

To: UTC and ISO/IEC JTC1/SC2 WG2

Title: Proposal to encode SYLOTI NAGRI SIGN ALTERNATE HASANTA in the UCS

From: Lorna Priest Evans (SIL International)

Date: 12 January 2019

Reference: [L2/18-259](#), [L2/19-023](#)

Introduction

We wish to propose the addition of SYLOTI NAGRI SIGN ALTERNATE HASANTA in the “Syloṭi Nagri (Sylo)” script block. The character should be encoded at the next available codepoint which is U+A82C.

The need for this character was discussed in [L2/18-259](#) and [L2/19-023](#). It could be considered a variant of the SYLOTI NAGRI SIGN HASANTA. However, the properties are different. There have been some suggestions that the Bengali virama could be used. However, it is best to keep these kinds of characters in the same Indic script block as other characters in a particular script. Encoding this new character will simplify implementations.

The current SYLOTI NAGRI SIGN HASANTA is classified as “Pure_Killer.” However, that property should be changed to “Virama” because the current hasanta is used for conjunct formation. This ALTERNATE HASANTA should be classified as a “Pure_Killer” because no conjunct should be formed.

Examples of SYLOTI NAGRI SIGN ALTERNATE HASANTA have not been found. However, it has been requested by modern Nagri users. [L2/19-023](#) gives examples of how it would be used.

In the example below (from [L2/19-023](#)), the first line uses the *hasanta* at the end of the word and the 2nd line uses the alternate *hasanta* at the end of the word.

দান্‌ !
দান্‌ !



The character should display similar to a BENGALI SIGN VIRAMA:

্

Thus, we wish to request the encoding of SYLOTI NAGRI SIGN ALTERNATE HASANTA with properties as described below. Also, as mentioned above, the properties for SYLOTI NAGRI SIGN HASANTA must also be changed.

Character Name and annotations

The color [blue](#) indicates the new character property or a change in property or text. Black indicates no changes.

A806		SYLOTI NAGRI SIGN HASANTA <ul style="list-style-type: none">• virama, forms conjuncts
A82C		SYLOTI NAGRI SIGN ALTERNATE HASANTA <ul style="list-style-type: none">• a killer, no conjunct formed

Unicode Character Properties

UnicodeData properties for the new character:

```
A806;SYLOTI NAGRI SIGN HASANTA;Mn;9;NSM;;;;N;;;;;
```

```
A82C;SYLOTI NAGRI SIGN ALTERNATE HASANTA;Mn;9;NSM;;;;N;;;;;
```

IndicSyllableCategory:

```
A806 ; Virama # Mn SYLOTI NAGRI SIGN HASANTA
```

```
A82C ; Pure\_Killer # Mn SYLOTI NAGRI SIGN ALTERNATE HASANTA
```

IndicPositionalCategory:

```
A806 ; Top # Mn SYLOTI NAGRI SIGN HASANTA
```

```
A82C ; Bottom # Mn SYLOTI NAGRI SIGN ALTERNATE HASANTA
```

LineBreak:

```
A806;CM # Mn SYLOTI NAGRI SIGN HASANTA
```

```
A82C;CM # Mn SYLOTI NAGRI SIGN ALTERNATE HASANTA
```

This character (U+A82C) can sort immediately after:

```
A806 ; [.2ABB.0020.0002] # SYLOTI NAGRI SIGN HASANTA
```

Core spec changes in documentation

In [L2/18-259](#) we made some suggested changes to the documentation. Those suggested changes were based on *not* encoding a new character. Thus, the changes to the Core spec should be revisited. The second paragraph that was added should be deleted.

**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://www.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://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html>.

See also <http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html> for latest Roadmaps.

A. Administrative

1. Title:	Proposal to encode SYLOTI NAGRI SIGN ALTERNATE HASANTA in the UCS		
2. Requester's name:	Lorna Priest Evans		
3. Requester type (Member body/Liaison/Individual contribution):	Individual contribution		
4. Submission date:	11-Jan-2019		
5. Requester's reference (if applicable):	L2/19-024		
6. Choose one of the following:			
This is a complete proposal:			Yes
(or) More information will be provided later:			No

B. Technical – General

1. Choose one of the following:			
a. This proposal is for a new script (set of characters):			No
Proposed name of script:			
b. The proposal is for addition of character(s) to an existing block:			Yes
Name of the existing block:	Syloti Nagri		
2. Number of characters in proposal:			1
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?			Yes
a. If YES, are the names in accordance with the “character naming guidelines” in Annex L of P&P document?			No
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?	STAR		
b. Identify the party granting a license for use of the font by the editors (include address, e-mail, ftp-site, etc.):			
6. References:			
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?			No
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?			No
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)?			Sorting

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	<i>No</i> <i>This is the first official proposal. Other discussion documents are listed in the proposal.</i>
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:	 <i>Proposal is based on desired usage.</i>
3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included? Reference:	<i>No</i>
4. The context of use for the proposed characters (type of use; common or rare) Reference:	<i>Yes</i> <i>See proposal</i>
5. Are the proposed characters in current use by the user community? If YES, where? Reference:	<i>No</i> <i>See proposal</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:	<i>Yes</i> <i>Yes</i> <i>See proposal</i>
7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)?	<i>n/a</i>
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:	<i>Yes</i> <i>See proposal</i>
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:	<i>No</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? If YES, is a rationale for its inclusion provided? If YES, reference:	<i>Yes</i> <i>Yes</i> <i>See proposal</i>
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:	<i>No</i> <i>No</i>
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)	<i>No</i>
13. Does the proposal contain any Ideographic compatibility characters? If YES, are the equivalent corresponding unified ideographic characters identified? If YES, reference:	<i>No</i>