Neo-Brahmi Generation Panel Cross-Script Variant Analysis

Date 2018-03-22

Contents

1. Cross-Script Variant Analysis Devanagari – Gurmukhi

1.1 Pending Issues

-None-

1.2 Variant code points

#	Devanagari	Gurmukhi	Resolution
1	ं (0902)	ਂ (0A02)	Variants
2	इ (0907)	ਙ (0A19)	Variants
3	उ (0909)	ਤ (0A24)	Variants
4	घ (0917)	ਗ (0A17)	Variants
5	घ (0918)	ਬ (0A2C)	Variants
6	ट (091F)	ਟ (0A1F)	Variants
7	ठ (0920)	ਠ (0A20)	Variants
8	ढ (0922)	ਢ (0A2B)	Variants
9	त्त (0924 094D 0924)	ਜ (0A1C)	Variants
10	प्टि (092A 094D 091F 093F)	ਇ (0A07)	Variants
11	प्टी (092A 094D 091F 0940)	ਈ (0A08)	Variants
12	प्टे (092A 094D 091F 0947)	ਐ (0A0F)	Variants
13	भ (092D)	ਮ (0A2E)	Variants
14	म (092E)	ਸ (0A38)	Variants
15	य (092F)	ਧ (0A27)	Variants
16	व (0935)	ਕ (0A15)	Variants
17	ह (0939)	ਵ (0A35)	Variants
18	ि (093F)	ਿ (0A3F)	Variants
19	ी (0940)	ੀ (0A40)	Variants
20	ॅ (0945)	ੱ (0A71)	Variants
21	ॆ (0946)	ੇ (0A47)	Variants
22	े (0947)	ੇ (0A47)	Variants
23	ै (0948)	ੈ (0A48)	Variants
24	़ (0956)	ੁ (0A41)	Variants
25	ॗ (0957)	ੂ (0A42)	Variants

1.3 Identical code points but not defined as variant code points

-None-

1.4 Similar code points

#	Devanagari	Gurmukhi	Resolution
1	ठ (0920)	ਨ (0A28)	Appendix - Similar
2	ठ (0920)	ਰ (0A30)	Appendix - Similar
3	ड (0921)	ਦ (0A21)	Appendix - Similar
4	ड (0921)	ਡ (0A21)	Appendix - Similar
5	ड (0921)	ਤ (0A24)	Appendix – Similar
6	त (0924)	ਜ (0A1C)	Appendix - Similar
7	प (092A)	ਧ (0A27)	Appendix – Similar
8	प्टॆ (092A 094D 091F 0946)	ਐ (OAOF)	Appendix – Similar

1.5 Non-confusable code points

#	Devanagari	Gurmukhi	Resolution	Note
1	उ (0909)	ਭ (0A2D)	Remove - no similar	
2	ट (091F)	ਦ (0A26)	Remove - no similar	resolved during NBGP Meeting 19 Jan 18
3	ट (091F)	ਫ (0A2B)	Remove - no similar	
4	ड (0921)	ਛ (0A1B)	Remove - no similar	resolved during NBGP Meeting 19 Jan 18
5	ढ (0922)	ਛ (0A1B)	Remove - no similar	resolved during NBGP Meeting 19 Jan 18
6	ढ (0922)	ਧ (0A22)	Remove - no similar	resolved during NBGP Meeting 19 Jan 18
7	प (092A)	ਪ (0A2A)	Remove - no similar	
8	म (092E)	ਮ (0A2E)	Remove - no similar	
9	य (092F)	ਪ (0A2A)	Remove - no similar	
10	र (0930)	ਕ (0A15)	Remove - no similar	Based on Akshat email to NBGP 31 Jan, agreed by Lehal and Jay
11	र (0930)	ਦ (0A26)	Remove - no similar	
12	र (0930)	0A15 (ਕ)	Remove - no similar	The GP agreed that 0930 (र) and 0A15 (ਕ)are not variant code points.
13	ष (0937)	ਖ (0A16)	Remove - no similar	

#	Devanagari	Gurmukhi	Resolution	Note
14	ष (0937)	ਥ (0A25)	Remove - no similar	

1.6 Resolved Issues log

#	Code point/ Code point sequence pair	Detail	Resolution
1	त (0924) and ਜ (0A1C)	Originally, U+0A1C (ਜ) being variant with U+0924 (त) as well as U+0924 U+094D U+0924 (त्त). Since it has been decided that no same script homoglyph variants will be proposed for this case, one of the variants needs to be dropped. In this case U+0924 (त) is proposed to be dropped	Move to the appendix
2	प (092A) and ਧ (0A27)	Originally, U+0A27 (ਧ) being variant with U+092A (प) as well as U+092F (य) Since it has been decided that no same script homoglyph variants will be proposed for this case, one of the variants needs to be dropped. In this case U+092F (य) is proposed to be dropped	Move to the appendix
3	प्ट (092A 094D 091F) and ੲ (0A72)	They were defined as Variant in Devanagari Proposal. However, it is not in the Gurmukhi Repertoire. Therefore, it will be removed from both proposal	Remove from the proposal
4	प्टॆ (092A 094D 091F 0946) ਏ (0A0F) And प्टे (092A 094D 091F 0947) ਏ (0A0F)	Where 0946 and 0947 are variant code points. The current proposal Devanagari and Gurmukhi agreed that प्टॆ (092A 094D 091F 0946) and ਏ (0A0F) are similar. But प्टे (092A 094D 091F 0947) and ਏ (0A0F) are variants	Agree (by submitting proposal to the IP)

2. Cross-Script Variant Analysis Devanagari – Gujarati

2.1 Pending Issues

-None-

2.2 Variant code points

-None-

2.3 Identical code points but not defined as variant code points

#	Devanagari	Gujarati
1	◌ः (0903)	◌ઃ (0A83)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

2.4 Similar code points

-None-

2.5 Non-confusable code points

-None-

2.6 Resolved Issues log

-None-

3. Cross-Script Variant Analysis Devanagari – Telugu

3.1 Pending Issues

-None-

3.2 Variant code points

-None-

3.3 Identical code points but not defined as variant code points

#	Devanagari	Telugu
1	◌ः (0903)	◌ః (0C03)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

3.4 Similar code points

-None-

3.5 Non-confusable code points

-None-

3.6 Resolved Issues log

-None-

4. Cross-Script Variant Analysis Devanagari – Kannada

4.1 Pending Issues

-None-

4.2 Variant code points

-None-

4.3 Identical code points but not defined as variant code points

#	Devanagari	Kannada
1	○ः (0903)	○ಃ (0C83)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

4.4 Similar code points

-None-

4.5 Non-confusable code points

-None-

4.6 Resolved Issues log

-None-

5. Cross-Script Variant Analysis Devanagari – Malayalam

5.1 Pending Issues

-None-

5.2 Variant code points

-None-

5.3 Identical code points but not defined as variant code points

#	Devanagari	Malayalam
1	◌ः (0903)	◌ঃ (0D03)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

5.4 Similar code points

-None-

5.5 Non-confusable code points

-None-

5.6 Resolved Issues log

-None-

6. Cross-Script Variant Analysis Devanagari – Sinhala

6.1 Pending Issues

-None-

6.2 Variant code points

-None-

6.3 Identical code points but not defined as variant code points

#	Devanagari	Sinhala
1	◌ः (0903)	◌ඃ (0D83)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

6.4 Similar code points

-None-

6.5 Non-confusable code points

-None-

6.6 Resolved Issues log

-None-

7. Cross-Script Variant Analysis Gujarati – Oriya

7.1 Pending Issues

-None-

7.2 Variant code points

-None-

7.3 Identical code points but not defined as variant code points

-None-

7.4 Similar code points

-None-

7.5 Non-confusable code points

#	Gujarati	Oriya	Resolution	Note
1	ધ (0A98)	ପ (0B2A)	Remove - no similar	resolved during NBGP Meeting 22 Feb 18
2	અ (0AA5)	ଥ (0B25)	Remove - no similar	resolved during NBGP Meeting 22 Feb 18
3	◌ः (0A83)	◌ଃ (0B03)	Remove - no similar	resolved during NBGP Meeting 22 Feb 18

7.6 Resolved Issues log

#	Code point/ Code point sequence pair	Detail	Resolution
1	◌ଃ (0B03) and ◌ः (0A83)	They could be confusable in the small font size. However, the character of the glyph is different. Therefore, they are not defined as variant code points	Remove from the Proposal

8. Cross-Script Variant Analysis Gujarati – Telugu

8.1 Pending Issues

-None-

8.2 Variant code points

-None-

8.3 Identical code points but not defined as variant code points

#	Gujarati	Telugu
1	◌ः (0A83)	◌ః (0C03)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

8.4 Similar code points

-None-

8.5 Non-confusable code points

-None-

8.6 Resolved Issues log

-None-

9. Cross-Script Variant Analysis Gujarati – Kannada

9.1 Pending Issues

-None-

9.2 Variant code points

-None-

9.3 Identical code points but not defined as variant code points

#	Gujarati	Kannada
1	◌ः (0A83)	◌ः (0C83)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

9.4 Similar code points

-None-

9.5 Non-confusable code points

-None-

9.6 Resolved Issues log

-None-

10.   Cross-Script Variant Analysis Gujarati – Malayalam

10.1   Pending Issues

-None-

10.2   Variant code points

-None-

10.3   Identical code points but not defined as variant code points

#	Gujarati	Malayalam
1	ः (0A83)	ः (0D03)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

10.4   Similar code points

-None-

10.5   Non-confusable code points

-None-

10.6   Resolved Issues log

-None-

11.   Cross-Script Variant Analysis Gujarati – Sinhala

11.1   Pending Issues

-None-

11.2   Variant code points

-None-

11.3   Identical code points but not defined as variant code points

#	Gujarati	Sinhala
1	◌ः (0A83)	◌ඃ (0D83)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

11.4   Similar code points

-None-

11.5   Non-confusable code points

-None-

11.6   Resolved Issues log

-None-

12.   Cross-Script Variant Analysis Oriya - Telugu

12.1   Pending Issues

-None-

12.2   Variant code points

-None-

12.3   Identical code points but not defined as variant code points

-None-

12.4   Similar code points

-None-

12.5   Non-confusable code points

#	Oriya	Telugu	Resolution	Note
1	a	౮ (0C30)	Remove - no similar	resolved during NBGP Meeting 22 Feb 18

12.6   Resolved Issues log

-None-

13. Cross-Script Variant Analysis Oriya - Kannada

13.1 Pending Issues

-None-

13.2 Variant code points

-None-

13.3 Identical code points but not defined as variant code points

-None-

13.4 Similar code points

-None-

13.5 Non-confusable code points

#	Oriya	Kannada	Resolution	Note
1	O (OB2O)	౮ (OCBO)	Remove - no similar	resolved during NBGP Meeting 22 Feb 18

13.6 Resolved Issues log

-None-

14. Cross-Script Variant Analysis Tamil – Malayalam

14.1 Pending Issues

-None-

14.2 Variant code points

#	Tamil	Malayalam	Resolution
1	ஜ (0B9C)	ജ (0D1C)	Variants
2	வ (0BB5)	വ (0D16)	Variants
3	ம (0BAE)	മ (0D25)	Variants
4	ி (0BBF)	ി (0D3F)	Variants
5	ெ (0BC6)	െ (0D46)	Variants
6	ே (0BC7)	േ (0D47)	Variants

14.3 Identical code points but not defined as variant code points

-None-

14.4 Similar code points

-None-

14.5 Non-confusable code points

#	Tamil	Malayalam	Resolution	Note
1	ஸ (0BB8)	സ (0D38)	Remove - no similar	resolved to Yellow during NBGP Meeting 19 Jan 18

14.6 Resolved Issues log

#	Code point/ Code point sequence pair	Detail	Resolution
1	் (0BCD) and ് (0D4E)	0D4E is not permitted in MSR	Remove from the Proposal

15. Cross-Script Variant Analysis Telugu – Kannada

15.1 Pending Issues

-None-

15.2 Variant code points

#	Telugu	Kannada	Resolution
1	○ం (0C02)	○ం (0C82)	Variants
2	○ః (0C03)	○ః (0C83)	Variants
3	అ (0C05)	ಅ (0C85)	Variants
4	ఆ (0C06)	ಆ (0C86)	Variants
5	ఇ (0C07)	ಇ (0C87)	Variants
6	ఈ (0C08)	ಈ (0C88)	Variants
7	ఐ (0C10)	ಐ (0C90)	Variants
8	ఒ (0C12)	ಒ (0C92)	Variants
9	ఓ (0C13)	ಓ (0C93)	Variants
10	ఔ (0C14)	ಔ (0C94)	Variants
11	ఖ (0C16)	ಖ (0C96)	Variants
12	గ (0C17)	ಗ (0C97)	Variants
13	జ (0C1C)	ಜ (0C9C)	Variants
14	ఝ (0C1D)	ಝ (0C9D)	Variants
15	ఞ (0C1E)	ಞ (0C9E)	Variants
16	ట (0C1F)	ಟ (0C9F)	Variants
17	ఠ (0C20)	ಠ (0CA0)	Variants
18	డ (0C21)	ಡ (0CA1)	Variants
19	ఢ (0C22)	ಢ (0CA2)	Variants
20	ణ (0C23)	ಣ (0CA3)	Variants
21	థ (0C25)	ಥ (0CA5)	Variants
22	ద (0C26)	ದ (0CA6)	Variants
23	ధ (0C27)	ಧ (0CA7)	Variants
24	న (0C28)	ನ (0CA8)	Variants
25	బ (0C2C)	ಬ (0CAC)	Variants
26	భ (0C2D)	ಭ (0CAD)	Variants

#	Telugu	Kannada	Resolution
27	మ (0C2E)	ಮ (0CAE)	Variants
28	య (0C2F)	ಯ (0CAF)	Variants
29	ర (0C30)	ರ (0CB0)	Variants
30	ల (0C32)	ಲ (0CB2)	Variants
31	ళ (0C33)	ಳ (0CB3)	Variants
32	ి (0C3F)	೿ (0CBF)	Variants
33	ు (0C41)	ು (0CC1)	Variants
34	ృ (0C43)	ೃ (0CC3)	Variants

15.3   Identical code points but not defined as variant code points
-None-

15.4   Similar code points
-None-

15.5   Non-confusable code points
-None-

15.6   Resolved Issues log
s-None-

16.   Cross-Script Variant Analysis Telugu – Malayalam

16.1   Pending Issues

-None-

16.2   Variant code points

-None-

16.3   Identical code points but not defined as variant code points

#	Telugu	Malayalam
1	⃝ം (0C02)	⃝ം (0D02)
2	⃝ः (0C03)	⃝ः (0D03)

They are identical but as there is not enough number of other variant codes point to form two labels
with each script that look the same. Therefore, these are not defined as variant code points.

16.4   Similar code points

-None-

16.5   Non-confusable code points

-None-

16.6   Resolved Issues log

-None-

17.   Cross-Script Variant Analysis Telugu – Sinhala

17.1   Pending Issues

-None-

17.2   Variant code points

-None-

17.3   Identical code points but not defined as variant code points

#	Telugu	Sinhala
1	○ం (0C02)	○ං (0D82)
2	○ః (0C03)	○ඃ (0D83)
3	ర (0C30)	ර් (0DBB+0DCA)

The pair 0C02-0D82 and 0C03-0D83 are almost identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. In Sinhala draft proposal, 0D82 and 0D83 cannot follow 0D88+0DCA. Therefore, these are not defined as variant code points.

17.4   Similar code points

-None-

17.5   Non-confusable code points

-None-

17.6   Resolved Issues log

-None-

18.   Cross-Script Variant Analysis Kannada – Malayalam

18.1   Pending Issues

-None-

18.2   Variant code points

-None-

18.3   Identical code points but not defined as variant code points

#	Kannada	Malayalam
1	ಂ (0C82)	ം (0D02)
2	ಃ (0C83)	ഃ (0D03)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

18.4   Similar code points

-None-

18.5   Non-confusable code points

-None-

18.6   Resolved Issues log

-None-

19. Cross-Script Variant Analysis Kannada – Sinhala

19.1 Pending Issues

-None-

19.2 Variant code points

-None-

19.3 Identical code points but not defined as variant code points

#	Kannada	Sinhala
1	ಂ (0C82)	ං (0D82)
2	ಃ (0C83)	ඃ (0D83)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

19.4 Similar code points

-None-

19.5 Non-confusable code points

-None-

19.6 Resolved Issues log

-None-

20.   Cross-Script Variant Analysis Malayalam – Sinhala

20.1   Pending Issues

-None-

20.2   Variant code points

-None-

20.3   Identical code points but not defined as variant code points

#	Malayalam	Sinhala
1	○ം (0D02)	○ං (0D82)
2	○ഃ (0D03)	○ඃ (0D83)

They are identical but as there is not enough number of other variant codes point to form two labels with each script that look the same. Therefore, these are not defined as variant code points.

20.4   Similar code points

-None-

20.5   Non-confusable code points

-None-

20.6   Resolved Issues log

-None-