifth and fourth centuries BCE. Most of the inscriptions have been found in or around Sardis, the capital of the ancient Lydia.

Processing

Lydian is an alphabetic script, related to Greek. Early texts are either right-to-left or left-to-right, but later texts are solely right-to-left. The exact phonetic value of all the letters has not yet been determined.

Names

The names used for the characters here are based on their Latin transliterations.

Bibliography

Melchert, H. Craig. 2004. "Lydian", in *The Cambridge encyclopedia of the world's ancient languages*, ed. Roger Woodard, 601-608. Cambridge: Cambridge University Press.

Swiggers, Pierre, & Wolfgang Jenniges. 1996. "The Anatolian alphabets", in *The World's Writing Systems*, ed. Peter T. Daniels & William Bright. New York; Oxford: Oxford University Press. ISBN 0-19-507993-0

Unicode Character Properties

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10B00;LYDIAN LETTER A;Lo;0;R;;;;;N;;;;;
10B01;LYDIAN LETTER B;Lo;0;R;;;;;N;;;;;
10B02;LYDIAN LETTER G;Lo;0;R;;;;;N;;;;;
10B03;LYDIAN LETTER D;Lo;0;R;;;;;N;;;;;
10B04;LYDIAN LETTER E;Lo;0;R;;;;;N;;;;;
10B05;LYDIAN LETTER V;Lo;0;R;;;;;N;;;;;
10B06;LYDIAN LETTER I;Lo;0;R;;;;;N;;;;;
10B07;LYDIAN LETTER Y;Lo;0;R;;;;;N;;;;;
10B08;LYDIAN LETTER K;Lo;0;R;;;;;N;;;;;
10B09;LYDIAN LETTER L;Lo;0;R;;;;;N;;;;;
10B0A;LYDIAN LETTER M;Lo;0;R;;;;;N;;;;;
10B0B;LYDIAN LETTER N;Lo;0;R;;;;;N;;;;;
10B0C;LYDIAN LETTER O;Lo;0;R;;;;;N;;;;;
10B0D;LYDIAN LETTER R;Lo;0;R;;;;;N;;;;;
10B0E;LYDIAN LETTER SS;Lo;0;R;;;;;N;;;;;
10B0F;LYDIAN LETTER T;Lo;0;R;;;;;N;;;;;
10B10;LYDIAN LETTER U;Lo;0;R;;;;;N;;;;;
10B11;LYDIAN LETTER F;Lo;0;R;;;;;N;;;;;
10B12;LYDIAN LETTER Q;Lo;0;R;;;;;N;;;;;
10B13;LYDIAN LETTER S;Lo;0;R;;;;;N;;;;;
10B14;LYDIAN LETTER TT;Lo;0;R;;;;;N;;;;;
10B15;LYDIAN LETTER AN;Lo;0;R;;;;;N;;;;;
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10B16;LYDIAN LETTER EN;Lo;0;R;;;;;;N;;;;;
10B17;LYDIAN LETTER LY;Lo;0;R;;;;;;N;;;;;
10B18;LYDIAN LETTER NN;Lo;0;R;;;;;;N;;;;;
10B19;LYDIAN LETTER C;Lo;0;R;;;;;;N;;;;;
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Figures

TABLE 22.8: *The Lydian Alphabet*

Letter(s)	Value
A	a
8	b
⅃	d
⅃ Ⱶ Ⅎ	e
ꓵ	v
I	i
ꝺ	y
ⴹ	k
⅂	l
ꓩ	m
ꓨ Ꮞ	n
O	o
ꝙ	r
Ŧ ‡ Ⅰ	s
� ⅚ ⟩	ś
T	t
Ⴤ	u
8 ⸶	f
+	q
M	ã
Ŧ	τ
Ⴤ	ẽ
Ⴤ	λ
ꓘ ⟨	ν
↑	c
ꓒ	g

Figure 1. Table of Lydian letters from Swiggers & Jenniges 1996.

ᴛᴌᴌ**T**T**ᑫ**A **ꓝ**ᴌᴌA**ꓱ**ᴌᴌ**A**ᴆ **ꓱ**A**ꓱꓱ**A**ᴌ**

NANNAΣΔΙΟΝΥΣΙΚΛΕΟΣΑΡΤΕΜΙΔΙ

λumitra silavikab śannan←

Lydian:	nannaś	bakivalis	artimuλ
Greek:	NANNAΣ	ΔΙΟΝΥΣΙΚΛΕΟΣ	ΑΡΤΕΜΙΔΙ
Gloss:	Nannas	the.one.of.Bakiva	to.Artemis

'Nannas, the son of Bakiva (i.e. Bacchus/Dionysus) (dedicates this statue) to
Artemis.'   —*From Sardis (Gusmani 1964–86, no. 20).*

.ᴌᑍ4A**ᑍ** ᖴᑫᴌAT ᴗᴪᴪ.
Ti ᒧAꟿ᠕AꟿATꟿA8
ᒧAᑫTA ᑫAꙄ
A ⊙ᕼᴧᴧᴧᴧᴧᴧᴧ

liveav caat vsv←
titaś śaratrab←

Lydian:	vsv	taac		vacvil	bartaraś	śatit
Greek:				ΠΑΡΤΑΡΑΣ ΑΘΗΝΑΙΗΙ		
Gloss:	this	statue/pillar(?)		to.Acvi	Bartara	has.built

'Bartara has built this statue/pillar to Asni(?) (= Athena).'
—*From Pergamon (Gusmani 1964–86, no. 40; Neumann 1967; Gusmani 1986a).*

Figure 2. Sample of Lydian text from Swiggers & Jenniges 1996.

Table 22.1 The Lydian alphabet	
Character	Transcription
A	a
8	b
ꓳ	g
ꓸ	d (/ð/)
ꓵ	e
ꓝ	v
I	i
ꓷ	y
ꓤ	k
ꓶ	l
ꓹ	m
ꓩ	n
o	o
q	r
ꓶ ꓜ ꓼ	ś (/s/)
T	t
Y	u
8	F
+	q (/k^w/)
I ꓞ	s (/ç/)
Ɨ	τ (/t^s/)
M	ā
Y	ě
Ꙗ	λ
ꓸ	ν
ꓮ	c (/d^z/?)

Figure 3. Table of Lydian letters from Melchert 2004.

TABLE XX - Row 10B: LYDIAN

	10B0	10B1
0	Ꭿ	Ɣ
1	Ꞵ	8
2	Ꞔ	+
3	⅃	I
4	∨	Ξ
5	⅄	M
6	I	Ψ
7	◁	Ψ
8	Ж	∿
9	⅂	↑
A	ᙏ	
B	Ꮪ	
C	○	
D	ꟼ	
E	⟩	
F	⊤	

G = 00
P = 01

TABLE XX - Row 10B: LYDIAN

hex	Name	hex	Name
00	LYDIAN LETTER A		
01	LYDIAN LETTER B		
02	LYDIAN LETTER G		
03	LYDIAN LETTER D		
04	LYDIAN LETTER E		
05	LYDIAN LETTER V		
06	LYDIAN LETTER I		
07	LYDIAN LETTER Y		
08	LYDIAN LETTER K		
09	LYDIAN LETTER L		
0A	LYDIAN LETTER M		
0B	LYDIAN LETTER N		
0C	LYDIAN LETTER O		
0D	LYDIAN LETTER R		
0E	LYDIAN LETTER SS		
0F	LYDIAN LETTER T		
10	LYDIAN LETTER U		
11	LYDIAN LETTER F		
12	LYDIAN LETTER Q		
13	LYDIAN LETTER S		
14	LYDIAN LETTER TT		
15	LYDIAN LETTER AN		
16	LYDIAN LETTER EN		
17	LYDIAN LETTER LY		
18	LYDIAN LETTER NN		
19	LYDIAN LETTER C		
1A	(This position shall not be used)		
1B	(This position shall not be used)		
1C	(This position shall not be used)		
1D	(This position shall not be used)		
1E	(This position shall not be used)		
1F	(This position shall not be used)		

A. Administrative

1. Title

Proposal for encoding the Lydian script in the UCS

2. Requester's name

Michael Everson

3. Requester type (Member body/Liaison/Individual contribution)

Individual contribution.

4. Submission date

2005-04-27

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

No.

6b. More information will be provided later

This is a preliminary proposal.

B. Technical – General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

Yes.

Proposed name of script

Lydian.

1b. The proposal is for addition of character(s) to an existing block

No.

1b. Name of the existing block

2. Number of characters in proposal

27.

3. Proposed category (see section II, Character Categories)

Category C

4a. Proposed Level of Implementation (1, 2 or 3) (see clause 14, ISO/IEC 10646-1: 2000)

Level 1.

4b. Is a rationale provided for the choice?

Yes.

4c. If YES, reference

Spacing characters are proposed.

5a. Is a repertoire including character names provided?

Yes.

5b. If YES, are the names in accordance with the character naming guidelines in Annex L of ISO/IEC 10646-1: 2000?

Yes.

5c. Are the character shapes attached in a legible form suitable for review?

Yes.

6a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

Michael Everson. TrueType.

6b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

Michael Everson, Fontographer.

7a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes, see bibliography above.

7b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

Yes.

8. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

Yes, see 9 below.

9. 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 at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database http://www.unicode.org/Public/UNIDATA/ UnicodeCharacterDatabase.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

Yes, see Unicode properties above.

C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

No

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2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?
Yes.
2b. If YES, with whom?
Deborah Anderson, University of California, Berkeley
2c. 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?
Scholarly communities researching the Lydian language.
4a. The context of use for the proposed characters (type of use; common or rare)
Lydian is fairly rare as these things go.
4b. Reference
5a. Are the proposed characters in current use by the user community?
Yes.
5b. If YES, where?
By scholars worldwide.
6a. After giving due considerations to the principles in Principles and Procedures document (a WG 2 standing document) must the proposed characters be entirely in the BMP?
No.
6b. If YES, is a rationale provided?
6c. If YES, reference
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?
Yes, they should be encoded in a single block as presented here.
8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?
No.
8b. If YES, is a rationale for its inclusion provided?
8c. If YES, reference
9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?
No.
9b. If YES, is a rationale for its inclusion provided?
9c. If YES, reference
10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?
No.
10b. If YES, is a rationale for its inclusion provided?
10c. If YES, reference
11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?
No.
11b. If YES, is a rationale for such use provided?
11c. If YES, reference
12a. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
No.
12b. If YES, reference
13a. Does the proposal contain characters with any special properties such as control function or similar semantics?
No.
13b. If YES, describe in detail (include attachment if necessary)
14a. Does the proposal contain any Ideographic compatibility character(s)?
No.
14b. If YES, is the equivalent corresponding unified ideographic character(s) identified?
14c. If YES, reference