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

Doc Type: Working Group Document<br>Title: Proposal to add two letters to the Grantha repertoire<br>Source: Michael Everson<br>Status: Individual Contribution<br>Action: For consideration by JTC1/SC2/WG2 and UTC<br>Date: 2012-01-30

This document requests two additional characters to be added to the repertoire for Grantha and contains the proposal summary form. The characters are as follows:

## 11329 GRANTHA LETTER NNNA

11334 GRANTHA LETTER LLLA

These characters represent consonants, transliterated $\underline{\underline{n}}$ and $\underline{\underline{l}}$. They are used in Grantha script in transcriptions of Dravidian languages. Both have analogues (1) in modern Tamil, U+0BA9 TAMIL LETTER nNNA and U+0BB4 tamil letter llla, and (2) in modern Malayalam, U+0D29 malayalam letter nNNA and U+0D34 malayalam letter llla .

## Unicode Character Properties


11334;GRANTHA LETTER LLLA;LO;0;L;;;;;N;;;;

## Bibliography

Periya Vachchan Pillai. 1901. Bharathadii Thani Slokam. Madras: Srinikethana Mudrakshara Salai. Rañgasvāmi Ayyañgār. 1923. Jaimin̄̄ya Prayoga Vivaraṇam. Kumbakōṇam: Komalāmbā Press.

Figures


Figure 1. Sample showing the word taniślokaí 'solitary verse' in Grantha script where the second letter is the letter nnna followed by the vowel sign i. Note that the the conjunct ślo, the la is subjoined to the SHA. This does not occur in Tamil script, though the letters used to write this word do look very similar in the two scripts.

i.

Figure 2. Sample showing the same word taniślokam elsewhere in the same document; it occurs in the header of at least 40 pages in this book.
A


Figure 3. Another example.


Figure 4. Another example.
/r. 2


Figure 5. Another example.


Figure 6. Sample showing the word taniślokaín 'solitary verse' in Tamil script where the second letter is the letter nnna followed by the vowel sign i. Note that the the conjunct slo, the sha is killed by the pulli and only the LA is modified by the dependent vowel o.


Figure 7. Sample showing the word $i \underline{l} \bar{a} \bar{a}$ 'the goddess Ila' in Grantha script with the letter LLLA.

|  | 1130 | 1131 | 1132 | 1133 | 1134 | 1135 | 1136 | 1137 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 |  | வென 11310 | $\underset{11320}{\bigcirc}$ | ए | $\begin{gathered} \text { e } \\ 11340 \end{gathered}$ |  | E33 | $\begin{gathered} \text { שy } \\ 11370 \end{gathered}$ |
| 1 |  |  | 2） |  |  |  | ளல3 <br> 11361 | $\begin{gathered} \text { ¢户 } \\ 11371 \\ \hline \end{gathered}$ |
| 2 | $\begin{gathered} 0 \\ 11302 \end{gathered}$ |  | 29 | $\underset{11332}{(@)}$ | ■ <br> 11342 |  | ¢お ${ }_{11362}$ | $\begin{array}{r} \square \\ 11372 \end{array}$ |
| 3 | $\underset{11303}{\stackrel{8}{1130}}$ | ${ }_{11313}^{\overbrace{4}}$ | $\begin{gathered} \ldots \\ { }_{1} 1323 \end{gathered}$ | $\begin{aligned} & \uparrow 2 \\ & 11333 \end{aligned}$ | ${ }_{11343}^{0}$ |  | －ف̧） | ¢ |
| 4 |  |  | $\frac{\text { த }}{11324}$ | $ழ_{11334}$ |  |  |  | ¢ |
| 5 | $\begin{gathered} \text { Cud } \\ 11305 \end{gathered}$ | $\begin{gathered} \text { கా } \\ 11315 \end{gathered}$ | $\begin{array}{r} U 9 \\ 11325 \\ \hline \end{array}$ | $\begin{gathered} வ \\ 11335 \end{gathered}$ |  |  |  |  |
| 6 | $\underset{11306}{\underset{\sim}{\text { Cb }}}$ | $\begin{aligned} & \text { 11316 } \\ & \hline \end{aligned}$ | $\underset{11326}{2}$ | $\begin{aligned} & \text { Uए } \\ & 11336 \\ & \hline \end{aligned}$ |  |  | $\begin{gathered} \mathrm{O} \\ 11366 \end{gathered}$ |  |
| 7 | $\underset{11307}{\underset{\sim}{2}}$ | $\frac{1}{11317}$ | $U_{11327}$ | ஷ <br> 11337 | 0 11347 | $\underset{\substack{11357}}{ }$ | $\begin{gathered} \text { க } \\ 11367 \end{gathered}$ |  |
| 8 | $\begin{aligned} & \text { •ரு } \\ & 11308 \end{aligned}$ | $\begin{aligned} & \text { Ш1 } \\ & 11318 \\ & \hline \end{aligned}$ | $\frac{\text { நந }}{11328}$ |  | 00 <br> 11348 |  | 11368 |  |
| 9 | $\underset{11309}{2}$ | $\underset{11319}{ }$ | $\begin{gathered} \text { ன1 } \\ 11329 \end{gathered}$ | ஹ |  |  | F． <br> 11369 |  |
| A | $\underset{\text { 1130A }}{24}$ | $\frac{9}{1131 \mathrm{~A}}$ | $\underset{1132 \mathrm{~A}}{ـ ـ}$ |  |  |  | ச <br> 1136A |  |
| B | ${\underset{1130 B}{8}}^{8}$ | $\begin{gathered} 90 \\ 11318 \end{gathered}$ | ஹـ |  | आा <br> 1134B |  | （5） <br> 1136B |  |
| C | $\begin{aligned} & \text { JU } \\ & \hline 1130 c \end{aligned}$ | ஜ $1131 \mathrm{C}$ | $\begin{aligned} & \text { 乌1 } \\ & 1132 \mathrm{C} \end{aligned}$ | $\underset{\substack{\text { Q1133C }}}{ }$ | ௌ <br> 1134C |  | $\begin{gathered} \operatorname{him}_{4}^{3} \\ 1136 c \end{gathered}$ |  |
| D |  | $\begin{aligned} & \text { ГमU } \\ & 11310 \end{aligned}$ | $\frac{ல 1}{11320}$ | S |  | 完 1135D |  |  |
| E |  | சு | $\begin{gathered} 2 \\ 1132 \mathrm{E} \end{gathered}$ | $\begin{aligned} & \text { ाT } \\ & 1133 E \\ & \hline \end{aligned}$ |  |  |  |  |
| F | $\begin{gathered} \text { ஹण } \\ \substack{1130 \mathrm{~F}} \\ \hline \end{gathered}$ | $\underset{1131 F}{L_{1}}$ | $\underset{1132 \mathrm{~F}}{\mathrm{U}}$ | $\begin{gathered} \text { h } \\ 1133 F \end{gathered}$ |  | （1） <br> 1135 F |  |  |

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## A. Administrative

1. Title

Proposal for to add two letters to the Grantha repertoire.
2. Requester's name

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

Individual contribution.
4. Submission date

2012-01-30
5. Requester's reference (if applicable)
6. Choose one of the following:

6a. This is a complete proposal
Yes.
6b. More information will be provided later
No.

## B. Technical - General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)
No.
1b. Proposed name of script
1c. The proposal is for addition of character(s) to an existing block
Yes.
1d. Name of the existing block
Grantha (proposed for ballot).
2. Number of characters in proposal
2.
3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

## Category A.

4a. Is a repertoire including character names provided?
Yes.
$4 b$. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P\&P document?
Yes.
4c. Are the character shapes attached in a legible form suitable for review?
Yes.
5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?
Mr Elmar Kniprath.
5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:
kniprath - at - online - dot - de
6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?
No.
6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?
Yes.
7. 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.
8. 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.
See above.

## C. Technical - Justification

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

Yes, in numerous documents, but not with evidence of the characters in use.
2 a . 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?
Asko Parpola

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?
Grantha users.
4 a . The context of use for the proposed characters (type of use; common or rare)
Quite rare.
4b. Reference
5a. Are the proposed characters in current use by the user community?
Yes.
5b. If YES, where?

## Texts in Grantha.

6a. After giving due considerations to the principles in the $\mathrm{P} \& \mathrm{P}$ 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)?

No.
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
9 a . 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?
They are similar to Tamil characters but belong to a different script.
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?
No.
11b. If YES, is a rationale for such use provided?
11c. If YES, reference
11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?
No.
11e. If YES, reference
12a. Does the proposal contain characters with any special properties such as control function or similar semantics?
No.
12b. If YES, describe in detail (include attachment if necessary)
13a. Does the proposal contain any Ideographic compatibility character(s)?
No.
13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?

