

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 ँ 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 ು is proposed for Kannada. Based on the recommendation by the Script Ad Hoc, the character is moved to OCDD as it matches with the position of the corresponding Telugu character.

Attestations

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

೨ ಬಾಲಕಾಂಡಃ [ಸರ್ಗಃ ೧

ಆತ್ಮನಾೃ ಕೋ ಜಿತಕ್ರೋಧೋ ದ್ಯುತಿನಾೃ ಕೋನಸೂಯಕಃ
ಕಸ್ಯ ಬಿಭೃತಿ ದೇವಾಶ್ಚ ಜಾತರೋಷಸ್ಯ ಸಂಯುಗೇ || ೪

ಏತದಿಚ್ಛಾನ್ಮಹಂ ಶ್ರೋತುಂ ಪರಂ ಕೌತೂಹಲಂ ಹಿ ಮೇ |
ಮಹರ್ಷೇ ತ್ವಂ ಸನುರ್ಥೋಽಸಿ ಜ್ಞಾತುಮೇವಂವಿಧಂ ನರಮ್ ||

ಶ್ರುತ್ವಾ ಚೈತತ್ ತ್ರಿಲೋಕಜ್ಞೋ ವಾಲ್ಮೀಕೀರ್ನಾರದೋ ವಚಃ |
ಶ್ರೂಯತಾನಿತಿ ಚಾನುಕ್ಯ ಪ್ರಹೃಷ್ಟೋ ನಾಕೃಮುಬ್ರವೀತ್ ||

ಬಹವೋ ದುರ್ಲಭಾಶ್ಚೈವ ಯೇ ತ್ವಯಾ ಕೀರ್ತಿತಾ ಗುಣಾಃ |
ಮುನೇ ವಕ್ಷ್ಯಾನ್ಮಹಂ ಬುದ್ಧ್ವಾ ತೈರ್ಯುಕ್ತಃ ಶ್ರೂಯತಾಂ ನರಃ

ಇಕ್ಷ್ವಾಕುವಂಶಪ್ರಭವೋ ರಾನೋ ನಾನು ಜನೈಃ ಶ್ರುತಃ |
ನಿಯತಾತ್ಮಾ ಮಹಾವೀರ್ಯೋ ದ್ಯುತಿನಾನ್ ಧೃತಿನಾನ್ ವಶೀ||

ಪಂಚ ಸೇನಾಗ್ರಗಾನ್ ಹತ್ವಾ ಸಪ್ತ ನುಂತ್ರಿ ಸುತಾನಪಿ |
 ಶೂರನುಕ್ಷಂ ಚ ನಿಷ್ಪಿಷ್ಯ ಗ್ರಹಣಂ ಸಮುಪಾಗಮತ್ || ೭೫
 ಅಸ್ತ್ರೇಣೋನ್ಮುಕ್ತ ಮಾತ್ಮಾನಂ ಜ್ಞಾತ್ವಾ ಪೈತಾನುಹಾದ್ವರಾತ್ |
 ಮರ್ಷಯನ್ ರಾಕ್ಷಸಾನ್ ನೀರೋ ಯಂತ್ರಿಣಸ್ತಾನ್ ಯದ್ಯಚ್ಛಯಾ ||

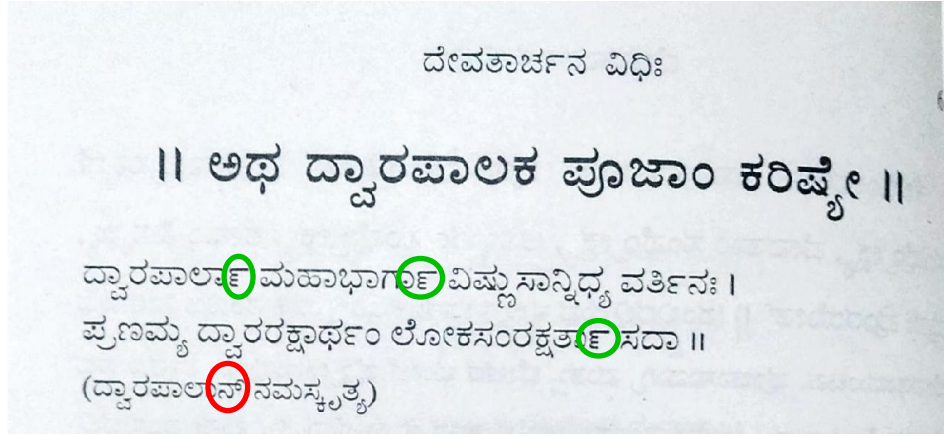
From Śrīmadvālmīkirāmāyaṇam bālakāṇḍaḥ with Kannada translation by Vidvan. N. Ranganatha Sharma, 1972 (2nd reprint)

ತಾವತ್ ಕೋಕಿಲ ವಿರಸಾ ಯಾಪಯ ದಿವಸಾನ್ ವನಾಂತರೇ ನಿವಸನ್ |
 ಯಾವನ್ನಿಲದಲಿಮಾಲಃ ಕೋಟಿ ರಸಾಲಃ ಸಮುಲ್ಲಸತಿ ||²⁰
 [ಕೋಗಿಲೆ, ದುಂಬಿಗಳಿಂದ ಅಲಂಕೃತವಾದ ಮಾವಿನ ಮರವೊಂದು ಚಿಗುರುವವರೆಗೂ
 ವಿರಸವಾದೀ ದಿವಸಗಳನ್ನು ಅಲ್ಲೇ ವನಾಂತರದಲ್ಲೇ ಕಳೆಯುತ್ತಿರು.]

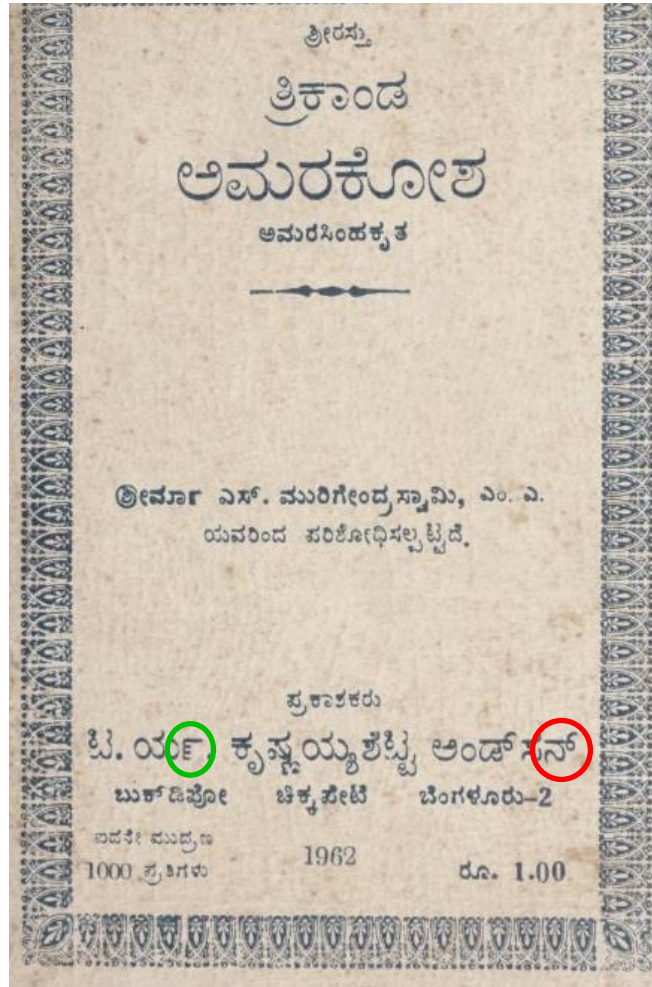
From Saṁskṛta kāvya by Dr. K. Krishnamoorthy, 2003 (3rd edition)

ಯಸ್ಮಿನ್ ಸರ್ವಾಣಿ ಭೂತಾನ್ಯಾತ್ಮೈವಾಭೂದ್ ವಿಜಾನತಃ |
 ತತ್ರ ಕೋ ಮೋಹಃ ಕಃ ಶೋಕ ಏಕತ್ವಮನು ಪಶ್ಯತಃ ||೭||
 ಯಸ್ಮಿನ್ - ಯಾವ ಸ್ಥಿತಿಯಲ್ಲಿ ; ವಿಜಾನತಃ - ಪರಬ್ರಹ್ಮ ಪರಮೇಶ್ವರನನ್ನು
 ಪೂರ್ಣವಾಗಿ ತಿಳಿದಿರುವ ಮಹಾಪುರುಷನ (ಅನುಭವದಲ್ಲಿ) ; ಸರ್ವಾಣಿ - ಸಂಪೂರ್ಣ ;
 ತಿಳಿಯುವುದರ ಹಾಗೂ ಸರ್ವತ್ರ ಕಾಣುವುದರ ಫಲವನ್ನು ತಿಳಿಸುತ್ತಾರೆ -
 ಸ ಪರ್ಯಗಾಚ್ಛುಕ್ರಮಕಾಯಮವ್ರಣ-
 ಮಸ್ತಾವಿರಗ್ಂ ಶುದ್ಧಮಪಾಪವಿದ್ಧಮ್ |
 ಕವಿರ್ಮನೀಷೀ ಪರಿಭೂಃ ಸ್ವಯಂಭೂರ್ಯಾಥಾತಥ್ಯತೋಽರ್ಥಾನ್
 ವ್ಯದಧಾಚ್ಛಾಶ್ವತೀಭ್ಯಃ ಸಮಾಭ್ಯಃ ||೮||
 ಸಃ - ಆ ಮಹಾಪುರುಷನು ; ಶುಕ್ರಮ್ - (ಆ) ಪರಮತೇಜೋಮಯನಾದ ;

From Īśāvāsyōpaniṣat published by Gita Press, Gorakhpur, 2005





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



From Trikāṇḍa amarakōṣa by S. Murigēndrasvāmi (Ed.), 1962

Description

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

Font	Sequence	Rendering
Old Style	<i>na + virama</i> <i>na + virama</i> +  + <i>da</i>	ಢ ಢದ
New Style	<i>na + virama</i> <i>na + virama</i> +  + <i>da</i>	ಢ್ ಢ್‌ದ
All Fonts	<i>na + virama + da</i>	ಢ್ದ

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
ಢ	0CDD	KANNADA LETTER NAKAARA POLLU

Recommended annotation

- Special vowel-less form of NA
- TELUGU LETTER NAKAARA POLLU

0CDD;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. Nakaara Pollu should be treated as an equivalent to the Unicode sequence ಢ 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

0CDD ; 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 10646¹.

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:	January 7, 2021
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	

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)

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?	<i>The authors belong to user community.</i>
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:	<i>See the proposal</i>
4. The context of use for the proposed characters (type of use; common or rare)	Rare
Reference:	<i>See the proposal</i>
5. Are the proposed characters in current use by the user community?	Yes
If YES, where? Reference:	<i>See the proposal</i>
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:	<i>Kannada is in BMP</i>
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:	<i>See the proposal</i>

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: