

Proposal to encode a nasal character in Vedic Extensions

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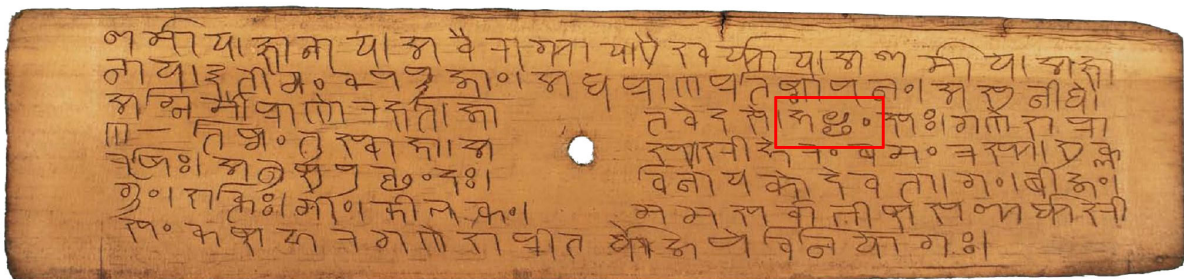
April 25, 2017

1 Proposed character

Glyph	Code	Character name
ॐ	1CFA	VEDIC SIGN DOUBLE ANUSVARA ANTARGOMUKHA

2 Description

The ॐ is used in Nandinagari for nasalization in Vedic texts. As it is related to other Vedic nasalization signs, it is proposed for inclusion in ‘Vedic Extensions’ instead of a future Nandinagari block. It has been assigned the name VEDIC SIGN DOUBLE ANUSVARA ANTARGOMUKHA because it consists of two instances of ॐ U+1CE9 VEDIC SIGN ANUSVARA ANTARGOMUKHA stacked vertically. It is a letter-like character that can function as a base for a combining nasal sign. It occurs in the syllable ॐ ham shown in the Nandinagari folio below:



ॐ ha, ॐ double *anusvāra antargomukha*, ◌◌ *anusvāra*

3 Character Data

3.1 Character Properties

In the format of `UnicodeData.txt`:

```
1CFA;VEDIC SIGN DOUBLE ANUSVARA ANTARGOMUKHA;Lo;0;L;;;;N;;;;;
```

3.2 Linebreaking

In the format of `LineBreak.txt`:

```
1CFA;AL # Lo VEDIC SIGN DOUBLE ANUSVARA ANTARGOMUKHA
```

3.3 Script

In the format of `Scripts.txt`:

```
1CFA ; Common # Lo VEDIC SIGN DOUBLE ANUSVARA ANTARGOMUKHA
```

3.4 Syllabic Categories

The character should be added to `IndicSyllabicCategory.txt` under a new category, eg. ‘Nasal_Letter’. This is necessary because the character participates in syllables and can also serve as a base for combining nasal signs.

3.5 Script Extensions

The character should be extended for use with the proposed script ‘Nandinagari’ in `ScriptExtensions.txt`.

**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 a nasal character in Vedic Extensions
2. Requester's name:	<i>Anshuman Pandey <pandey@umich.edu></i>
3. Requester type (Member body/Liaison/Individual contribution):	<i>Expert contribution</i>
4. Submission date:	<i>2017-04-25</i>
5. Requester's reference (if applicable):	
6. Choose one of the following:	
This is a complete proposal:	<input checked="" type="checkbox"/> <i>Yes</i>
(or) More information will be provided later:	<input type="checkbox"/>

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:	<input checked="" type="checkbox"/> <i>Yes</i>	
Name of the existing block:	<i>Vedic Extensions</i>	
2. Number of characters in proposal:	<i>1</i>	
3. Proposed category (select one from below - see section 2.2 of P&P document):		
A-Contemporary <input checked="" type="checkbox"/>	B.1-Specialized (small collection) <input type="checkbox"/>	B.2-Specialized (large collection) <input type="checkbox"/>
C-Major extinct <input type="checkbox"/>	D-Attested extinct <input type="checkbox"/>	E-Minor extinct <input type="checkbox"/>
F-Archaic Hieroglyphic or Ideographic <input type="checkbox"/>	G-Obscure or questionable usage symbols <input type="checkbox"/>	
4. Is a repertoire including character names provided?	<input checked="" type="checkbox"/> <i>Yes</i>	
a. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?	<input checked="" type="checkbox"/> <i>Yes</i>	
b. Are the character shapes attached in a legible form suitable for review?	<input checked="" type="checkbox"/> <i>Yes</i>	
5. Fonts related:		
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for publishing the standard?	<i>Anshuman Pandey</i>	
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):	<i>Anshuman Pandey</i>	
6. References:		
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?	<input checked="" type="checkbox"/> <i>Yes</i>	
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?	<input checked="" type="checkbox"/> <i>Yes</i>	
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)?	<input checked="" type="checkbox"/> <i>Yes</i>	

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

1. Has this proposal for addition of character(s) been submitted before? If YES explain _____	No
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.)? If YES, with whom? _____ If YES, available relevant documents: _____	No
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Reference: _____	Yes <i>Attested in manuscripts</i>
4. The context of use for the proposed characters (type of use; common or rare) Reference: _____	Common
5. Are the proposed characters in current use by the user community? If YES, where? Reference: _____	Yes; <i>used in representation of Vedic Sanskrit</i>
6. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP? If YES, is a rationale provided? _____ If YES, reference: _____	N/A
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	N/A
8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? If YES, is a rationale for its inclusion provided? _____ If YES, reference: _____	No
9. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters? If YES, is a rationale for its inclusion provided? _____ If YES, reference: _____	No
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? If YES, is a rationale for its inclusion provided? _____ If YES, reference: _____	No
11. Does the proposal include use of combining characters and/or use of composite sequences? 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: _____	No
12. Does the proposal contain characters with any special properties such as control function or similar semantics? If YES, describe in detail (include attachment if necessary) _____ _____	No
13. Does the proposal contain any Ideographic compatibility characters? If YES, are the equivalent corresponding unified ideographic characters identified? If YES, reference: _____	No