

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

Doc Type: Working Group Document**Title:** Preliminary proposal for encoding the Rañjana script in the SMP of the UCS**Source:** Michael Everson**Status:** Individual Contribution**Action:** For consideration by JTC1/SC2/WG2 and UTC**Date:** 2009-05-04

Varieties of the Rañjana script (called Lañdza or Lañtsa in Tibetan) have been used to writing Sanskrit, Tibetan, and Newari in an area ranging from Nepal to Tibet. The script is a descendent of the ancient Brahmic script from India, and has the same basic behaviours (inherent vowel, vowel-sign modifiers, consonant conjunct formation). There are very many texts in Rañjana. It is mostly used for printing Hindu and Buddhist scriptures and literature in Sanskrit and Buddhist Hybrid Sanskrit used by the Newar community. Tarthang Tulku in America recently published an edition of the entire 8,000 verse Prajñāpāramitā in parallel Rañjana and Tibetan scripts. The Rañjana script continues to be taught in Tibetan and Bhutanese monasteries—and books on how to write the script continue to be published.

Rañjana is also in current use for printing “high status” documents (wedding invitations, certificates, etc) in Nepal in the Newar language and for Newar language book titles.

Since Rañjana is visually and structurally similar to the Lañtsa & Wartu scripts used for Buddhist Sanskrit documents in Tibet (China), Bhutan, Mongolia, Nepal, Sikkim & Ladakh (India) it has been considered would be practical to merge these two scripts (Lañtsa and Wartu) with Rañjana for encoding purposes.

2. Structure. Rañjana is of the Brahmic type: the consonant letters contain an inherent vowel. Consonant clusters are written with conjunct characters, and a visible vowel killer shows the deletion of the inherent vowel when there is no conjunct.

3. Independent vowels. The full set of Sanskrit independent vowels exist, though not all of these are used when Rañjana is used to write Newar: ा a, ा ā, ि i, ि ī, उ u, उ ū, र̄ r, र̄ ū, ल̄ l, ल̄ ū, ए e, ए ai, ओ o, and औ au.

4. Dependent vowel signs are used in a manner similar to that employed in the Devanagari script. Examples here show the vowel signs in conjunction with the letter क ka and ग ga. Note in particular the differences in glyph for -ā and -ī, which for क ka and some other letters have short glyphs like ◌ and ◌, and which for ग ga and most other letters have long gyps like ◌ and ◌. A similar alternation occurs for -e, -ai, -o, -au: the first class use a small -e element, and the second class use a long sweeping -e element: ◌ and ◌.

ka **କ** ga **ଗ** kā **କା** gā **ଗା** ki **କି** gi **ଗି** kī **କିଏ** gī **ଗିଏ** ku **କୁ** gu **ଗୁ** kū **କୁଏ** gū **ଗୁଏ**
 kr **କ୍ର** gr **ଗ୍ର** k̄r **କ୍ରା** ḡr **ଗ୍ରା** kl **କ୍ଳ** gl **ଗ୍ଲ** k̄l **କ୍ଳା** ḡl **ଗ୍ଲା** ke **କେ** ge **ଗେ** kai **କାଇ** gai **ଗାଇ**
 ko **କୋ** go **ଗୋ** kau **କାଉ** gau **ଗାଉ** kam **କମ** gam **ଗମ** kam̄ **କମା** gam̄ **ଗମା** kah **କାହ** gah **ଗାହ**

5. Consonant clusters are used in a manner similar to that employed in the Devanagari script. There are many excellent manuals available which show the conjunct glyphs deriving from these combinations, and any font design should for a consistent style base itself on one of them. Of particular interest are a number of voiceless consonants which are represented by consonant clusters. These are listed below. It is expected that named-sequences for these should be added to the standard to give guidance to users in Nepal.

| | | |
|--------------|------|--|
| ହନ | hna | = ହ ha + ନ VIRAMA + ନ na |
| ହନ୍ତ | h̄na | = ହ ha + ନ VIRAMA + ନ୍ତ n̄a |
| ହନ୍ତା | hna | = ହ ha + ନ VIRAMA + ନ୍ତା na |
| ହମ | hma | = ହ ha + ମ VIRAMA + ମ ma |
| ହର | hra | = ହ ha + ର VIRAMA + ର ra |
| ହଲ | hla | = ହ ha + ଲ VIRAMA + ଲ la |
| ହବ | hwa | = ହ ha + ଵ VIRAMA + ଵ wa |

6. Collating order. The standard Brahmic sorting order applies to Rañjana.

7. Character names. Consonant letter names use the typical Brahmic transliteration used in the UCS.

9. Linebreaking. Letters and digits behave as in Devanagari.

8. Digits and punctuation. A set of digits exists. Alongside a single and double danda punctuation, Rañjana has many other signs.

10. Unicode Character Properties.

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11800;RANJANA LETTER A;Lo;0;L;;;;N;;;;;
11801;RANJANA LETTER AA;Lo;0;L;;;;N;;;;;
11802;RANJANA LETTER I;Lo;0;L;;;;N;;;;;
11803;RANJANA LETTER II;Lo;0;L;;;;N;;;;;
11804;RANJANA LETTER U;Lo;0;L;;;;N;;;;;
11805;RANJANA LETTER UU;Lo;0;L;;;;N;;;;;
11806;RANJANA LETTER VOCALIC R;Lo;0;L;;;;N;;;;;
11807;RANJANA LETTER VOCALIC RR;Lo;0;L;;;;N;;;;;
11808;RANJANA LETTER VOCALIC L;Lo;0;L;;;;N;;;;;
11809;RANJANA LETTER VOCALIC LL;Lo;0;L;;;;N;;;;;
1180A;RANJANA LETTER E;Lo;0;L;;;;N;;;;;
1180B;RANJANA LETTER AI;Lo;0;L;;;;N;;;;;
1180C;RANJANA LETTER O;Lo;0;L;;;;N;;;;;
1180D;RANJANA LETTER AU;Lo;0;L;;;;N;;;;;
1180E;RANJANA LETTER KA;Lo;0;L;;;;N;;;;;
1180F;RANJANA LETTER KHA;Lo;0;L;;;;N;;;;;
11810;RANJANA LETTER GA;Lo;0;L;;;;N;;;;;
11811;RANJANA LETTER GHA;Lo;0;L;;;;N;;;;;
11812;RANJANA LETTER NGA;Lo;0;L;;;;N;;;;;
11813;RANJANA LETTER CA;Lo;0;L;;;;N;;;;;

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11814;RANJANA LETTER CHA;Lo;0;L;;;;N;;;;
 11815;RANJANA LETTER JA;Lo;0;L;;;;N;;;;
 11816;RANJANA LETTER JHA;Lo;0;L;;;;N;;;;
 11817;RANJANA LETTER NYA;Lo;0;L;;;;N;;;;
 11818;RANJANA LETTER TTA;Lo;0;L;;;;N;;;;
 11819;RANJANA LETTER TTHA;Lo;0;L;;;;N;;;;
 1181A;RANJANA LETTER DDA;Lo;0;L;;;;N;;;;
 1181B;RANJANA LETTER DDHA;Lo;0;L;;;;N;;;;
 1181C;RANJANA LETTER NNA;Lo;0;L;;;;N;;;;
 1181D;RANJANA LETTER TA;Lo;0;L;;;;N;;;;
 1181E;RANJANA LETTER THA;Lo;0;L;;;;N;;;;
 1181F;RANJANA LETTER DA;Lo;0;L;;;;N;;;;
 11820;RANJANA LETTER DHA;Lo;0;L;;;;N;;;;
 11821;RANJANA LETTER NA;Lo;0;L;;;;N;;;;
 11822;RANJANA LETTER PA;Lo;0;L;;;;N;;;;
 11823;RANJANA LETTER PHA;Lo;0;L;;;;N;;;;
 11824;RANJANA LETTER BA;Lo;0;L;;;;N;;;;
 11825;RANJANA LETTER BHA;Lo;0;L;;;;N;;;;
 11826;RANJANA LETTER MA;Lo;0;L;;;;N;;;;
 11827;RANJANA LETTER YA;Lo;0;L;;;;N;;;;
 11828;RANJANA LETTER RA;Lo;0;L;;;;N;;;;
 11829;RANJANA LETTER LA;Lo;0;L;;;;N;;;;
 1182A;RANJANA LETTER WA;Lo;0;L;;;;N;;;;
 1182B;RANJANA LETTER SHA;Lo;0;L;;;;N;;;;
 1182C;RANJANA LETTER SSA;Lo;0;L;;;;N;;;;
 1182D;RANJANA LETTER SA;Lo;0;L;;;;N;;;;
 1182E;RANJANA LETTER HA;Lo;0;L;;;;N;;;;
 1182F;RANJANA SIGN CANDRABINDU;Mn;230;NSM;;;;N;;;;
 11830;RANJANA SIGN ANUSVARA;Mn;230;NSM;;;;N;;;;
 11831;RANJANA SIGN VISARGA;Mc;230;.;;;N;;;;
 11832;RANJANA VOWEL SIGN AA;Mn;0;NSM;.;;;N;;;;
 11833;RANJANA VOWEL SIGN I;Mn;0;NSM;.;;;N;;;;
 11834;RANJANA VOWEL SIGN II;Mn;0;NSM;.;;;N;;;;
 11835;RANJANA VOWEL SIGN U;Mn;220;NSM;.;;;N;;;;
 11836;RANJANA VOWEL SIGN UU;Mn;220;NSM;.;;;N;;;;
 11837;RANJANA VOWEL SIGN VOCALIC R;Mn;220;NSM;.;;;N;;;;
 11838;RANJANA VOWEL SIGN VOCALIC RR;Mn;220;NSM;.;;;N;;;;
 11839;RANJANA VOWEL SIGN VOCALIC L;Mn;220;NSM;.;;;N;;;;
 1183A;RANJANA VOWEL SIGN VOCALIC LL;Mn;220;NSM;.;;;N;;;;
 1183B;RANJANA VOWEL SIGN E;Mc;0;L;.;;;N;;;;
 1183C;RANJANA VOWEL SIGN AI;Mn;0;NSM;.;;;N;;;;
 1183D;RANJANA VOWEL SIGN O;Mn;0;NSM;.;;;N;;;;
 1183E;RANJANA VOWEL SIGN AU;Mn;0;NSM;.;;;N;;;;
 1183F;RANJANA VIRAMA;Mn;9;NSM;.;;;N;;;;
 11840;RANJANA DIGIT ZERO;Nd;0;L;;0;0;0;N;;;;
 11841;RANJANA DIGIT ONE;Nd;0;L;;1;1;1;N;;;;
 11842;RANJANA DIGIT TWO;Nd;0;L;;2;2;2;N;;;;
 11843;RANJANA DIGIT THREE;Nd;0;L;;3;3;3;N;;;;
 11844;RANJANA DIGIT FOUR;Nd;0;L;;4;4;4;N;;;;
 11845;RANJANA DIGIT FIVE;Nd;0;L;;5;5;5;N;;;;
 11846;RANJANA DIGIT SIX;Nd;0;L;;6;6;6;N;;;;
 11847;RANJANA DIGIT SEVEN;Nd;0;L;;7;7;7;N;;;;
 11848;RANJANA DIGIT EIGHT;Nd;0;L;;8;8;8;N;;;;
 11849;RANJANA DIGIT NINE;Nd;0;L;;9;9;9;N;;;;
 1184B;RANJANA OM;Lo;0;L;.;;;N;;;;
 1184E;RANJANA YIG MGO;Po;0;L;.;;;N;;;;
 1184C;RANJANA DANDA;Po;0;L;.;;;N;;;;
 1184D;RANJANA DOUBLE DANDA;Po;0;L;.;;;N;;;;
 1184F;RANJANA VIRAM;Po;0;L;.;;;N;;;;

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Consonants mixed with Ya

यकार संयोग व्यञ्जनवर्ण

क्षात्यग्न्यज्ञात्यग्न्यज्ञात्यग्न्यज्ञा

Kya Khya Gya Ghyा Nyā Chya Chhya Jya Jhhya Yanya
 क्य ख्य ग्य घ्य झ्य च्य छ्य ज्य झ्य य्य

त्यात्यद्यन्यात्यात्यद्यन्यात्यात्यन्या

Tya Thya Dya Dhyā Nyā Tya Thya Dya Dhyā Nyā
 त्य थ्य द्य ध्य ए्य ए्य अ्य अ्य न्य

प्याप्याब्याभ्याम्याय्यार्याल्याव्याम्याह्या

Pya Phya Baa Bhya Mya Yya Rya Lya Wya
 प्य फ्य ब्य भ्य म्य य्य र्य ल्य व्य

श्याश्याश्याक्ष्यात्याक्ष्या

Shya Shya Sya Hya Kshya Trya Jnya
 श्य श्य श्य ह्य क्ष्य त्र्य ज्न्य

Figure 1. Example of conjuncts in -ya from Shakyavansha 1985.

Consonants mixed with Ra

रकार संयोग व्यञ्जनवर्ग

क्राख्राग्राघ्रान्नाच्छ्राज्ञ्रायन्ना

Kra Khra Gra Ghra Nra Chra Chhra Jra Jhra Ynra

क ख प घ ङ् च छ ज झ य

त्राथ्राद्राध्रान्नात्राथ्राद्राध्रान्ना

Tra Thra Dra Dhra Nra Tra Thra Dra Dhra Nra

ट ठ ଙ୍ଗ ଙ୍ର ଣ୍ଟ ଥ୍ର ଥ୍ର ଦ୍ର ଧ୍ର ନ୍ନ

प्राफ्राब्राभ्राम्नाल्राल्रालା

Pra Phra Bra Bhra Mra Yra Rra Lra Wra

ପ୍ର ଫ୍ର ବ୍ର ଭ୍ର ମ୍ନ ଯ୍ର ର୍ର ଲ୍ର ଲା

श्राश्रास्राह्राक्ष्रात्र्राज्ञା

Shra Shra Sra Hra Kshra Trra Jnra

ଶ୍ର ସ୍ର ସ୍ର ହ୍ର କ୍ଷର ତ୍ର ଜ୍ଞ

Figure 2. Example of conjuncts in -ra from Shakyavansha 1985.

Consonants mixed with La

लकार संशोग व्यञ्जनवग

क्ल ख्ल ग्ल घ्ल न्ल च्ल छ्ल ज्ल यन्ल

Kla Khla Gla Ghla Nla Chla Chhl Jla Jhla Yanla
 क्ल ख्ल ग्ल घ्ल न्ल च्ल छ्ल ज्ल यन्ल

त्ल थ्ल द्ल ध्ल न्ल त्ल थ्ल द्ल ध्ल न्ल

Tla Thla Dla Dhla Nla Tla Thla Dla Dhla Nla
 ट्ल थ्ल द्ल ध्ल न्ल त्ल थ्ल द्ल ध्ल न्ल

प्ल फ्ल ब्ल भ्ल म्ल य्ल र्ल ल्ल व्ल

Pla Phla Bla Bhla Mla Yla Rla Lla Wla
 प्ल फ्ल ब्ल भ्ल म्ल य्ल र्ल ल्ल व्ल

श्ल ष्ल स्ल ह्ल क्ष्ल त्र्ल ज्ल

Shla Shla Sla Hla Kshla Trla Jnla
 श्ल ष्ल स्ल ह्ल क्ष्ल त्र्ल ज्ल

Figure 3. Example of conjuncts in -la from Shakyavansha 1985.

Consonants mixed with Wa

वकार संयोग व्यञ्जनवर्ग

क्वात्वात्खात्वात्ख्वात्वात्ख्व्वात्वात्ख्व्व्वात्वात्व्व्व्वा

KwaKhwaGwaGhwaNwaChwaChhwaJwaJhwaYnwa

क र्व ख र्ख छ्व च्व छ्ख ज्व झ्व भ्व य्व

त्वात्वात्व्वात्वात्व्व्वात्वात्व्व्व्वात्वात्व्व्व्व्वा

Twa ThwaDwaDhwaNwa Twa ThwaDwaDhwaNwa

ट्व ठ्व ड्व ढ्व ए्व त्व थ्व द्व ध्व न्व

प्वात्प्वात्प्व्वात्प्वात्प्व्व्वात्प्वात्प्व्व्व्वा

Pwa Phwa Bwa Bhwa Mwa Ywa Rwa LwaWwa

प्व फ्व ब्व भ्व म्व य्व र्व ल्व व्व

श्वात्श्वात्श्व्वात्श्वात्श्व्व्वात्श्वात्श्व्व्व्वा

Shwa Shwa Swa Hwa Kshwa Trwa Jnwa

श्व ष्व र्व ह्व क्ष्व त्र्व ज्व

Figure 4. Example of conjuncts in -wa from Shakyavansha 1985.

Consonants mixed with Na

नकार संयोग व्यञ्जनवर्ग

ना खा ख्ना गा ग्ना धा ध्ना चा च्ना च्छा जा ज्ना झा झ्ना

Kna Khna Gna Ghna Nna Chna Chhna Jna Jhna
कन खन गन घन चन च्छन जन झन भन

ता था थ्ना ठा ठ्ना दा द्ना थ्हा थ्ह्ना त्हा त्ह्ना द्हा द्ह्ना

Tna Thna Dna Dhna Nna Tna Thna Dna Dhna Nna
टन ठन दन थन तन थ्हन द्हन थ्ह्न न

पा फा फ्ना फ्हा फ्ह्ना बा ब्ना फ्ह्हा फ्ह्ह्ना ला ल्ना वा व्हा व्ह्ना

Pna Phna Bna Bhna Mna Yna Rna Lna Wna
पन फन बन भन मन यन रन लन वन

शा श्ना श्हा श्ह्ना

Shna Shna Sna Hna Kshna
शन श्न श्हन श्ह्न श्ह्हन

Figure 5. Example of conjuncts in -na from Shakyavansha 1985.

[१६]

[१६]

Consonants mixed with Ma

मकार संयोग व्यञ्जनवण

क्लाम्बाघ्नाङ्गाख्लाङ्गाख्नाम्बा

KmaKhmaGmaGhmaNmaChmaChhmaJmaJhma

क्लम ख्लम ग्लम घ्लम न्लम च्लम झ्लम भ्लम

त्त्राम्बाद्धाव्यात्त्राव्याद्धाव्याम्बा

TmaThmaDmaDhmaNmaTma ThmaDmaDhmaNma

ट्लम ठ्लम ड्लम ए्लम त्लम थ्लम द्लम ध्लम न्लम

य्याम्बात्त्वाम्बाम्बाम्बाल्लाम्बा

Pma Phma Bma Bhma Mma Yma Rma Lma Wma

ए्लम फ्लम ब्लम भ्लम म्लम य्लम र्लम ल्लम व्लम

श्वाम्बास्त्वाह्नाक्षा

Shma Shma Sma Hma Kahma

श्लम ष्लम र्लम ह्लम क्लम

Figure 6. Example of conjuncts in -ma from Shakyavansha 1985.

[१७]

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पूर्वतो वर्गीय पञ्चम व्यञ्जनवर्ण

क्लङ्कलङ्कलङ्कलङ्कलङ्कलङ्कलङ्कलङ्क
Nka Nkha Nga Ngha Nna Ncha Nchha Nja Njha
କ୍ଳ ଙ୍କ ଙ୍କ ଙ୍କ ଙ୍କ ଙ୍କ ଙ୍କ ଙ୍କ

ନ୍ତାନ୍ତାନ୍ତାନ୍ତାନ୍ତାନ୍ତାନ୍ତାନ୍ତାନ୍ତାନ୍ତାନ୍ତା
Nta Ntha Nda Ndha Nna Nta Ntha Nda Ndha Nna
ନ୍ତ ନ୍ତ ନ୍ତ ନ୍ତ ନ୍ତ ନ୍ତ ନ୍ତ ନ୍ତ ନ୍ତ

ମୁଖମୁଖମୁଖ
Mpa Mpha Mba Mbha Mma
ମ୍ପ ମ୍ଫ ମ୍ବ ମ୍ଭ ମ୍ମ

Figure 7. Example of conjuncts with initial homorganic nasals \dot{n} -, \tilde{n} -, n -, n -, and m -,
from Shakyavansha 1985.

[१८]

[१९]

Consonants mixed with Sa

सक्तार संयोग व्यञ्जनवर्ण

स्का स्खा स्गा स्घा स्ना स्चा स्छा स्जा स्यां

Ska Skha Sga Sgha Sna Scha Schha Sja Sjha Syan

સ્ક સ્ખ સ્ગ સ્ઘ સ્ન શ્ર શ્છ શ્જ શ્મ શ્બ

स्टा स्था स्दा स्धा स्ना स्ता स्था स्दा स्धा स्ना

Sta Stha Sda Sdha Sna Sta Stha Sda Sdha Sna

સ્ટ સ્થ સ્દ સ્ધ સ્ન સ્ત સ્થ સ્દ સ્ધ સ્ન

स्पा स्फा स्बा स्भा स्मा

Spa Spha Sba Sbha Sma

સ્પ સ્ફ સ્બ સ્ભ સ્મ

Figure 8. Example of conjuncts with initial *s*- from Shakyavansha 1985.

For reading practice
अभ्यास निमित परलपेगु शिक्षा

विज्ञापनान्वयनात्मवाचक
मात्रव्याप्तिव्याप्तिवाचक
संज्ञत्वायाप्तिव्याप्तिवाचक
द्वित्वायाप्तिव्याप्तिवाचक

Figure 9. Example text in Rañjana script from Shakyavansha 1985.

Consonants mixed with Vowels from Ka to Jna
स्वरवर्ण संयोग व्यञ्जनवर्ण क-ङ् पर्यन्त

Ka Ka Ki Kee Ku Koo Kri Kree Ke Kai Ko Kau Kan Kah

कृतिविद्वात्मवाचक
तत्त्वात्मवाचक
गणायामीयायायाप्तिव्याप्तिवाचक
द्वित्वायाप्तिव्याप्तिवाचक

Figure 10. Example showing the letters *ka*, *kha*, *ga*, and *gha* with vowel signs, from Shakyavansha 1985.

A. Administrative

1. Title

Proposal for encoding the Rañjana script in the SMP of the UCS

2. Requester's name

Michael Everson

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

Individual contribution.

4. Submission date

2009-05-04

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

No.

6b. More information will be provided later

Yes.

B. Technical – General

1. Choose one of the following:

1a. This proposal is for a new script (set of characters)

Yes.

1b. Proposed name of script

Rañjana.

1c. The proposal is for addition of character(s) to an existing block

No.

1d. Name of the existing block

2. Number of characters in proposal

79.

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.

4b. 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?

Michael Everson.

5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

Michael Everson, FontLab.

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

Yes.

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.

No.

2a. 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?

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?

People living in Nepal, India, Tibet. Scholars.

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

Common.

4b. Reference

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

Yes.

5b. If YES, where?

In Nepal and elsewhere.

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

Yes.

6b. If YES, is a rationale provided?

Yes.

6c. If YES, reference

Contemporary use and accordance with the Roadmap.

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

Yes.

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

9a. 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?

No.

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 (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

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?

| | 1180 | 1181 | 1182 | 1183 | 1184 | 1185 |
|---|-------|------|------|-------|------|------|
| 0 | ର୍ଣୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଥୁ | |
| 1 | ର୍କୁ | ର୍ଲୁ | ର୍ଳୁ | ର୍ମୁଖ | ର୍ତୁ | |
| 2 | ର୍ହୁ | ର୍ଣୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| 3 | ର୍ମୁଖ | ର୍ବୁ | ର୍ଳୁ | ର୍ମୁଖ | ର୍ତୁ | |
| 4 | ର୍ତୁ | ର୍ଲୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| 5 | ର୍ତୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| 6 | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| 7 | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| 8 | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| 9 | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| A | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| B | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| C | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| D | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| E | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |
| F | ର୍ମୁ | ର୍ମୁ | ର୍ବୁ | ର୍ଦୁ | ର୍ଧୁ | |

Independent vowels

| | | |
|-------|-----|---------------------------|
| 11800 | ା | RANJANA LETTER A |
| 11801 | ାା | RANJANA LETTER AA |
| 11802 | ି | RANJANA LETTER I |
| 11803 | ିି | RANJANA LETTER II |
| 11804 | ୁ | RANJANA LETTER U |
| 11805 | ୁି | RANJANA LETTER UU |
| 11806 | ୁା | RANJANA LETTER VOCALIC R |
| 11807 | ୁର | RANJANA LETTER VOCALIC RR |
| 11808 | ୁଲ | RANJANA LETTER VOCALIC L |
| 11809 | ୁଲ୍ | RANJANA LETTER VOCALIC LL |
| 1180A | ୟ | RANJANA LETTER E |
| 1180B | ୟା | RANJANA LETTER AI |
| 1180C | ୟୁ | RANJANA LETTER O |
| 1180D | ୟୁା | RANJANA LETTER AU |

Consonants

| | | |
|-------|------|---------------------|
| 1180E | କ | RANJANA LETTER KA |
| 1180F | ଖ | RANJANA LETTER KHA |
| 11810 | ଗ | RANJANA LETTER GA |
| 11811 | ଘ | RANJANA LETTER GHA |
| 11812 | ଙ | RANJANA LETTER NGA |
| 11813 | ଚ | RANJANA LETTER CA |
| 11814 | ଛ | RANJANA LETTER CHA |
| 11815 | ଜ | RANJANA LETTER JA |
| 11816 | ଝ | RANJANA LETTER JHA |
| 11817 | ଞ | RANJANA LETTER NYA |
| 11818 | ତ | RANJANA LETTER TTA |
| 11819 | ତ୍ତ | RANJANA LETTER TTHA |
| 1181A | ଦ | RANJANA LETTER DDA |
| 1181B | ଦ୍ଦ | RANJANA LETTER DDHA |
| 1181C | ନ | RANJANA LETTER NNA |
| 1181D | ନ୍ନ | RANJANA LETTER TA |
| 1181E | ଥ | RANJANA LETTER THA |
| 1181F | ଧ | RANJANA LETTER DA |
| 11820 | ଧ୍ବ | RANJANA LETTER DHA |
| 11821 | ନ୍ମ | RANJANA LETTER NA |
| 11822 | ମ | RANJANA LETTER PA |
| 11823 | ପ୍ରା | RANJANA LETTER PHA |
| 11824 | ବ୍ରା | RANJANA LETTER BA |
| 11825 | ପ୍ରା | RANJANA LETTER BHA |
| 11826 | ମ୍ବା | RANJANA LETTER MA |
| 11827 | ଯ୍ବା | RANJANA LETTER YA |
| 11828 | ର୍ବା | RANJANA LETTER RA |
| 11829 | ଲ୍ବା | RANJANA LETTER LA |
| 1182A | ଵ୍ରା | RANJANA LETTER WA |
| 1182B | ଶ୍ରା | RANJANA LETTER SHA |
| 1182C | ଷ୍ରା | RANJANA LETTER SSA |
| 1182D | ଷ୍ରା | RANJANA LETTER SA |
| 1182E | ହ୍ରା | RANJANA LETTER HA |

Various signs

| | | |
|-------|---|--------------------------|
| 1182F | ୠ | RANJANA SIGN CANDRABINDU |
| 11830 | ୦ | RANJANA SIGN ANUSVARA |
| 11831 | ୩ | RANJANA SIGN VISARGA |

Dependent vowel signs

| | | |
|-------|----|-----------------------|
| 11832 | ାା | RANJANA VOWEL SIGN AA |
| 11833 | ିି | RANJANA VOWEL SIGN I |
| 11834 | ୁି | RANJANA VOWEL SIGN II |

| | | |
|-------|------------|-------------------------------|
| 11835 | ୦ | RANJANA VOWEL SIGN U |
| 11836 | ୦୦ | RANJANA VOWEL SIGN UU |
| 11837 | ୦୦୦ | RANJANA VOWEL SIGN VOCALIC R |
| 11838 | ୦୦୦୦ | RANJANA VOWEL SIGN VOCALIC RR |
| 11839 | ୦୦୦୦୦ | RANJANA VOWEL SIGN VOCALIC L |
| 1183A | ୦୦୦୦୦୦ | RANJANA VOWEL SIGN VOCALIC LL |
| 1183B | ୦୦୦୦୦୦୦ | RANJANA VOWEL SIGN E |
| 1183C | ୦୦୦୦୦୦୦୦ | RANJANA VOWEL SIGN AI |
| 1183D | ୦୦୦୦୦୦୦୦୦ | RANJANA VOWEL SIGN O |
| 1183E | ୦୦୦୦୦୦୦୦୦୦ | RANJANA VOWEL SIGN AU |

Various signs

| | | |
|-------|---|----------------|
| 1183F | ୭ | RANJANA VIRAMA |
|-------|---|----------------|

Digits

| | | |
|-------|---|---------------------|
| 11840 | ୦ | RANJANA DIGIT ZERO |
| 11841 | ୧ | RANJANA DIGIT ONE |
| 11842 | ୨ | RANJANA DIGIT TWO |
| 11843 | ୩ | RANJANA DIGIT THREE |
| 11844 | ୪ | RANJANA DIGIT FOUR |
| 11845 | ୫ | RANJANA DIGIT FIVE |
| 11846 | ୬ | RANJANA DIGIT SIX |
| 11847 | ୭ | RANJANA DIGIT SEVEN |
| 11848 | ୮ | RANJANA DIGIT EIGHT |
| 11849 | ୯ | RANJANA DIGIT NINE |

Punctuation

| | | |
|-------|----|----------------------|
| 1184B | ୧୧ | RANJANA OM |
| 1184C | ୧୨ | RANJANA YIG MGO |
| 1184D | ୧୩ | RANJANA DANDA |
| 1184E | ୧୪ | RANJANA DOUBLE DANDA |
| 1184F | ୧୫ | RANJANA VIRAM |