Proposal to encode Kannada sign Nakaara Pollu

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Introduction

This is a proposal to encode the Nakaara Pollu in the Kannada script.

L2/13-228 by Shriramana Sharma documented the alternate form of vowelless NA ೯ and proposed it be handled with at font-level and using joiners to avoid conjunct formation. L2/20-084R proposed the atomic encoding of Nakaara Pollu in Telugu script with need for simultaneous representation of the both forms in plain text and was accepted at UTC meeting 163. Similarly, the analogous form ೯ is proposed for Kannada.

Attestations

The attestations for the simultaneous use of ನ್ and ೯ in the same text and typeface are given below.

1

From Śrīmadvālmīkirāmāyaṇam bālakāṇḍaḥ with Kannada translation by Vidvan. N. Ranganatha Sharma, 1972 (2nd reprint)

From Saṁskṛta kāvya by Dr. K. Krishnamoorthy, 2003 (3rd edition)

From Īśāvāsyōpaniṣat published by Gita Press, Gorakhpur, 2005

ದೇವತಾರ್ಚನ ವಿಧಿಃ

॥ ಅಥ ದ್ವಾರಪಾಲಕ ಪೂಜಾಂ ಕರಿಷ್ಯೇ ॥

ದ್ವಾರಪಾಲ ಮಹಾಭಾಗ ವಿಷ್ಣುಸಾನ್ನಿಧ್ಯ ವರ್ತಿನಃ ।
ಪ್ರಣಮ್ಯ ದ್ವಾರರಕ್ಷಾರ್ಥಂ ಲೋಕಸಂರಕ್ಷತರ್ ಸದಾ ॥
(ದ್ವಾರಪಾಲನ್ ನಮಸ್ಕೃತ್ಯ)

From Dēvatārcana vidhiḥ by H.K. Srinivasa Sharma (Ed.), 2010 (2nd edition)

ಶ್ರೀರಸ್ತು

ತ್ರಿಕಾಂಡ
ಅಮರಕೋಶ
ಅಮರಸಿಂಹಕೃತ

ಶ್ರೀಮ ಎಸ್. ಮುರಿಗೇಂದ್ರಸ್ವಾಮಿ, ಎಂ. ಎ.
ಯವರಿಂದ ಪರಿಶೋಧಿಸಲ್ಪಟ್ಟಿದೆ.

ಪ್ರಕಾಶಕರು
ಟಿ. ಯರ ಕೃಷ್ಣಯ್ಯಶೆಟ್ಟಿ ಅಂಡ್ ಸನ್
ಬುಕ್‌ಡಿಪೋ   ಚಿಕ್ಕಪೇಟೆ   ಬೆಂಗಳೂರು-2
ಇಪತೇ ಮುದ್ರಣ
1000 ಪ್ರತಿಗಳು   1962   ರೂ. 1.00
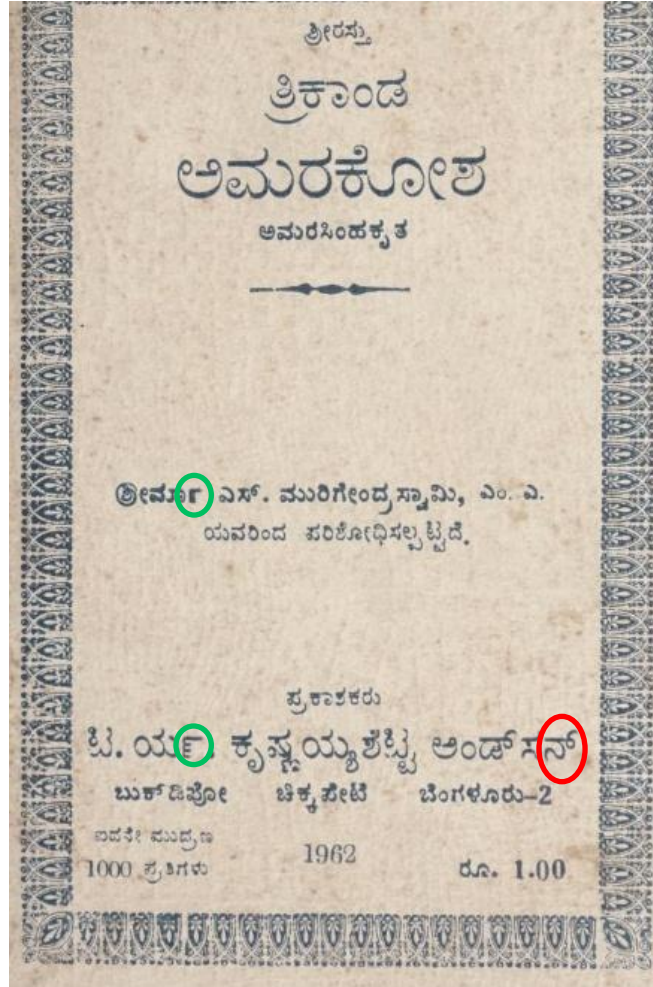
From Trikāṇḍa amarakōśa by S. Murigēndrasvāmi (Ed.), 1962

Description

Table 12-33. Rendering of Kannada *na + virama*

Font	Sequence	Rendering
Old Style	na + virama	೯
	na + virama + ⟨ZWNJ⟩ + da	೯ದ
New Style	na + virama	ನ್
	na + virama + ⟨ZWNJ⟩ + da	ನ್ದ
All Fonts	na + virama + da	ನ್ದ

Unicode standard 13.0, Chapter 12, Section 12.8

Currently, the representation is font dependent and uses joiners to avoid conjunct formation. Based on the need for simultaneous rendering in plain text and simplifying rendering requirements, the atomic encoding of Nakaara Pollu is necessary. The justification for the atomic encoding is same as discussed in L2/20-084R.

Character details

Glyph	Code	Character name
೯	0CF0	KANNADA LETTER NAKAARA POLLU

Recommended annotation

- Special vowel-less form of NA

→   TELUGU LETTER NAKAARA POLLU

```
0CF0;KANNADA LETTER NAKAARA POLLU;Lo;0;L;;;;;N;;;;;
```

Since no special name is known for usage in Kannada as noted in L2/13-228 p.3, the Telugu term is re-used for the character name. 0CF0 is chosen to fill the hole. Nakaara Pollu should be treated as an equivalent to the Unicode sequence ನ್ U+0CA8 U+0CCD for sorting and searching purposes. The Kannada chapter of the core specification must be modified accordingly.

Indic Syllabic Category

```
# Indic_Syllabic_Category=Consonant_Dead
```

```
0CF0 ; Consonant_Dead # Lo KANNADA LETTER NAKAARA POLLU
```

Acknowledgments

We would like to thank Vinodh Rajan for providing the font for the above character.

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.**

Please ensure you are using the latest Form from http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html.

See also http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html **for latest** *Roadmaps*.

A. Administrative

1. **Title:**	**Proposal to encode Kannada sign Nakaara Pollu**
2. Requester's name:	*Srinidhi A and Sridatta A*
3. Requester type (Member body/Liaison/Individual contribution):	*Individual contribution*
4. Submission date:	*September 13, 2020*
5. Requester's reference (if applicable):	
6. Choose one of the following:	
This is a complete proposal:	*Yes*
(or) More information will be provided later:	

B. Technical – General

1. Choose one of the following:	
a. This proposal is for a new script (set of characters):	
Proposed name of script:	
b. The proposal is for addition of character(s) to an existing block:	*Yes*
Name of the existing block:	*Kannada*
2. Number of characters in proposal:	*1*

3. Proposed category (select one from below - see section 2.2 of P&P document):

A-Contemporary		B.1-Specialized (small collection)	X	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	

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?

    Vinodh Rajan

    b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):

    Vinodh Rajan, vinodh@virtualvinodh.com

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)?   *Yes*

    Sorting and searching

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.

C. Technical - Justification

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

    If YES explain

2. 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?   *The authors belong to user community.*

      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?   *Yes*

      Reference: *See the proposal*

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

      Reference: *See the proposal*

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

      If YES, where? Reference: *See the proposal*

6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely

    in the BMP?   *Yes*

       If YES, is a rationale provided?   *Yes*

       If YES, reference: *Kannada is in BMP*

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

8. Can any of the proposed characters be considered a presentation form of an existing

    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

    existing characters or other proposed characters?   *Yes*

       If YES, is a rationale for its inclusion provided?   *Yes*

       If YES, reference: *See the proposal*

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?   *Yes*

    If YES, is a rationale for its inclusion provided?   *Yes*

    If YES, reference: *The proposed character is similar to Telugu sign Nakaara Pollu*

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?

    If YES, reference:

    Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

    If YES, reference:

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?   *No*

    If YES, are the equivalent corresponding unified ideographic characters identified?

    If YES, reference: