PROPOSAL SUMMARY FORM

A. Administrative

1.Title:
Proposal to encode ancient Greek mathematical characters in the UCS
2. Requester's name:
Thesaurus Linguae Graecae Project at the University of California, Irvine
3. Requester type:
Expert contribution
4. Submission date:
2002-6-11
5. Requester's reference
6. Completion
This is a complete proposal.

B. Technical - General

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| 1. The proposal is for addition of character(s) to an existing block: |
| Name of the existing block: |
| Mathematical Symbols |
| 2. Number of characters in proposal: |
| 2 |
| 3. Proposed category |
| Category C |
| 4. Proposed Level of Implementation (1, 2 or 3): |
| Level 1 |
| 5a. Character names provided? |
| Yes. |
| 5b. Character names in accordance with guidelines |
| Yes. |
| 5c. Character shapes reviewable? |
| Yes |
| 6a. Who will provide the appropriate computerized font for publishing the standard? |
| Danid Perry and TLG Project |
| 6b. Fonts currently available. |
| Yes. |
| 6c. Font Format |
| True Type |
| 7a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? |
| Yes |
| 7b. Are published examples of use of proposed characters attached? |
| Yes. |
| 8. Does the proposal address other aspects of character data processing? |
| No. |
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L2/03-187

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? No.

2. Has contact been made to members of the user community

Yes. The TLG has been in contact with a great number of experts. Earlier versions of this proposal have been posted online and received comments by members of the profession.

3. Information on the user community for the proposed characters

Scholarly community.

4. The context of use for the proposed characters (type of use; common or rare) Rare.

5. Are the proposed characters in current use by the user community?

Yes. Characters are present in editions of Greek mathematical texts and used by scholars of Greek.

6. After giving due considerations to the principles in *Principles and Procedures document*, must the proposed characters be entirely in the BMP?

Yes, preferably.

If YES, is a rationale provided?

Accordance with the Roadmap.

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?

Characters should preferably be kept together.

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No.

9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

No.

10. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

No.

11a. Does the proposal include use of combining characters and/or use of composite sequences?

No.

12. Does the proposal contain characters with any special properties such as control function or similar semantics?

No.

13. Does the proposal contain any Ideographic compatibility character(s)? No.

Introduction

The following two characters appear in texts of Euclid and ancient and modern works discussing the theories of Euclid.

The Three Dimensional Angle appears in discussion of the various types of angle. The Triangle Enclosed within Triangle appears as a visual representation of a shape which is contained within another.

The property for these characters is "Sm".

Examples

THREE DIMENSIONAL ANGLE

yeanny representer A entireous furth of the country ις περιεχομένη. [] στερεά γωνία ή ύπο τριών εύθειών περιορθή έστι γωνία διχοτόμημα εθθείας έπ' εθεχομένη. 9

Scholia in Euclid 1.3.5

TRIANGLE ENCLOSED WITHIN TRIANGLE

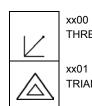
OLIMA CO OLIMAND HAD AND OF TITE ένεται έπι τῶν μὴ ἐφαπτομένων ἀλλήλων ὡς ἐπὶ τοῦδε το δε όταν των τοῦ έχτος πλευρων ή περιφερειών ώς ί τοῦ κύκλου αί τοῦ ἐντὸς γωνίαι ἐφάπτωνται. περι- 10

Scholia in Euclid 4.6.6

Reference

E.S. Stamatis (post J.L. Heiberg), Euclidis opera omnia, vols. 5.1-5.2, 2nd edn. (Leipzig, 1977)

MATHEMATICAL SYMBOLS



THREE DIMENSIONAL ANGLE

TRIANGLE ENCLOSED WITHIN TRIANGLE