Revised proposal to encode Sidetic in Unicode

Anshuman Pandey

pandey@umich.edu pandey.github.io/unicode

January 5, 2023

1 Introduction

This is a revised proposal to encode Sidetic in Unicode. It supersedes the following documents:

- L2/19-106: "Introducing the Sidetic Script"
- L2/21-111: "Preliminary proposal to encode the Sidetic script in Unicode"
- L2/22-235: "Revised proposal to encode the Sidetic script in Unicode"

The major changes between L2/21-111 and L2/22-235 include:

- Revision of proposed character repertoire to include all attested Sidetic letters, in order to enable
 complete representation of the extant corpus and to provide scholars working on the decipherment of
 the script with a means to represent all known characters
- Change of proposed character names from phonetic references to a serial numbering system used by scholars for identifying Sidetic letters, which eliminates the need to withhold from the encoding characters whose phonetic values have not yet been determined.
- Description of other letters used in Sidetic coinage, which are not included in the conventional scholarly repertoire (§ 4.1).

The current version is the same as L2/22-235, but contains the following update:

- Michaela Zinko has reviewed L2/22-235 and affirmed usage of the serial numbering system for naming Sidetic letters.
- Zinko has also informed me that new materials containing Sidetic inscriptions have recently been found, but these have not yet been analyzed. She has requested that space be provided in the code block for the addition of new characters, if there is a requirement to do so. The current block contains sufficient space for adding new characters in the future.
- The ISO proposal summary form has been included.

2 Background

Sidetic is a right-to-left alphabet that was used from the 5th through 2nd centuries BCE for writing a now-extinct Indo-European language of the Anatolian branch, which is also referred to by scholars as 'Sidetic' (ISO 639: xsd). The name 'Side' is borrowed from the Greek name of the ancient city where the language and script were used, that being ' $\Sigma i\delta \eta$ ', located in the region of Pamphylia, on the southern coast of Anatolia on the Mediterranean.

The origins of Sidetic are not clearly known. Scholars believe that it developed from the Phoenician script in parallel with Greek. Some Sidetic letterforms resemble those found in Greek, as well as in Carian, Lycian, and Lydian, but differ in the assignment of sound values (see fig. 14). Sidetic has other letters not found in these other scripts. The right-to-left orientation of Sidetic sets it apart from the normative left-to-right direction of Greek. The other Anatolian alphabets were also written from right-to-left, but could also be written left-to-right. Such variation is not observed for Sidetic in the available sources.

3 Attested Sources

The script is attested on numerous coins and inscriptions (some specimens are shown in fig. 1–6). The inscriptions prove that Sidetic is a true writing system, especially its distinctive representation alongside Greek in a few bilingual inscriptions.

| S1 | S I.1.1 | Artemon bilingual from Side (1914) |
|---------|-----------|---|
| S2 | S I.1.2 | Apollonios bilingual from Side (1949) |
| S3 & S4 | S I.2.1-2 | Strategos dedications from Side (1964) |
| S5 | S II.1.1 | Palimpsest bronze altar table or voting tablet (1969) |
| S6 | S I.1.3 | Euempolos bilingual from Lyrbe-Seleukia (1972) |
| S7 | S I.2.3 | Inscription on fragment of the rim of a pot (1982) |
| S8 | S I.2.4 | Inscription on stone Heraldes relief (1982) |
| S9 | S I.2.5 | A list of names, also interpreted as the "Athenodoros memorial" (six complete lines (and traces of two more lines) (1995) |
| S10 | S III | 5th century BC coins with around twenty different legends (since 19th century) |
| S11 | | Words possibly from Mnemon, a physician of Side (1983), who added notes in Sidetic to a Greek Hippocrates manuscript. |
| S12 | S II.2.1 | A steatite scarab, of uncertain provenance ("acquired in Turkey"); on its underside three (?) hardly identifiable signs have been carved, possibly Sidetic (2005) |
| S13 | S I.2.6 | Graffito from Lyrbe-Seleukia (2014) |
| | | |

4 Character Inventory

Scholars have identified at least 29 distinctive letters for Sidetic. While the script has not been fully deciphered, there is some consensus on the values of 26 letters. The remaining 3 letters are attested in coinage, and their values are unclear. Additional research of these is required.

Sidetic letters are traditionally referred to by scholars and arranged using serial numbers, eg. 1–29. This enumeration was developed by Bossert 1950 (fig. 8), then expanded by Brandenstein 1958 (fig. 9), Neuman 1978 (fig. 10), Woudhuizen 1985 (fig. 11), Nollé 2001 (fig. 12), and Rizza 2005 (fig. 13). The latest work by Rizza extended the number of characters to 29.

The arrangement of the repertoire has 5 vowel letters at the top, followed by 2 semi-vowels, then 19 known consonants. The last 3 letters are found on coninage and were added to the scholarly repertoire by Rizza (2005); the latter two may represent ligatures.

Variant forms of letters used in inscriptions are provided in the 'variants' column. Also provided are transliterated values of letters used by scholars, as well as phonetic values. The 'Deciphered?' column indicates the decipherment status of the letter.

| # | Letter | Variants | Deciphered? | Latin | IPA | Category |
|----|------------|----------|-------------|-------------------------------------|------------------|------------|
| 1 | 5 | 5 | Yes | а | /a/ | vowel |
| 2 | × | | Yes | e | /e/ | vowel |
| 3 | У | У | Yes | i | /i/ | vowel |
| 4 | \$ | 9 | Yes | 0 | /o/ | vowel |
| 5 | Y | | Yes | u | /u/ | vowel |
| 6 | > | > | Yes | w | /w/ | semi-vowel |
| 7 | X |)(| Yes | y | / j / | semi-vowel |
| 8 | ħ | | Yes | p | /p/ | consonant |
| 9 | Ψ | | No | $\varphi\left(\varsigma\right. ?)$ | $/p^h/$ (/ts/ ?) | consonant |
| 10 | < | (| Yes | m | /m/ | consonant |
| 11 | ٦ | | Yes | t | /t/ | consonant |
| 12 | ป | ነ | Yes | d | /d/ | consonant |
| 13 | 0 | 0 | Yes | θ | $/t^{\rm h}/$ | consonant |
| 14 | 1 | | Yes | z | /z/ (or /s/) | consonant |
| 15 | Ν | Ж | Yes | S | /s/ | consonant |
| 16 | > | 3 | Yes | n | /n/ | consonant |
| 17 | I\$ | ۲, K | Yes | l | /1/ | consonant |
| 18 | \uparrow | | Yes | t_2 | /ts/ | consonant |

| 19 | И | И | Yes | g | /g/ | consonant |
|----|----------|------|-----|-------|---------|-----------|
| 20 | X | | No | x | /x/ | consonant |
| 21 | \wedge | Λ, λ | Yes | r | /r/ | consonant |
| 22 | 3 | | Yes | a_2 | | consonant |
| 23 | Р | | No | k (?) | | consonant |
| 24 | > |), { | Yes | b | /b/ | consonant |
| 25 | 3 | | Yes | n_2 | /n/ ? | consonant |
| 26 | × | У | No | z (?) | /z/ (?) | consonant |
| 27 | Υ | φ | No | q (?) | | consonant |
| 28 | Ą | | No | | | ligature? |
| 29 | 1 | | No | | | ligature? |

4.1 Additional attested letters

The following letters are documented in the scholarly literature as appearing on coinage, but are not included in the conventional scholarly repertoire for Sidetic. These letters appear to represent sound values that are analogous to letters in the conventional repertoire. Feedback from experts is needed for determining the status of these letters.

| # | Letter | Deciphered? | Latin | IPA | Source |
|---|----------|-------------|-------|-----|--|
| _ | Γ | Unknown | d | /d/ | Woudhuizen 1985 (see fig. 11) |
| _ | 1 | Unknown | k | /k/ | Woudhuizen 1985 (see fig. 11) |
| _ | Ω | Unknown | b | /b/ | Bossert 1950 (see fig. 8) Brandenstein 1958 (see fig. 9) Woudhuizen 1985 (see fig. 11) |

4.2 Other script details

- *Punctuation* Script-specific punctuation is not attested. Usage of spaces for separating words and other text segments is inconsistent.
- *Line-breaking* The sources do not contain evidence showing rules for breaking words at the end of line. Words are typically split after a letter when it occurs at a 'margin' or some defined position on the surface, and continued on the next line with the subsequent letter in the word. There are no indications of hyphens or other continuation marks.
- Digits Digits are not attested in Sidetic records.

5 Proposed Encoding Model

Given that there are Sidetic letters whose values have not been fixed, there are two approaches to encoding the script in Unicode:

- 1. Include all attested, distinctive letters and assign them Unicode character names based upon serial numbers, which is the scholarly convention for identifying the letters. This approach would result in a character repertoire of 29 letters.
- 2. Include only those letters for which scholars have proposed values with a high degree of certainty, and assign them Unicode character names that reference those values. This approach would yield a repertoire of 22 letters.

Approach #1 is recommended as it will provide scholars who are actively studying the script to represent all Sidetic letters. Approach #2 would provide only those letters whose values have been fixed, but such an approach would deprive users of the ability to represent the entire known repertoire.

5.1 Character Naming Convention

Usage of serial numbers for identifying characters is practical for scripts that have a mature, but evolving decipherment status. This convention enables users to identify characters using the nomenclature found in sign catalogues and databases, which are referenced in the scholarly literature. Moreover, there is precedence for using serial numbers in character names in Unicode: U+10600 LINEAR A SIGN AB001, U+12F90 CYPRO-MINOAN SIGN 01, U+13000 EGYPTIAN HIEROGLYPH A001, etc.

Accordingly, the serial numbering system introduced by Nollé (2001: 629; see fig. 12 here) is adopted for naming Sidetic characters in Unicode, eg. N1, N2, etc., where N is an abbreviation of 'Nollé'. This nomenclature is used throughout the scholarly literature, as evidenced in the concordances shown in figs. 17, 18. Usage of the first initial of a scholar's name also has predence in script decipherment. For example, the catalogue names for Proto-Elamite letters are based upon the number system introduced by Meriggi, ie. M1, M387, etc. (see details in Pandey 2020). In that nomenclature the M is an abbreviation of 'Meriggi'.

A comparison of Sidetic character names based on serial numbers and phonetic values is shown below:

| # | Letter | Named by serial number | Named by phonetic value |
|---|-----------|------------------------|-------------------------|
| 1 | 5 | SIDETIC LETTER N1 | SIDETIC LETTER A |
| 2 | × | SIDETIC LETTER N2 | SIDETIC LETTER E |
| 3 | У | SIDETIC LETTER N3 | SIDETIC LETTER I |
| 4 | \$ | SIDETIC LETTER N4 | SIDETIC LETTER O |
| 5 | Υ | SIDETIC LETTER N5 | SIDETIC LETTER U |
| 6 | > | SIDETIC LETTER N6 | SIDETIC LETTER W |
| 7 | × | SIDETIC LETTER N7 | SIDETIC LETTER Y |
| 8 | τı | SIDETIC LETTER N8 | SIDETIC LETTER P |
| 9 | Ψ | SIDETIC LETTER N9 | _ |

| # | Letter | Named by serial number | Named by phonetic value |
|----|-------------|------------------------|-------------------------|
| 10 | < | SIDETIC LETTER N10 | SIDETIC LETTER M |
| 11 | ٦ | SIDETIC LETTER N11 | SIDETIC LETTER T |
| 12 | J | SIDETIC LETTER N12 | SIDETIC LETTER D |
| 13 | 0 | SIDETIC LETTER N13 | SIDETIC LETTER TH |
| 14 | 1 | SIDETIC LETTER N14 | SIDETIC LETTER Z |
| 15 | Ν | SIDETIC LETTER N15 | SIDETIC LETTER S |
| 16 | > | SIDETIC LETTER N16 | SIDETIC LETTER N |
| 17 | I\$ | SIDETIC LETTER N17 | SIDETIC LETTER L |
| 18 | \uparrow | SIDETIC LETTER N18 | SIDETIC LETTER TS |
| 19 | И | SIDETIC LETTER N19 | SIDETIC LETTER G |
| 20 | X | SIDETIC LETTER N20 | SIDETIC LETTER X |
| 21 | \wedge | SIDETIC LETTER N21 | SIDETIC LETTER R |
| 22 | 3 | SIDETIC LETTER N22 | _ |
| 23 | Р | SIDETIC LETTER N23 | _ |
| 24 | > | SIDETIC LETTER N24 | SIDETIC LETTER B |
| 25 | 3 | SIDETIC LETTER N25 | _ |
| 26 | À | SIDETIC LETTER N26 | _ |
| 27 | Υ | SIDETIC LETTER N27 | _ |
| 28 | Ą | SIDETIC LETTER N28 | _ |
| 29 | 1 | SIDETIC LETTER N29 | |

Certainly, while a reference to the actual value of a letter would be ideal in a Unicode name, this is not possible due to the uncertain values for several letters. On the other hand, a naming convention based on serial numbers provides for distinctive identifiers for all letters in the scholarly repertoire.

5.2 Representative Forms of Characters

The representative glyphs for Sidetic letters are based upon forms attested in inscriptions. Variant forms are unified with the normative letter. However, some of the forms listed as glyphic variants may be candidates for separate encoding if it occurs concurrently with the representative form, eg. z represented using both \forall and \forall in S9 (see fig. 6). A glyphic variant may also be encoded separately if it differs substantially in structure from the representative form, eg. \forall h for \forall d in S2 (see fig. 2).

6 Character Data

Character Properties: UnicodeData.txt

```
10940; SIDETIC LETTER N1; Lo; 0; R;;;;; N;;;;;
10941;SIDETIC LETTER N2;Lo;0;R;;;;;N;;;;;
10942; SIDETIC LETTER N3; Lo; 0; R;;;;; N;;;;;
10943;SIDETIC LETTER N4;Lo;0;R;;;;;N;;;;;
10944; SIDETIC LETTER N5; Lo; 0; R;;;;; N;;;;;
10945;SIDETIC LETTER N6;Lo;0;R;;;;;N;;;;;
10946; SIDETIC LETTER N7; Lo; 0; R;;;;; N;;;;;
10947;SIDETIC LETTER N8;Lo;0;R;;;;;N;;;;;
10948;SIDETIC LETTER N9;Lo;0;R;;;;;N;;;;;
10949; SIDETIC LETTER N10; Lo; 0; R;;;;; N;;;;
1094A; SIDETIC LETTER N11; Lo; 0; R;;;;; N;;;;
1094B; SIDETIC LETTER N12; Lo; 0; R;;;;; N;;;;;
1094C;SIDETIC LETTER N13;Lo;0;R;;;;;N;;;;;
1094D;SIDETIC LETTER N14;Lo;0;R;;;;;N;;;;;
1094E;SIDETIC LETTER N15;Lo;0;R;;;;;N;;;;;
1094F;SIDETIC LETTER N16;Lo;0;R;;;;;N;;;;;
10950; SIDETIC LETTER N17; Lo; 0; R;;;;; N;;;;;
10951;SIDETIC LETTER N18;Lo;0;R;;;;;N;;;;;
10952; SIDETIC LETTER N19; Lo; 0; R;;;;; N;;;;
10953;SIDETIC LETTER N20;Lo;0;R;;;;;N;;;;;
10954;SIDETIC LETTER N21;Lo;0;R;;;;;N;;;;;
10955;SIDETIC LETTER N22;Lo;0;R;;;;;N;;;;;
10956; SIDETIC LETTER N23; Lo; 0; R;;;;; N;;;;;
10957;SIDETIC LETTER N24;Lo;0;R;;;;;N;;;;;
10958;SIDETIC LETTER N25;Lo;0;R;;;;;N;;;;;
10959;SIDETIC LETTER N26;Lo;0;R;;;;;N;;;;
1095A; SIDETIC LETTER N27; Lo; 0; R;;;;; N;;;;;
1095B;SIDETIC LETTER N28;Lo;0;R;;;;;N;;;;;
1095C;SIDETIC LETTER N29;Lo;0;R;;;;;N;;;;;
```

Linebreaking Properties: LineBreak.txt

```
10940..1095C; AL # Lo [29] SIDETIC LETTER N1..SIDETIC LETTER N29
```

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8 Acknowledgments

I would like to express my gratitude to following individuals:

- Michaela Zinko (Associate Professor, Institut für Antike, Universität Graz, Austria), for extensive feedback about the character repertoire; details about additional variant forms; and status regarding the decipherment of the Sidetic script. This revised proposal would not have been possible without her feedback.
- Alfredo Rizzo, for literature about the Sidetic script, as well as feedback on the character repertoire
- Lars Rutten (Leu Numismatik AG, Winterthur, Switzerland), for providing me with an image of a Sidetic coin, and discussions on Sidetic coinage
- Craig Melchert (Professor Emeritus, Department of Linguistics and Indepartmental Program in Indo-European Studies, UCLA), for discussions about Sidetic and for providing scholarly articles

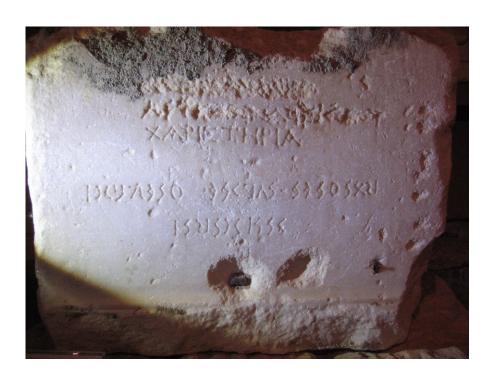
The glyphs used in this proposal are derived from the 'Aegean' font developed by George Douros, with modifications and new glyphs created by the proposal author.

The project to encode Sidetic has been made possible in part by funding from the Adopt-A-Character program of the Unicode Consortium and the effort is supervised by Deborah Anderson and Andrew Glass.

It was also made possible in part by a grant from the U.S. National Endowment for the Humanities, which funded the Universal Scripts Project PR-268710-20 (part of the Script Encoding Initiative at UC Berkeley). Any views, findings, conclusions or recommendations expressed in this publication do not necessarily reflect those of the National Endowment of the Humanities.

| | 1094 | 1095 |
|---|-------------------|-------------------|
| 0 | 5 | 10950 |
| 1 | 10941 | 10951 |
| 2 | 10942 | 10952 |
| 3 | \$ 10943 | 10953 |
| 4 | 10944 | 10954 |
| 5 | 10945 | 3 |
| 6 | 10946 | P |
| 7 | 10947 | 10957 |
| 8 | Ψ | 3 |
| 9 | 10949 | 10959 |
| Α | 1094A | P |
| В | <u> </u> | Q 1095B |
| С | O 1094C | 1 095C |
| D | 1094D | |
| E | N 1094E | |
| F | > 1094F | |

| 10940 | 5 | SIDETIC LETTER N1 |
|-------|------------|--------------------|
| 10941 | × | SIDETIC LETTER N2 |
| 10942 | У | SIDETIC LETTER N3 |
| 10943 | \$ | SIDETIC LETTER N4 |
| 10944 | Υ | SIDETIC LETTER N5 |
| 10945 | > | SIDETIC LETTER N6 |
| 10946 | \times | SIDETIC LETTER N7 |
| 10947 | τ | SIDETIC LETTER N8 |
| 10948 | Ψ | SIDETIC LETTER N9 |
| 10949 | < | SIDETIC LETTER N10 |
| 1094A | ٦ | SIDETIC LETTER N11 |
| 1094B | Ŋ | SIDETIC LETTER N12 |
| 1094C | 0 | SIDETIC LETTER N13 |
| 1094D | 1 | SIDETIC LETTER N14 |
| 1094E | Ν | SIDETIC LETTER N15 |
| 1094F | ∢ | SIDETIC LETTER N16 |
| 10950 | K | SIDETIC LETTER N17 |
| 10951 | \uparrow | SIDETIC LETTER N18 |
| 10952 | И | SIDETIC LETTER N19 |
| 10953 | X | SIDETIC LETTER N20 |
| 10954 | \wedge | SIDETIC LETTER N21 |
| 10955 | 3 | SIDETIC LETTER N22 |
| 10956 | Р | SIDETIC LETTER N23 |
| 10957 | > | SIDETIC LETTER N24 |
| 10958 | 3 | SIDETIC LETTER N25 |
| 10959 | Y | SIDETIC LETTER N26 |
| 1095A | Υ | SIDETIC LETTER N27 |
| 1095B | 꾸 | SIDETIC LETTER N28 |
| 1095C | 1 | SIDETIC LETTER N29 |



XXXXXXXX A[PTEM]ΩNAΘ[HNOBI]OY XAPIΣTHPIA

Published tracings of Sidetic text

Zinko & Zinko (2015)

1)ረሃ*Ϯ*ϡϟዕ **ϡ**∮<7¼ϟ ∮ϡ∮ዕϟጵህ 1ϟህϟ>**ረ**|ረፈረ

Nollé (2001: 631)

Transliteration of Sidetic text

deathono artmon thanpiys malyadas

Figure 1: Greek and Sidetic dedication to Athena from Artemon (S1). Photo: Zinko and Zinko (2015).



ΧΥΥ 3Λ3N3< Ι3ΧΥΡΡΡΙΘΗ ΙΛΑΝΛΑΗ ΧΥΡΡΡΙΘΗ

[Α]ΠΟΛΛΩΝ[ΙΟΣ]] ΑΠΟΛΛΟΔΩΡΟΥ [Τ]ΟΥ ΑΠΟΛΛΩΝΙΟΥ ΑΝΕΘΗΚΕΝ [ΕΙ]ΚΟΝΑ ΤΗΝΔ ΕΑΥΤΟΥ ΘΕΟΙΣ ΠΑΣΙ

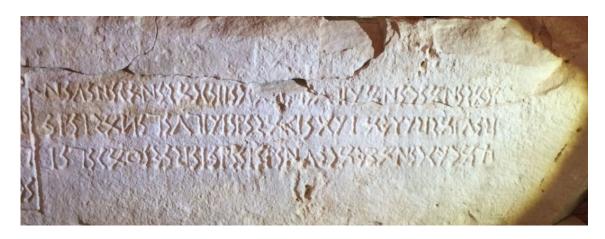
[M]NA Σ EA[Σ] APTEM Ω NO Σ Σ I Δ HTH Σ E Π O[IH] Σ E

Published tracings of Sidetic text

Transliteration of Sidetic text

poloniy pord²ors poloniyas mas₂ara t₂ue[...]

Figure 2: Greek and Sidetic dedication to Apollo (S2). Photo: Zinko and Zinko (2015). Sidetic text in red indicates glyphic variants — \forall for \forall i; \forall for \forall l — while blue indicates forms that may be true alternates: \forall h for \forall d.



Published tracings of Sidetic text

\(\lambda \lambda \lam

Transliteration of Sidetic text (Nolle 2001)

wejase a>ase iztratag waz za wejase masarase darPej (darkej ?) diiYneziwaz mejaPaz (mejakaz ?) iztratag ejz aP (ak ?) o pe>iwase 3ne>arsaPaza (3ne>arsakaza ?) aP (ak ?) ozad anaθemataz

Figure 3: Sidetic dedication from the eastern gate (S3). Photo: Zinko and Zinko (2015).



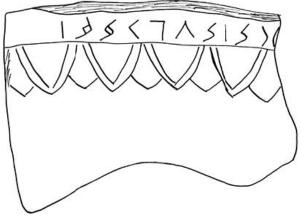


YC507 .x5 15YP WRAIORE B F 1 YIFA YXYPISKISKIY XYYPISKIY XYYPISKIY XYYPISKIY

Puar (kuar ?)[...]e[...]pthami φorz (çorz) thandors iztra tag ozad jozPiwi (jozkiwi ?) anathematas

Figure 4: Sidetic dedication from the eastern gate (S4). Photo: Zinko and Zinko (2015).





I**⋟**∳<**7**∧5l5⟩⟨...

] y as artmons

Figure 5: Inscription on fragment of the rim of a pot (S7). Photo: Zinko and Zinko (2015); transliteration: Zinko and Zinko (2016).







...

zem istos zems artmons poyaw thandors garis ubat₂zem ubat₂χars ubat₂zems thandor poyaws thandors pigse[s] toba₂n₂remar thanpiys talamoniy a'[s] [p]oyaw poyaws thandors 'ga'ris []...[]...[][z]'e'ms

Figure 6: Athenodoros memorial (S9). Photo: Zinko and Zinko (2015). Note the glyphic variant \land for \land r. Also, the concurrent usage of variants for z: \forall and \forall .



Figure 7: The Sidetic letters on a coin, struck c. 360–330 BCE. Obverse: $$\not \uparrow po$$, possibly an abbreviation of the name $$\not \searrow $\not \searrow $\not \uparrow poloniy$$ (Gr. Apollonios ?). Image courtesy of Lars Rutten (Leu Numismatik AG, Winterthur, Switzerland).

| _ | <u>-</u> | - | | 4.1 | |
|----|----------|-------------|----------|------------|--------------|
| | | Apollonies | | Side | |
| 1 | P. | ħ | ለ | Ħ | Π |
| 2 | W/O | 4 | 4 | | 8 |
| 3 | l | K | | R | Λ |
| 4 | n | > | þ | • | N |
| 5 | F3 | y | 4 4 | 9494 | Iś |
| 6 | o/ri; | × |)(| | 0? |
| 7 | τ/λ | ^ | ٨ | | Ş |
| 8 | a | 4 | | | Δ |
| 9 | 525 | \$ | I | 1 | |
| 10 | a | \$ | 5 | | A |
| 11 | m | < | < | | M |
| 12 | Śł | N | | 744 | Σ_{3} |
| 13 | | 1 | | ↑ ↑ | |
| 14 | C 3 | Y | | YV | ÷: |
| 15 | | | गग | | |
| 16 | ð | | 0 | 000 | 8 |
| 17 | | | 3 | 77777 | |
| 18 | t | | | | T |
| 19 | | | 4 | | |
| 20 | Q s | | | vuu | Ųŝ |
| 21 | | | | १५ १५ | |
| 22 | | | | የ | |
| 23 | | | | 44 | |
| 24 | | | | भ | |

2. Tabella dei segni della scrittura sidetica.

Figure 8: Letters from Sidetic inscriptions at Apollonias, Artemon, and Side (from Bossert 1950: Table 2).

| Nr. | Wert | Ap. | Art. | Münzen | Kypros | Supp. | Anm. |
|-----|---------------|----------|--|---------------------------------------|---------------|------------|-----------|
| 1 | р | 7 | Α | \U\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | ∩ = po | очрр. | Ann. |
| 2 | 0 | 4 | 4 | \$ | X = 0 | | Golgoi |
| 3 | l | K | - | R | | | Jourgui |
| 4 | n | > | 3 | 3 |); = nu | .\ | |
| 5 | - <u>''</u> - | <u>у</u> | / / / | 9 9 19 | X = i | ;) | V Da∍Las |
| | | | | 7717 | | 幺头 | × Paphos |
| 6 | и | X |)< | | X = u | \propto | |
| 7 | r | ^ | ^ | | A = re | | ∧Golgoi |
| 8 | d | ф | | | 十 = te | 4 | |
| 9 | ΖŞ | I | I | I | | vgl.gr.∫=I | |
| 10 | а | 5 | 5 | ና ያ | * = a | | |
| 11 | m | < | < | | :X = mu | × | |
| 12 | ś | Z | | 744N | Ψ = se | h.: | v. Nr. 23 |
| 13 | kş | 1 | | ↑ | ↑=ti,1=ka | | |
| 14 | †° | Υ | | YV | ∀ | | |
| 15 | g ș | | ЛЛ | | 文 = ki | 八 | |
| 16 | th | | 0 | 00 | | | gr. ⊙ |
| 17 | | | う | 3777 | (), f = VO | | 3 Golgoi |
| 18 | † | | 7 | | ⊢ = ta | 4 | → Golgoi |
| 19 | ρŝ | | 4 | | ς = pe | | 4 Golgoi |
| 20 | ₩ | | | {} ~ |)^(= Va | | ∽ Pamph. |
| 21 | | | | የ | X = ro | | |
| 22 | | | | Ą | = Nr. 21+8 | የ + ኒካ | Ligatur |
| 23 | SS | Pam | phylis | ch 屮 | vergl. Nr. 12 | H + H | Ligatur |

Figure 9: Letters from Sidetic inscriptions and coins and possible analogues in the Cypriot Syllabary (from Brandenstein 1958: Table 2).

| | Text I-V | Hűnz- legenden | Brixhe 69 | Ševoroškin 75 | Neumann 77 |
|----|---|-------------------|-----------|---------------|-----------------|
| 1 | t | h h | Р | P | Р |
| 2 | 4 | 99 | 0 | 0 | 0 |
| 3 | K 14 | R | l | l | 1 |
| 4 | 3 | | n | n | n |
| 5 | 4 | ५ ५ | i | i | i |
| 6 | >< | | u | W | W |
| 7 | ^ | | r | r | r |
| 8 | य भ | | d | d | d |
| 9 | 0 | 00 | łh | v | v |
| 10 | 7 | | t | t | t |
| 11 | 5 | 1 5 | a | a | а |
| 12 | 5 | 37 | ű ? | å żż | Yariante von U? |
| 13 | <c< td=""><td>576</td><td>m</td><td>m</td><td>m</td></c<> | 576 | m | m | m |
| 14 | × | | £ 5 | e | e |
| 15 | 1 | 1 | z | z | S |
| 16 | И | | W | 9 | 9 |
| 17 | 3 \$ | > | | 8 | j |
| 18 | N | Y H N | S | S | Ś ż |
| 19 | Υ | VY | P šš | u | |
| 20 | ^ | ↑ | еş | τ | |
| 21 | | Ω | žş m̃ | M4 = B 55 | |
| 22 | | 99 | | i | |
| 23 | P | | | Ь | konsonant |
| 24 | Ψ | | hšΧš | Χŝ | |
| 25 | > | | | k | Konsonant |
| 26 | 3 | | | Ś | |

Figure 10: Sidetic letters in S1–S5 and their provisional values (from Neumann 1978: 875).

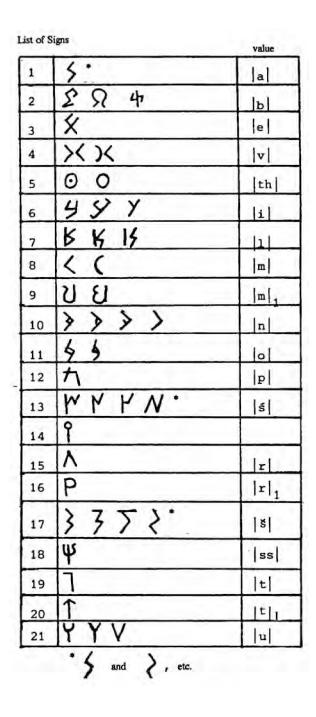


Figure 11: Sidetic letters and postulated values (from Woudhuizen 1985: 127).

Die Zeichen der sidetischen Steininschriften

| Nr.13 | VOKALE | | |
|----------------|------------------|----|--|
| 01(11) | a | 2 | gesichert: artmon, θandor, anaθemataz |
| 02(14) | e | × | gesichert: anaθemataz, e)pel, mejaPaz |
| 03(05) | i | У | gesichert: θanpiwz, poloniw |
| 04(02) | 0 | 6 | gesichert: poloniw, artmon, θandor |
| 05(19) | u | Y | wahrscheinlich: diYnesiwaz |
| | GLEITLAUTE | | |
| 06 (17) | j | > | wahrscheinlich: mejaPaz, Y)a↑joroz |
| 07(06) | w | >< | gesichert: poloniwaz, diYnesiwaz, jozPiwi, θanpiwz |
| | LABIALE | | |
| 08(01) | Ten.: p | カ | gesichert: poloniw, θanpiwz |
| | Med.: b | | |
| 09(24) | Asp.: φ | Ψ | wahrscheinlich: фOrZ |
| 10(13) | Nas.: m | 1 | gesichert: anaθemataz,artmon |
| | DENTALE | | |
| 11(10) | Ten.: t | 7 | gesichert: artmon, iztratag, anaθemataz |
| 12(08) | Med.: d | บ | gesichert: θandor, pordor, diYnesiwaz |
| 13(09) | Asp.: θ | 0 | gesichert: θandor, θanpiwz, anaθemataz |
| 14(15) | Spir.: z | 1 | gesichert: iztratag, |
| 15(18) | Spir.: s | 7 | gesichert: masara |
| 16(04) | Nas.: n | 3 | gesichert: artmon, θandor, diYnesiwaz |
| 17(03) | Liq.: 1 | 15 | gesichert: poloniw |
| 18(20) | Affr.: ts | 1 | möglicherweise: zdi↑ z |
| | GUTTURALE | | |
| | Ten.: k | | |
| 19(16) | Med.: g | И | gesichert: iztratag |
| 20() | Asp.: ch | × | möglicherweise: Y)a↑Xarz |
| 21(07) | Liq.: r | 7. | gesichert: artmon, θandor |
| | UNIDENTIFIZIERTE | | |
| 22(—) | | 3 | Vokal?: to)Ÿ3remar |
| 23(23) | | P | Konsonant: darPej, mejaPaz |
| 24(25) | | > | Konsonant: to)Ÿ3remar, Y)a↑Xarz, e)pel |
| 25(26) | | 3 | Konsonant?: to)Ÿ3remar |
| 26(—) | | -4 | Konsonant: ¥em, Y)a↑¥emz |

Figure 12: Sidetic letters and postulated values (from Nollé 2001: 629).

¹³ Die nicht fettgedruckte Zahl in Klammern gibt die Nummerierung von Neumann 1978, 873f. (= Ausgew. kl. Schriften, 279f.) wieder.

C 0 E G В 10 1 11 a 25 2 14 e 3 5 5 Y i 2 2 4 0 14 5 19 U 26 17 W 6 j X 7 6 6 W ħ 8 1 1 P ħ 24 V 9 28 11 13 < C 10 m 10 t 18 7 11 8,21141 12 15,8 d V 13 16 9 0 0 0 14 9 15 I S Ś WHW K 15 18 N N 12 3 16 4 4 n 3 3 17 KK K 13 18 20 个 ţ 个 24 16 И 19 8 X X 20 7 7 21 Λ r 3 22 17 23 27 23 K P 24 29 25 > 25 26 3 3424,17 4 26 Z +27 22 21 +28 Ą 22 +29 23

Table 2. Provisional Sidetic sign-list

Legenda:

- A: Numbering by Nollé (N), a + before number means addition to Nollé's list
- B: Numbering by Brixhe
- C: Numbering by Neumann
- D: Signs as attested in inscriptions (as edited by Nollé)
- E: Signs as attested on coins (based upon Neumann and Brixhe)
- F: Value of signs (based upon Neumann)
- G: Proposals by Peréz 2003; Pérez 2005.

Figure 13: Sidetic letters and postulated values (from Rizza 2005: 72).

Tab. 5.12: Anatolian alphabets

| (Greek) | Phry | giana | Lyd | ianª | Lyciana | Carian ^b | Sidetic |
|----------|----------|------------------|-----|------|-------------------|-------------------------|--------------|
| Α | Α | a | A | a | Р а | A a | 5 a |
| | | | | | ↑ е | < d | % e |
| В | В | b | В | b | ВЪ | Δ 1 | Уi |
| | | | | | r~β | E y | \$ 0 |
| Γ | 7 | g | Э | g | Υg | Fr | Υu |
| Δ | Δ | d | 7 | d | \triangle d | Ι λ | ≀ w |
| Е | E | e | 4 | e | Εi | ⊕ q | × j |
| F | F | υ | 1 | v | F w | ГЬ | t p |
| Z | 1 | z | | | Ιz | N m | Ψç |
| Н | | | | | + h | 0 0 | < m |
| Θ | | | 1 | i | \times θ | γt | 7 t |
| 1 | 1 | i | D | y | l y | 4 š | Zl d |
| K | K | k | K | k | κk | M s | ο θ |
| | | | | | * q | ⊤ ? | l ś |
| \wedge | \wedge | 1 | 1 | 1 | ∧ 1 ¹ | Y u | N s |
| Μ | Μ | m | ~ | m | ^ m | Φñ | 3 n |
| Ν | Ч | n | М | n | ~ n | × k | IS 1 |
| | | | | | × m̃ | Υn | ↑ ţ |
| Ξ | | | | | Ξñ | | И д |
| 0 | 0 | O | 0 | О | 0 0 | Δ p Φ ś | ×χ |
| П | Р | p | | | Γр | e i | ∧ r |
| Q | | Ρ | + | q | φ κ | □ e | 3 a/u |
| P | P | r | P | r | Pr | Ρý | n k |
| Σ | ٤ | s | Ŧ | s | 5 s | ▽ k | > b |
| | | | 3 | ś | | ≈ δ | 3 n |
| Т | T | t | Т | t | Τt | m w | z k |
| Υ | Υ | u | Y | u | Υτ | Σγ | |
| Φ | Φ | p^h | 8 | f | ₩ ã |)(z | |
| X | * | Г | | - | Ϋ́ē | ↑ ŋ | |
| Ψ | Ψ | \mathbf{k}^{h} | | | Ψ χ | H j | |
| Ω | - | | Ξ | τ | Α. | \tau_{\tau_{\tau}} ? | |
| | | | Μ | ã | | · τ | |
| | | | Υ | ẽ | | 6 ŕ | |
| | | | Ψ | λ | | | |
| | | | ₹ | v | | ν β Υ β ₂ | |
| | | | 1 | c | | . [22 | |

a. After Swiggers & Jenniges in Daniels & Bright (1996, 283).

Figure 14: Comparison of Anatolian alphabets (from Klein, Joseph, and Fritz 2017: 44).

b. After Adiego (2007, 508).

c. After Pérez Orosco (2005).

| Mode d'arti- culation | Point d'arti- culation | | Grec | Phry- gien | Lydien | Carien | Lycien | Sidé- tique | Phénicien |
|--------------------------|---------------------------|------------|------|---------------|------------|----------------|------------------------|----------------|------------|
| Occlusives | | | | | | | | | |
| Sourdes | | | | | | | | | |
| | Bilabiale | /p/ | П | ΓΊ | 8 | ΔΔ | ٢ | ħ | 2 |
| | Dentale | /t/ | Т | Т | Т | QΡ | Т | 7 | + X |
| | Palatale | /c/ | | | | X + | Ϋ́ | | |
| | Vélaire | /k/ | K | к× | K < K | ∇∇ | Ket ★ et V V Y Y | supposé | P K |
| | Labiovélaire | /kw/ | | | + | | w | | |
| | Uvulaire | /q/ | | | | 0 0 | | | |
| | Laryngale | /?/ | | | | | | | ¥Κ |
| Sourdes aspirées | | | | | | | | | |
| | Bilabiale | /ph/ | Ф | | | | | Υ | |
| | Dentale | /th/ | θ | | | | | 0 | |
| | Vélaire | /kh/ | X | | | | | X | |
| Sonores | | | | | | | | | |
| | Bilabiale | /b/ | В | B 8 | | | | supposé | 4 |
| | Dentale | /d/ | Δ | ΔΛ | | | | SI | 4 Δ |
| | Vélaire | /g/ | Γ | Г٦ | 1 | | | И | 1Λ |
| Emphatiques | | | | | | | | | |
| | Dentale | /ţ/ | | | | | | | ⊕ © |
| | Vélaire | /ķ/ | | | | | | | φ |
| Fricatives | | | | | | | | | |
| Sourdes | | | | | | | | | |
| | Labiodentale | /f/ | | | 8 | | | | |
| | Interdentale | /0/ | | | | | X | | |
| | Pharyngales | / <u>ħ</u> | | | | | | | ĦB |
| | Laryngales | /h/ | | | | | + | | % 3 |
| Sonores | | | | | | | | | |
| | Bilabiale | /β/ | | | | Λ 11 | ВЬ | | |
| | Labiodentale | /v/ | | | 4 | | | | |
| | Interdentale | /ŏ/ | | | J 1 | CKP | Δ | | |
| | Vélaires | /y/ | | | | | rn | | |
| | Pharyngales | /5/ | | | | | | | 00 |
| Sifflantes | | | | | | | 1 | | |
| Sourdes | | | | | | | 1 | | |
| | Dentale Alvéolaire | /s/ | ٤ | { } { } | 37}37 | M | S | N | ₹ |
| | Palato-alvéol. | /ç/ | | | | 444P | | | WV |
| | Palatale | /ç/ | | | ΙŦ | 0.0 | | | |
| Sonores | | | | | | | | | |
| | Dentale Alvé. | /z/ | | | | | I | I | 12 |
| Emphatiques | | | | | | | | | |
| | Dentale Alvé. | /ş/ | | | | | | | ۳ |

Figure 15: Anatolian alphabets (from Bernard 2017: following p. 59); continued in fig. 16.

| Mode d'arti- | Point d'arti- | | Grec | Phry- | Lydien | Carien | Lycien | Sidé- | Phénicien |
|--------------|---------------|--------|------|----------------|----------------|--------------|-------------|-----------|-----------|
| culation | culation | | | gien | | | | tique | |
| Affriquées | | | | | | | | | |
| | Dentale | /ts/ | | ↑ФТ | 王 | X 5 5 | ou I | 1 | |
| | Palato-alvéo- | /tg/ | | | | ↑ † / | | | |
| | laire | | | | | Ω? | | | |
| | Palatale | /tç/ | | | ou 王 | | | | |
| Sonores | | | | | | | | | |
| | Dentale | /dz/ | | | ↑ | | | | |
| Latérale | | | | | | | | | |
| | Alvéolaire | /[/ | Λ | ٢1 | 1 | Δ | Λ | ß | L |
| | | ſλ/ | | | ₩ (ou pa- | | | | |
| | Palatale | | | | latalisé) | | | | |
| Vibrante | | | | | / | | | | |
| | | /r/ | P | PΦ | 4 | FEF | Р | ٨ | ٩ |
| Nasales | | | 1 | | - | | | - | + |
| - | Bilabiale | /m/ | М | мм | М | NW | W | < | 77 44 |
| | Dentale | /n/ | N | ۲٦ | 14 | W Y | N | 3 | 7 4 |
| | Affaiblie (?) | /n/ ? | 13 | ' ' | ا ا | ¥ 1 | 11 | , | ' ' |
| Samirarallas | Affaible (2) | /110 : | | | مر <u>د</u> | | | | |
| Semivoyelles | Dilabiela | /w/ | F | F∃ | 7 | ш | F | V | Y |
| | Bilabiale | | F | | 1 | | | X | |
| | Palatale | /j/ | | 11 | | H | I | > | 2 7 |
| | | /q/ ? | | | | | | | |
| Voyelles | | | | | | | | | |
| Orales | | | | | | | | | |
| | Antérieures | /ę/ | Н | | | | | | |
| | | /e/ | Е | E a E a | 143#F | ΠН | 1 | × | |
| | | | 1 | I | I | 4 (1 (1 | E | У | |
| | | | | | | 4 44 H | | | |
| | | /i/ | | | | α<- | | | |
| | | /y/ | | | | E F 字 生 | | | |
| | | | Α | AA | AA | AAA | P | 4 | |
| | Centrales | /a/ | | | | 4 (⊞) | | | |
| | Postérieures | /Q/ | Ω | | | | | | |
| | | /o/ | 0 | 0 | 0 | 0 | | \$ | |
| | | /u/ | Υ | ۲٩ | Υ | VY | 0 | Υ | |
| Nasales | | | | | | | | | |
| | | | | | Ψ | | * * * * | | |
| | Antérieures | /ê/ | | | | | * \ \ \ \ | | |
| | | /i/ | | | | | supposé | | |
| | | | | | Μ | | F/37 | | |
| | | | | | | | /\$\\$\\$ | | |
| | | | | | | | W/W | | |
| | | | | | | | Ψ/Ψ | | |
| | Centrales | /ã/ | | | | | W/W | | |
| | Postérieures | | | | | | | | |
| | | /ũ/ | | | | | supposé | | |
| | I | | | | | | 11. | 1 | 1 |

Figure 16: Anatolian alphabets (from Bernard 2017: following p. 59); continued from fig. 15.

| | | | | Vo | kale | | | | | | |
|-----|--|--------------|--------------------|------------------------|---|---------------|--------|------------------|-----|--|--|
| a | N 1 | e | N 2 | i | N 3 | o | N 4 | u (?) | N 5 | | |
| | Halbvokale | | | | | | | | | | |
| у? | N 6 | w ? | N 7 | | | | | | | | |
| {w | P.O.} | {y | P.O.} | | | | | | | | |
| | | | Konse | onanten | | | | | | | |
| | | | Plo | sive | | | | | | | |
| | | stir | mmhaft | 5 | stimmlos | asp | iriert | | | | |
| 1 | labial | | V 24 ? P.O.} | p | N 8 | | | | | | |
| d | lental | d | N 12 | t | N 11 | θ | N 13 | | | | |
| 1 | velar N 19 ? {g P.O.} | | | N 23 ? {k P.O.} | χ (?) {ch | N 20 ? N.} | | | | | |
| N | Vasale | m | N 10 | n | N 16 | | | N 22 | a/u | | |
| Li | iquide | r | N 21 | 1 | N 17 | | | N 25 | ? | | |
| Fri | ikative | s {\$ P.O | N14 0.}, {z N.} | ś | N15 {s P.O.} | | | | | | |
| | N 9 {ç (affrikata) P.O.}, {φ (aspiriert) N.} | | {z (af | N 26 frikata) P.O.} | | | N 27- | 29 ¹² | | | |
| | | | | | N 18 atalisiert) P.O.} affrikata) N.} | | | | | | |

Figure 17: Phonetic classification of Sidetic letters (Zinko, Zinko, Rizzo 2017: 375).

| | N. | Neum. | P. O. | Š. | Br. | В. | Bos. |
|-----|--------|------------|----------|----|-----------------------------|---------------------------|----------------------------|
| N1 | a | [11] | | | [10] | [10] | [10] |
| N2 | e | [14] | | | ĕ? [25] | # | # |
| N3 | i | [5] | | | [5] | [5] | i? [5] |
| N4 | O | [2] | | | [2] | [2] | u/o [2] [23] |
| N5 | u | - [19] | u | u | b? [14] | t° [14] | e? [14] |
| N6 | j | [17] | w | j | - [26] | # | # |
| N7 | W | [6] | j | | u [6] | u | o/u? [6] |
| N8 | р | [1] | | | [1] | [1] | [1] |
| N9 | ф | - [24] | ç | χ? | φ?, χ? [28] | # | # |
| N10 | m | [13] | | | [11] | [11] | [11] |
| N11 | t | [10] | | | [18] | [18] | [18] |
| N12 | d | [8] | | d | d [8] - [15] m [20] | d [8] p [1] g? [15] | d [8] ? [15] δ? [20] |
| N13 | θ | [9] | | | [16] | [16] | [16] |
| N14 | z | s [15] | ś | z | z [9] | z? [9] | s? [9] |
| N15 | s | ś [18] | s | s | s [12] | ś [12] | ś? [12] |
| N16 | n | [4] | | | [4] | [4] | [4] |
| N17 | 1 | [3] | | | [3] | l [3] b? [19] | 1 [3] [19] |
| N18 | ts | - [20] | <u>t</u> | τ | e? [13] | k? [13] | [13] |
| N19 | g | [16] | | | w [24] | cf. w [20] (coins) | # |
| N20 | ch | # | χ | # | # | # | # |
| N21 | r | [7] | | | [7] | [7] | r/λ [7] |
| N22 | vowel? | # | a/u | # | ä? [17] | # | # |
| N23 | cons. | cons. [23] | k | b | - [27] | # | # |
| N24 | cons. | cons. [25] | b | k | - [29] | # | # |
| N25 | cons.? | [26] | | ? | ä? [17] w [24] – [30] | [17] | [17] |
| N26 | cons. | # | z | # | # | # | # |

Figure 18: Concordance of Sidetic letter values (Zinko, Zinko, Rizzo 2017: 383).

ISO/IEC JTC 1/SC 2/WG 2 PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646.1

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

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

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See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.

A. Administrative

| 1. Title: Revised proposal to encode Sidetic in Unicode |
|---|
| 2. Requester's name: Anshuman Pandey <pandey @umich.edu=""></pandey> |
| 3. Requester type (Member body/Liaison/Individual contribution): Expert contribution |
| 4. Submission date: 2023-01-05 |
| 5. Requester's reference (if applicable): |
| 6. Choose one of the following: |
| This is a complete proposal: (or) More information will be provided later: |
| B. Technical – General |
| Choose one of the following: |
| a. This proposal is for a new script (set of characters): Yes |
| Proposed name of script: |
| b. The proposal is for addition of character(s) to an existing block: |
| Name of the existing block: |
| 2. Number of characters in proposal: |
| 3. Proposed category (select one from below - see section 2.2 of P&P document): |
| A-Contemporary B.1-Specialized (small collection) B.2-Specialized (large collection) |
| C-Major extinct D-Attested extinct X E-Minor extinct |
| F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usage symbols |
| 4. Is a repertoire including character 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: |
| a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard? |
| Anshuman Pandey |
| b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.): |
| Anshuman Pandey |
| 6. References: |
| a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? Yes |
| b. Are published examples of use (such as samples from newspapers, magazines, or other sources) |
| of proposed characters attached? Yes |
| 7. Special encoding issues: |
| 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)? |
| 8. 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 at 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.

¹ 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

| Has this proposal for addition of character(s) been submitted before? If YES explain | No | | | | | | |
|---|-------------|--|--|--|--|--|--|
| 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 | | | | | | |
| If YES, with whom? Michaela Zinko <michaela.zinko@uni-graz.at> Craig Melchert <melchert@humnet.ucla.edu> Alfredo Rizza <alfredo.rizza@univr.it></alfredo.rizza@univr.it></melchert@humnet.ucla.edu></michaela.zinko@uni-graz.at> | | | | | | | |
| If YES, available relevant documents: | | | | | | | |
| Information on the user community for the proposed characters (for example: | | | | | | | |
| size, demographics, information technology use, or publishing use) is included? | Yes | | | | | | |
| Reference: See text of proposal | Doro | | | | | | |
| 4. The context of use for the proposed characters (type of use; common or rare) Reference: See text of proposal | Rare | | | | | | |
| 5. Are the proposed characters in current use by the user community? | Yes | | | | | | |
| If YES, where? Reference: Used by scholars working on Anatolian epigraphy, the Sidetic and the decipherment of the Sidetic script | | | | | | | |
| 6. After giving due considerations to the principles in the P&P document must the proposed characters | be entirely | | | | | | |
| in the BMP? | No | | | | | | |
| If YES, is a rationale provided? | | | | | | | |
| If YES, reference: | | | | | | | |
| 7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)8. Can any of the proposed characters be considered a presentation form of an existing | ? Yes | | | | | | |
| 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 | No | | | | | | |
| existing characters or other proposed characters? If YES, is a rationale for its inclusion provided? | 740 | | | | | | |
| 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? | No | | | | | | |
| If YES, reference: | | | | | | | |
| Is a list of composite sequences and their corresponding glyph images (graphic symbols) provide If YES, reference: | d? No | | | | | | |
| 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? | | | | | | | |
| 13. Does the proposal contain any Ideographic compatibility characters? If YES, are the equivalent corresponding unified ideographic characters identified? | | | | | | | |
| If YES, reference: | | | | | | | |
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