Revised code chart and names list for Zanabazar Square

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1 Introduction

The code chart and names list for Zanabazar Square (N4541 L2/14-024) have been revised as a result of a meeting with experts of Mongolian scripts in Tokyo, October 15–16, 2015. Changes are as follows:

1. Changed glyph for final consonant mark from circle to diamond shape.
2. Included "Mongolian aang" as an annotation for -l-a.

The following points were discussed informally between various participants, but they were not formally documented:

1. Add annotation for vowel length mark regarding its additional usage for representing Tibetan ‘a-chung’.
2. Change the glyph for cluster initial ra from  to  in order to indicate its special rendering properties. This aligns with the use of a dashed box around glyphs for cluster-initial letters in the Soyombo block.
3. Allocate spaces for the future encoding of  and  . These two characters are required because contextual alternates for the diphthongs ai and au are based upon their glyph shapes.
4. Open new spaces at U+11A43 and U+11A45 for the future encoding of  and . The proposal specifies that these are glyphic variants of initial head mark and closing head mark, respectively. They should be encoded as distinctive characters.
5. Consider renaming the candrabindu ornament signs to align with the revised names of these elements in the Soyombo head marks. However, it is more sensible to retain candrabindu in the Zanabazar Square names (as is also the case for Soyombo).
6. Move SIGN ANUSVARA and SIGN VISARGA to after VOWEL LENGTH MARK, under a new subheading ‘Vowel modifiers’. This has the benefit of keeping all vowel-related signs together.

7. Move the LONG TSHEG to after TSHEG.

8. Change the control character used for producing conjunct stacks. Reintroduce the \( \text{झ} \) SUBJOINER proposed in earlier versions (see N4471 L2/13-198). Rename SIGN VIRAMA to SIGN HALANTA and remove its conjunct-forming function. The SIGN HALANTA will only represent silencing of the inherent vowel.

Zanabazar Square does not have a native halanta. Apart from the FINAL CONSONANT MARK there is no means for indicating a bare consonant. The halanta, however, appears in a few sources and it was necessary to encode it. Earlier versions of the encoding model relied upon a \( \text{झ} \) SUBJOINER for controlling conjunct formation. When the halanta was identified, it seemed practical to follow the Indic model and to unite its function with that of the SUBJOINER into the single character VIRAMA. As a result, the SUBJOINER was removed from the final proposal. It now seems more prudent to revert to the previous model so that it aligns with Soyombo.
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Known in Mongolian as Xewtee Dörböljin Bicig or the Horizontal Square Script. Also called Zanabazarin Dörböljin Useg or Zanabazar Square Script.

**Vowel letter**
11A00 ᠮ ZANABAZAR SQUARE LETTER A

**Vowel signs**
11A01 ᠪ ZANABAZAR SQUARE VOWEL SIGN I
11A02 ᠲ ZANABAZAR SQUARE VOWEL SIGN UE
11A03 ᠳ ZANABAZAR SQUARE VOWEL SIGN U
11A04 ᠴ ZANABAZAR SQUARE VOWEL SIGN E
11A05 ᠵ ZANABAZAR SQUARE VOWEL SIGN OE
11A06 ᠶ ZANABAZAR SQUARE VOWEL SIGN O
11A07 ᠷ ZANABAZAR SQUARE VOWEL SIGN AI
  • also represents secondary vowel i
11A08 ᠸ ZANABAZAR SQUARE VOWEL SIGN AU
  • also represents secondary vowel u

**Reversed vowel sign**
11A09 ᠨ ZANABAZAR SQUARE REVERSED VOWEL SIGN I
  • used for Sanskrit vocalic sounds

**Vowel length mark**
11A0A ᠩ ZANABAZAR SQUARE VOWEL LENGTH MARK

**Consonants**
11A0B ᠩ ZANABAZAR SQUARE LETTER KA
  • Mongolian ga, gamma
11A0C ᠪ ZANABAZAR SQUARE LETTER KHA
  • Mongolian qa, xa
11A0D ᠫ ZANABAZAR SQUARE LETTER GA
11A0E ᠬ ZANABAZAR SQUARE LETTER GHA
11A0F ᠭ ZANABAZAR SQUARE LETTER NGA
11A10 ᠮ ZANABAZAR SQUARE LETTER CA
11A11 ᠯ ZANABAZAR SQUARE LETTER CHA
11A12 ᠰ ZANABAZAR SQUARE LETTER JA
11A13 ᠱ ZANABAZAR SQUARE LETTER NYA
11A14 ᠲ ZANABAZAR SQUARE LETTER TFA
11A15 ᠳ ZANABAZAR SQUARE LETTER TTHA
11A16 ᠴ ZANABAZAR SQUARE LETTER DDA
11A17 ᠵ ZANABAZAR SQUARE LETTER DDHA
11A18 ᠶ ZANABAZAR SQUARE LETTER NNA
11A19 ᠷ ZANABAZAR SQUARE LETTER TA
  • Mongolian da
11A1A ᠸ ZANABAZAR SQUARE LETTER THA
  • Mongolian ta
11A1B ᠹ ZANABAZAR SQUARE LETTER DA
11A1C ᠺ ZANABAZAR SQUARE LETTER DHA
11A1D ᠼ ZANABAZAR SQUARE LETTER NA
11A1E ᠽ ZANABAZAR SQUARE LETTER PA
  • Mongolian ba
11A1F ᠾ ZANABAZAR SQUARE LETTER PHA
  • Mongolian pa
11A20 ᠿ ZANABAZAR SQUARE LETTER BA
  • Mongolian va
  • also used instead of non-initial 11A2D ᠽ in conjuncts
11A21 ᠻ ZANABAZAR SQUARE LETTER BHA
11A22 ᠼ ZANABAZAR SQUARE LETTER MA
11A23 ᠽ ZANABAZAR SQUARE LETTER TSA
  • Mongolian ja, Sanskrit ca
11A24 ᠾ ZANABAZAR SQUARE LETTER TSAH
  • Mongolian ca, Sanskrit cha

**Final consonant mark**
11A25 ᠫ ZANABAZAR SQUARE LETTER DZA
  • Sanskrit ja
11A26 ᠬ ZANABAZAR SQUARE LETTER DZHA
  • Sanskrit jha
11A27 ᠭ ZANABAZAR SQUARE LETTER ZHA
11A28 ᠮ ZANABAZAR SQUARE LETTER ZA
11A29 ᠯ ZANABAZAR SQUARE LETTER -A
  • Mongolian aang
  • Tibetan a-chung
  → 0F60 ᠫ tibetan letter -a
11A2A ᠰ ZANABAZAR SQUARE LETTER YA
11A2B ᠱ ZANABAZAR SQUARE LETTER RA
11A2C ᠲ ZANABAZAR SQUARE LETTER LA
11A2D ᠳ ZANABAZAR SQUARE LETTER VA
11A2E ᠴ ZANABAZAR SQUARE LETTER SHA
11A2F ᠵ ZANABAZAR SQUARE LETTER SSA
  • created by reversal of 11A2E ᠶ
11A30 ᠶ ZANABAZAR SQUARE LETTER SA
11A31 ᠷ ZANABAZAR SQUARE LETTER HA
11A32 ᠸ ZANABAZAR SQUARE LETTER KSSA

**Virama**
11A33 ᠹ ZANABAZAR SQUARE FINAL CONSONANT MARK
  • used for marking a syllable-final consonant in Mongolian
  • indicates a syllabic boundary in Mongolian

**Candra ornaments**
11A34 ᠺ ZANABAZAR SQUARE SIGN VIRAMA
  → 0F84 ᠺ tibetan sign halanta
  • indicates a bare consonant in Sanskrit and Tibetan
  • used for producing subjoining conjuncts

**Vowel modifiers**
11A38 ᠸ ZANABAZAR SQUARE SIGN ANUSVARA
  • indicates nasализation
  → 0F82 ᠸ tibetan sign nyi zla naa da
11A39 ᠹ ZANABAZAR SQUARE SIGN VISARGA
  • indicates post-vocalic aspiration
  → 0F7F ᠹ tibetan sign mam bced
Cluster-initial consonant

11A3A 𑩺 ZANABAZAR SQUARE LETTER CLUSTER INITIAL RA
• initial form of 11A2B ཨ in Tibetan conjuncts

Cluster-final consonants

11A3B 𑩻 ZANABAZAR SQUARE LETTER CLUSTER FINAL YA
• final form of 11A2A ཨ in Tibetan conjuncts
11A3C 𑩼 ZANABAZAR SQUARE LETTER CLUSTER FINAL RA
• final form of 11A2B ཨ in Tibetan conjuncts
11A3D 𑩽 ZANABAZAR SQUARE LETTER CLUSTER FINAL LA
• final form of 11A2C ཨ in Tibetan conjuncts
11A3E 𑩾 ZANABAZAR SQUARE LETTER CLUSTER FINAL VA
• final form of 11A20 ཨ in Tibetan conjuncts

Head marks

11A3F 𑩺 ZANABAZAR SQUARE INITIAL HEAD MARK
→ 0FD3 ༼ tibetan mark initial brda rnying yig mgo mdun ma
→ 0F04 ༽ tibetan mark initial yig mgo mdun ma
→ 1800 ༼ mongolian birga
11A40 𑩺 ZANABAZAR SQUARE CLOSING HEAD MARK
→ 0FD4 ༼ tibetan mark closing brda rnying yig mgo sgab ma
→ 0F05 ༽ tibetan mark closing yig mgo sgab ma

Punctuation

11A41 ༼ ZANABAZAR SQUARE TSHEG
→ 0F0B ༼ tibetan mark intersyllabic tsheg
11A42 ༽ ZANABAZAR SQUARE SHAD
→ 0F0D ཨ tibetan mark shad
11A43 ༽ ZANABAZAR SQUARE DOUBLE SHAD
→ 0F0E ཨ tibetan mark nyis shad
11A44 ཨ ZANABAZAR SQUARE LONG TSHEG
→ 0F14 ཨ tibetan mark gter tsheg