

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

Doc Type: Working Group Document**Title: Proposal to encode additional Unified Canadian Aboriginal Syllabics in the UCS****Source: UC Berkeley Script Encoding Initiative (Universal Scripts Project)****Authors: Michael Everson and Chris Harvey****Status: Individual Contribution****Action: For consideration by JTC1/SC2/WG2 and UTC****Date: 2008-10-06**

1. Summary. This document requests 43 additional characters to be added to the UCS and contains the proposal summary form.

2. Additions for Moose Cree.

ᐃ̇ /oj/	18B0	CANADIAN SYLLABICS OY	(fig. 3)
ᐃ̇ /aj/	18B1	CANADIAN SYLLABICS AY	(fig. 1)
ᐃ̇ /a:j/	18B2	CANADIAN SYLLABICS AAY	(fig. 2)
ᐃ̇ /waj/	18B3	CANADIAN SYLLABICS WAY	(fig. 4)
ᐃ̇ /poj/	18B4	CANADIAN SYLLABICS POY	(fig. 3)
ᐃ̇ /paj/	18B5	CANADIAN SYLLABICS PAY	(fig. 3)
ᐃ̇ /p ^w oj/	18B6	CANADIAN SYLLABICS PWOY	(fig. 3)
ᐃ̇ /taj/	18B7	CANADIAN SYLLABICS TAY	(fig. 3)
ᐃ̇ /kaj/	18B8	CANADIAN SYLLABICS KAY	(fig. 6)
ᐃ̇ /k ^w aj/	18B9	CANADIAN SYLLABICS KWAY	σδ"ᐃ̇ <i>nikohtaskway</i>
ᐃ̇ /maj/	18BA	CANADIAN SYLLABICS MAY	ᐃ̇ᐃ̇ <i>miyāmay</i>
ᐃ̇ /noj/	18BB	CANADIAN SYLLABICS NOY	"ᐃ̇ <i>hanoy</i>
ᐃ̇ /naj/	18BC	CANADIAN SYLLABICS NAY	ᐃ̇ᐃ̇ <i>ošikwanay</i>
ᐃ̇ /laj/	18BD	CANADIAN SYLLABICS LAY	(fig. 5)
ᐃ̇ /soj/	18BE	CANADIAN SYLLABICS SOY	(fig. 3)
ᐃ̇ /saj/	18BF	CANADIAN SYLLABICS SAY	(fig. 3)
ᐃ̇ /foj/	18C0	CANADIAN SYLLABICS SHOY	(fig. 3)
ᐃ̇ /faj/	18C1	CANADIAN SYLLABICS SHAY	(fig. 3)
ᐃ̇ /f ^w oj/	18C2	CANADIAN SYLLABICS SHWOY	ᐃ̇ᐃ̇ <i>apašwoy</i>
ᐃ̇ /joj/	18C3	CANADIAN SYLLABICS YOY	(fig. 3)
ᐃ̇ /jaj/	18C4	CANADIAN SYLLABICS YAY	(fig. 3)
ᐃ̇ /raj/	18C5	CANADIAN SYLLABICS RAY	(fig. 7)

Moose Cree uses a ring above to indicate that a syllable ends in -y. The UCS currently encodes 11 of these characters which are also used in Inuktitut; 22 additional characters are proposed here for Moose Cree. For several of these we do not have textual examples, but can provide citations: ᐃ̇ /maj/ in Plains Cree ᐃ̇ᐃ̇ *miyāmay* ‘no doubt’; ᐃ̇ /noj/ in Moose Cree "ᐃ̇ *hanoy* ‘Hanoi’; ᐃ̇ /naj/ in ᐃ̇ᐃ̇ *ošikwanay* ‘wigwam pole’; ᐃ̇ /f^woj/ in Moose Cree ᐃ̇ᐃ̇ *apašwoy* ‘fish tail’; ᐃ̇ /k^waj/ in Moose Cree σδ"ᐃ̇ *nikohtaskway* ‘my throat’.

3. Additions for Beaver Dene.

ᐃ /lje/	18C6	CANADIAN SYLLABICS R-CREE RWE	(fig. 13)
ᐅ /laj/	18C8	CANADIAN SYLLABICS WEST-CREE LAA	(fig. 8, 10, 11)
ᐇ /tje/	18C9	CANADIAN SYLLABICS THWE	(fig. 8, 10)
ᐈ /tja/	18CA	CANADIAN SYLLABICS THWA	(fig. 10)
ᐉ /hje/	18CB	CANADIAN SYLLABICS TTHWE	(fig. 13)
ᐊ /haj/	18CD	CANADIAN SYLLABICS TTHAA	(figs. 9, 10, 11)
ᐋ /tlje/	18CE	CANADIAN SYLLABICS TLHWE	(fig. 11)
ᐌ /zje/	18D0	CANADIAN SYLLABICS SAYISI SHWE	(fig. 9)
ᐍ /gje/	18D2	CANADIAN SYLLABICS SAYISI HWE	
ᐎ /tfje/	18D4	CANADIAN SYLLABICS CARRIER GWU	(fig. 8)
ᐏ /tfaj/	18D6	CANADIAN SYLLABICS CARRIER GAA	(fig. 12)
ᐐ /tsaj/	18D8	CANADIAN SYLLABICS CARRIER JUU	
ᐑ /tsje/	18DA	CANADIAN SYLLABICS CARRIER JWA	(fig. 8)

There are 3 diphthongized (dot-above) characters required for Beaver Dene, and 7 letters with a palatal glide modified by a dot-after diacritic: 13 characters are proposed here for Beaver Dene. We have not found an example of ᐍ /gje/ or of ᐐ /tsaj/, but the syllables surely occur. (Syllabaries are by nature systematic; it would be easy to propose characters just to fill in blanks in a grid. In N3437 for instance 39 characters were proposed for Moose Cree to fill out the grid but only 22 are proposed here. The case for Beaver Dene *gye* and *tsay* is linguistically more sound than that which could have been made for Moose Cree. We leave it to WG2 and the UTC to determine whether these two characters should be encoded at this time or not.)

4. Addition for Hare Dene.

1 character is proposed here for Hare Dene.

ᐓ /fja/	18D7	CANADIAN SYLLABICS CARRIER GWA	(fig. 14)
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5. Additions for Chipewyan Dene.

ᐣ /lu/	18C7	CANADIAN SYLLABICS WEST-CREE LOO	(fig. 15)
ᐤ /t ^h u/	18CC	CANADIAN SYLLABICS TTHOO	(fig. 15)
ᐥ /t ^h u/	18CF	CANADIAN SYLLABICS TLHOO	(fig. 15)
ᐦ /fu/	18D1	CANADIAN SYLLABICS SAYISI SHOO	(fig. 15)
ᐧ /gu/	18D3	CANADIAN SYLLABICS SAYISI HOO	(fig. 15)
ᐨ /t ^h u/	18D5	CANADIAN SYLLABICS CARRIER DENE GEE	(fig. 15)
ᐩ /tsu/	18D9	CANADIAN SYLLABICS SAYISI JUU	(fig. 15)

These characters have a dot-above diacritic which changes the syllable vowel from /o/ to /u/: 7 characters are proposed here for Chipewyan Dene.

6. Character naming convention. A robust convention for naming UCAS characters in the UCS exists, though it has not previously been described. Perhaps the text given here could be used in the block description for Canadian Syllabics in the Unicode Standard.

The naming convention for Canadian Syllabics treats groups of characters, which are distinguished by rotation and/or the addition of rings, dots, or other marks, as “classes”. The L-class, for example, comprises ᐃ /le/, ᐅ /li/, ᐇ /lo/, ᐈ /la/, ᐉ /l/, with the additional ᐊ /la:j/, ᐋ /li:/, ᐌ /lo:/, ᐍ /la:/, ᐎ /lwe/, ᐏ /lwe/, ᐐ /lwi/, ᐑ /lwi/, ᐒ /lwi:/, ᐓ /lwo/, ᐔ /lwo/, ᐕ /lwo:/, ᐖ /lwa/, ᐗ /lwa/, ᐘ /lwa:/, ᐙ /lwa:/. The dot above diacritic is represented by doubling the base vowel: ᐇ LO, ᐈ LOO; the dot before or behind is represented by a -w-: ᐇ

LWO, ɔ̣ LWO. A new class, the LH-class, was historically derived from the L-class: ɛ̣ /ɬi/, ɔ̣ /ɬo/, ɛ̣ /ɬa/, ɛ̣ /ɬi:/, ɔ̣ /ɬo:/, ɛ̣ /ɬa:/ (these names are conventional; Inuktitut is (so far) the only language which uses this series, and pronounces ɔ̣ as /ɬu/ and ɔ̣ as /ɬu:/. Where a unique class begins the same consonant as another class, a language identifier is used to distinguish this class from the other. The SAYISI SH-class comprises ɔ̣ /ʃe/, ɔ̣ /ʃi/, ɔ̣ /ʃo/, ɔ̣ /ʃa/. In the present proposal two characters are being added to the SAYISI SH-class: ɔ̣ /zje/ used in Beaver Dene and ɔ̣ /ʃu/ used in Chipewyan Dene. Applying the regular naming conventions yields ɔ̣ SAYISI SHWE (dot-after adds a -w-), and ɔ̣ SAYISI SHOO (dot-above doubles the vowel letter).

Other languages use letters of these classes with different values. For instance, the C-class ɔ̣ /tʃe/ ɔ̣ /tʃi/, ɔ̣ /tʃo/, ɔ̣ /tʃa/ is used in Inuktitut for g /ɣaj ɣi ɣu ɣa/. Similarly, the CARRIER G-class is used for Dene /tʃ/; the CARRIER J-class is used for Dene /ts/. Accordingly, the use of the word CARRIER in a name does not imply that it is used in the Carrier language itself, but merely that the character is a member of a particular class. The dot-after in precomposition typically indicates labialization, as in ɔ̣ NA, ɔ̣ WEST-CREE NWA; since ɔ̣ is CARRIER GU, when the dot is added the name is conventionally derived as ɔ̣ CARRIER GWU, although the character is used for Beaver Dene /tsje/. The dot-above in precomposition typically indicates length, as in ɔ̣ NA, ɔ̣ NAA; since ɔ̣ is SAYISI HO, when the dot is added the name is conventionally derived as ɔ̣ SAYISI HOO, although the character is used for Chipewyan Dene /gu/. This naming convention permits users of the standard to more readily identify members of a class.

7. Unicode Character Properties.

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18B0;CANADIAN SYLLABICS OY;Lo;0;L;;;;N;;;;;
18B1;CANADIAN SYLLABICS AY;Lo;0;L;;;;N;;;;;
18B2;CANADIAN SYLLABICS AAY;Lo;0;L;;;;N;;;;;
18B3;CANADIAN SYLLABICS WAY;Lo;0;L;;;;N;;;;;
18B4;CANADIAN SYLLABICS POY;Lo;0;L;;;;N;;;;;
18B5;CANADIAN SYLLABICS PAY;Lo;0;L;;;;N;;;;;
18B6;CANADIAN SYLLABICS PWOY;Lo;0;L;;;;N;;;;;
18B7;CANADIAN SYLLABICS TAY;Lo;0;L;;;;N;;;;;
18B8;CANADIAN SYLLABICS KAY;Lo;0;L;;;;N;;;;;
18B9;CANADIAN SYLLABICS KWAY;Lo;0;L;;;;N;;;;;
18BA;CANADIAN SYLLABICS MAY;Lo;0;L;;;;N;;;;;
18BB;CANADIAN SYLLABICS NOY;Lo;0;L;;;;N;;;;;
18BC;CANADIAN SYLLABICS NAY;Lo;0;L;;;;N;;;;;
18BD;CANADIAN SYLLABICS LAY;Lo;0;L;;;;N;;;;;
18BE;CANADIAN SYLLABICS SOY;Lo;0;L;;;;N;;;;;
18BF;CANADIAN SYLLABICS SAY;Lo;0;L;;;;N;;;;;
18C0;CANADIAN SYLLABICS SHOY;Lo;0;L;;;;N;;;;;
18C1;CANADIAN SYLLABICS SHAY;Lo;0;L;;;;N;;;;;
18C2;CANADIAN SYLLABICS SHWOY;Lo;0;L;;;;N;;;;;
18C3;CANADIAN SYLLABICS YOY;Lo;0;L;;;;N;;;;;
18C4;CANADIAN SYLLABICS YAY;Lo;0;L;;;;N;;;;;
18C5;CANADIAN SYLLABICS RAY;Lo;0;L;;;;N;;;;;
18C6;CANADIAN SYLLABICS R-CREE RWE;Lo;0;L;;;;N;;;;;
18C7;CANADIAN SYLLABICS WEST-CREE LOO;Lo;0;L;;;;N;;;;;
18C8;CANADIAN SYLLABICS WEST-CREE LAA;Lo;0;L;;;;N;;;;;
18C9;CANADIAN SYLLABICS THWE;Lo;0;L;;;;N;;;;;
18CA;CANADIAN SYLLABICS THWA;Lo;0;L;;;;N;;;;;
18CB;CANADIAN SYLLABICS TTHWE;Lo;0;L;;;;N;;;;;
18CC;CANADIAN SYLLABICS TTHOO;Lo;0;L;;;;N;;;;;
18CD;CANADIAN SYLLABICS TTHAA;Lo;0;L;;;;N;;;;;
18CE;CANADIAN SYLLABICS TLHWE;Lo;0;L;;;;N;;;;;
18CF;CANADIAN SYLLABICS TLHOO;Lo;0;L;;;;N;;;;;
18D0;CANADIAN SYLLABICS SAYISI SHWE;Lo;0;L;;;;N;;;;;
18D1;CANADIAN SYLLABICS SAYISI SHOO;Lo;0;L;;;;N;;;;;
18D2;CANADIAN SYLLABICS SAYISI HWE;Lo;0;L;;;;N;;;;;
18D3;CANADIAN SYLLABICS SAYISI HOO;Lo;0;L;;;;N;;;;;
18D4;CANADIAN SYLLABICS CARRIER GWU;Lo;0;L;;;;N;;;;;
18D5;CANADIAN SYLLABICS CARRIER DENE GEE;Lo;0;L;;;;N;;;;;
18D6;CANADIAN SYLLABICS CARRIER GAA;Lo;0;L;;;;N;;;;;
18D7;CANADIAN SYLLABICS CARRIER GWA;Lo;0;L;;;;N;;;;;
18D8;CANADIAN SYLLABICS CARRIER JUU;Lo;0;L;;;;N;;;;;
18D9;CANADIAN SYLLABICS SAYISI JUU;Lo;0;L;;;;N;;;;;
18DA;CANADIAN SYLLABICS CARRIER JWA;Lo;0;L;;;;N;;;;;
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





























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	18B	18C	18D	18E	18F
0	 18B0	 18C0	 18D0		
1	 18B1	 18C1	 18D1		
2	 18B2	 18C2	 18D2		
3	 18B3	 18C3	 18D3		
4	 18B4	 18C4	 18D4		
5	 18B5	 18C5	 18D5		
6	 18B6	 18C6	 18D6		
7	 18B7	 18C7	 18D7		
8	 18B8	 18C8	 18D8		
9	 18B9	 18C9	 18D9		
A	 18BA	 18CA	 18DA		
B	 18BB	 18CB			
C	 18BC	 18CC			
D	 18BD	 18CD			
E	 18BE	 18CE			
F	 18BF	 18CF			

Additions for Moose Cree

18B0	ᐃ	CANADIAN SYLLABICS OY
18B1	ᐊ	CANADIAN SYLLABICS AY
18B2	ᐋ	CANADIAN SYLLABICS AAY
18B3	ᐌ	CANADIAN SYLLABICS WAY
18B4	ᐍ	CANADIAN SYLLABICS POY
18B5	ᐎ	CANADIAN SYLLABICS PAY
18B6	ᐏ	CANADIAN SYLLABICS PWOY
18B7	ᐐ	CANADIAN SYLLABICS TAY
18B8	ᐑ	CANADIAN SYLLABICS KAY
18B9	ᐒ	CANADIAN SYLLABICS KWAY
18BA	ᐓ	CANADIAN SYLLABICS MAY
18BB	ᐔ	CANADIAN SYLLABICS NOY
18BC	ᐕ	CANADIAN SYLLABICS NAY
18BD	ᐖ	CANADIAN SYLLABICS LAY
18BE	ᐗ	CANADIAN SYLLABICS SOY
18BF	ᐘ	CANADIAN SYLLABICS SAY
18C0	ᐙ	CANADIAN SYLLABICS SHOY
18C1	ᐚ	CANADIAN SYLLABICS SHAY
18C2	ᐛ	CANADIAN SYLLABICS SHWOY
18C3	ᐜ	CANADIAN SYLLABICS YOY
18C4	ᐝ	CANADIAN SYLLABICS YAY
18C5	ᐞ	CANADIAN SYLLABICS RAY

Additions for Beaver Dene, Hare Dene, and Chipewyan Dene

18C6	ᐟ	CANADIAN SYLLABICS R-CREE RWE Beaver Dene (LYE)
18C7	ᐠ	CANADIAN SYLLABICS WEST-CREE LOO Chipewyan Dene (LU)
18C8	ᐡ	CANADIAN SYLLABICS WEST-CREE LAA Beaver Dene (LAI)
18C9	ᐢ	CANADIAN SYLLABICS THWE Beaver Dene (TYE)
18CA	ᐣ	CANADIAN SYLLABICS THWA Beaver Dene (TYA)
18CB	ᐤ	CANADIAN SYLLABICS TTHWE Beaver Dene (HYE)
18CC	ᐥ	CANADIAN SYLLABICS TTHOO Chipewyan Dene (TTHU)
18CD	ᐦ	CANADIAN SYLLABICS TTHAA Beaver Dene (HAI)
18CE	ᐧ	CANADIAN SYLLABICS TLHWE Beaver Dene (TLYE)
18CF	ᐨ	CANADIAN SYLLABICS TLHOO Chipewyan Dene (TLU)
18D0	ᐩ	CANADIAN SYLLABICS SAYISI SHWE Beaver Dene (ZYE)
18D1	ᐪ	CANADIAN SYLLABICS SAYISI SHOO Chipewyan Dene (SHU)
18D2	ᐫ	CANADIAN SYLLABICS SAYISI HWE Chipewyan Dene (GWE), Beaver Dene (GYE)
18D3	ᐬ	CANADIAN SYLLABICS SAYISI HOO Chipewyan Dene (GU)
18D4	ᐭ	CANADIAN SYLLABICS CARRIER GWU Beaver Dene (CHYE)
18D5	ᐮ	CANADIAN SYLLABICS CARRIER DENE GEE Chipewyan Dene (CHU)

18D6	ᐯ	CANADIAN SYLLABICS CARRIER GAA Beaver Dene (CHAI)
18D7	ᐰ	CANADIAN SYLLABICS CARRIER GWA Hare Dene (SHYA)
18D8	ᐱ	CANADIAN SYLLABICS CARRIER JUU Beaver Dene (TSAI)
18D9	ᐲ	CANADIAN SYLLABICS SAYISI JUU Chipewyan Dene (TSU)
18DA	ᐳ	CANADIAN SYLLABICS CARRIER JWA Beaver Dene (TSYE)

Figures.

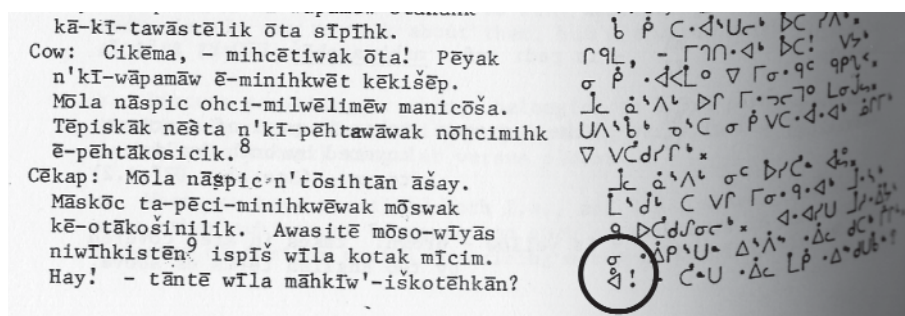


Figure 1. Sample in Moose Cree from Ellis 2000a, showing Canadian Syllabics AY in 'hay!'.

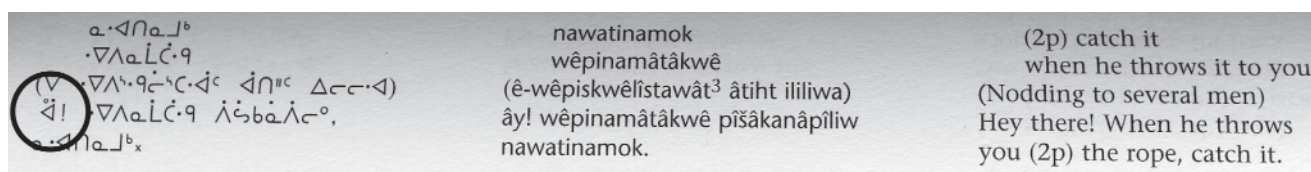


Figure 2. Sample in Moose Cree from Ellis 2000b, showing Canadian Syllabics AAY in 'ay!' 'hey there!'.

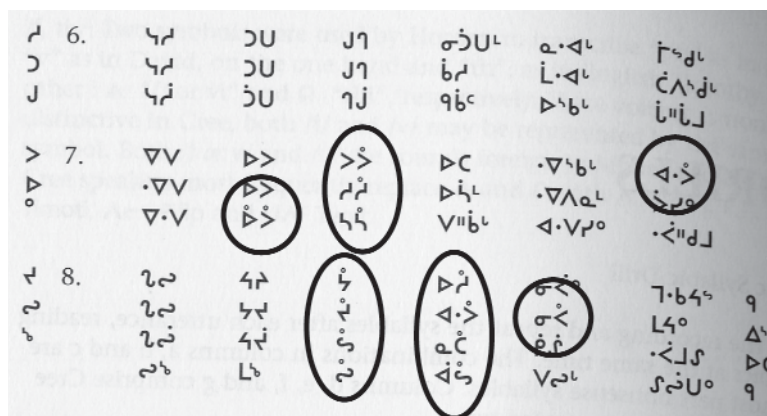


Figure 3. Sample in Moose Cree from Ellis 2000a, showing Canadian Syllabics OY, POY, SOY, SAY, YAY, YOY, SHAY, SHOY, PWOY, PAY, TAY, in *oyoy*, *popoy*, *sosoy*, *sasay*, *yay*, *yoy*, *šay*, *šoy*, *apwoy*, *nipay*, *natay*.

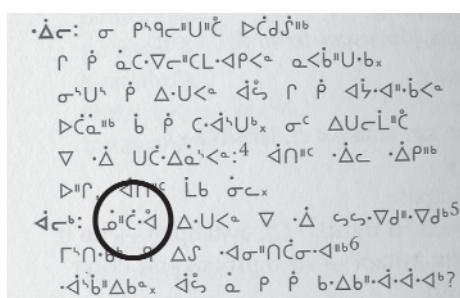


Figure 4. Sample in Moose Cree from Ellis 2000b, showing Canadian Syllabics WAY in 'nōstāway' 'my father'.

Cim:	olaysinimiwāw *	NI	their licence	▷ 2'σΓ·Δ°
	'ci-wI-kakwē-ayācik		that they-should-try-to-get-it	Γ·Δ° b·q Δ'Γ°
	n'kI-wIhtamawāwak	TA	I told them	σ β ΔCL·Δ·Δ° Γ·Δ° b·q
	N'kI-wIhtamawāwak 'ci-wI-kakwē-ayācik		I told them they should try to get their	Δ'Γ° ▷ 2'σΓ·Δ·Δ° ▷ P<D·V'·Δ° ▷ Γ°
	olasinimiwāwa okipahowēsiwa ohci.		licences from the Mountie.	Δ'Γ° Δ'Γ° Δ'Γ° Δ'Γ°

Figure 5. Sample in Moose Cree from Ellis 2000a, showing ˙ CANADIAN SYLLABICS LAY in the loanword ▷ 2'σΓ·Δ·Δ° *olaysinimiwāwa* ‘their licences’.

Doctor:	opIwāpiskom	NI	his "temperature" (lit. <u>metal</u>)	▷ Δ·Δ'·Δ°
	otinam		(U) take it (rel.)	▷ Nq·
	pēci-pIhtokah...ēw	TA	he brings him in	VΓ Δ'Δ° V
	pēci-pIhtokay		(U) bring him in	VΓ Δ'Δ°
	Pēci-pIhtokay, otinam māka		Bring him in and take his temperature.	VΓ Δ'Δ° ▷ Nq· Δ·Δ'·Δ°
	opIwāpiskom.			
Nurse:	Apišīš kikisison.		U have a bit of a temperature.	Δ'Δ' P P'Γ°
Doctor:	ospitonihk	NI ds loc.	in his arm	▷ Δ'Δ°
	otēhi	NI ds	his heart	▷ UΔ
	otēhiy...āpiy	NI	his heart-line (artery)	▷ UΔ'Δ°
	kotinam		(U) test it by hand (relative)	▷ Nq·
	Kotinam otēhiyāpiy ospitonihk.		Check his pulse.	▷ Nq· ▷ UΔ'Δ° ▷ Δ'Δ°

Figure 6. Sample in Moose Cree from Ellis 2000a, showing ˆ CANADIAN SYLLABICS KAY in VΓ Δ'Δ° *pēci-pIhtokay* ‘bring him in’.

Δ'Δ'Γ°Δ' P'Γ·Δ'·Δ' Δ'Δ'Δ'Δ'
 Δ'Δ'Γ°Δ'Δ'Δ'
 ▷ P'Γ·Δ', P'Δ'Δ'Δ'Γ'Δ' Δ'P'Γ·Δ' Δ'Δ'
 Δ'Δ'Γ°Δ'Δ'Δ' P'Γ·V'Γ·Δ'Δ'; Δ'Δ' Δ'Δ'
 Δ'Δ' Δ'Δ'Δ' Γ'Δ' P'Γ·Δ'U·Δ'Δ' Δ'Δ' Δ'Δ'
 Δ'Δ'Δ'Δ'; P'Γ·Δ'Δ'Δ'Δ'Γ'Δ' Δ'Δ' P'Γ·Δ'Δ'Δ'
 Δ'Δ'Δ'Δ'; Δ'Δ' Δ'Γ' Δ'Δ' Δ'Δ' Δ'Δ'Δ'Δ'·
 Δ'Δ' * Δ'Δ'

Figure 7. Sample from the Book of Common Prayer in Moose Cree (Hordon 1853), showing ˆ CANADIAN SYLLABICS RAY in Δ'Δ'Δ' *krayst* ‘Christ’.

Supplementary Syllabarium.

ǃ pronounced as the English word *eye*.
 ǃ high.
 ǂ " " " " lie.
 ǁ " " " " my.
 ǀ " " " " sigh.
 Ǆ " " " " tie.

ǃ pronounced as *ky* in the English word *sky*.
 ǃ kya. ǃ kye.
 ǃ tgha. ǃ tghē.
 ǃ tya. ǃ tye. ǃ tyi.
 ǃ kha. ǃ khe. ǃ khi. ǃ kho.
 ǃ hla. ǃ hle. ǃ hli. ǃ hlo.
 ǃ kwa. ǃ kwe. ǃ kwi. ǃ kwo.

The following are the other signs used, viz. :

X, for the word Christ.
 ' , necessary in writing such names as Peter,
 Mary, Herod, &c.
 ' , the acute accent.

24 ב"צ זינגט און שרייבט, ער איז דא דעם צייט: דא אים געקומען דא צו לייענען
 און געדענקט; ב"צ לייענט דעם געשליסענעם פארשטייט זיך.

11 ב"ב פ"ד ה"ה, דל"ד דל"ד דל"ד דל"ד. דל"ד, דל"ד 3 לב"פ"ד
דל"ד דל"ד, דל"ד דל"ד *
12 דל"ד 3 דל"ד דל"ד. דל"ד לב"פ"ד דל"ד דל"ד, דל"ד דל"ד *
13 דל"ד לב"ב פ"ד ה"ה דל"ד דל"ד דל"ד: דל"ד דל"ד. דל"ד דל"ד.
דל"ד דל"ד *

10

ବିଜ୍ଞାନର ଗନ୍ତବ୍ୟ

- [illegible]

Figure 13. Sample showing \mathfrak{U} CANADIAN SYLLABICS R-CREE RWE in $\triangleright' \mathfrak{N} \mathfrak{U}' \mathfrak{S}$ *oghilyélo* and \mathfrak{U} CANADIAN SYLLABICS TTHWE in $\mathfrak{S} \mathfrak{E} \sigma \mathfrak{U}'' \mathfrak{N}$ *sačanihyehti*.

ᑭᑭᑦᑎᑦᑭᑦ ᑦᑦᑦᑦᑦ ᑭᑭ ᑭᑭᑦᑦᑦ; ᑭᑭᑦᑦᑦ ᑭᑭᑦᑦᑦ
 Kkwimpe tay t'utsie tay ta-t'n taye'o; yadezen. Tatsan
 ᑦᑦᑦᑦ: ᑭᑭᑦᑦᑦ ᑭᑭᑦᑦᑦ ᑭᑭᑦᑦᑦ? ᑭᑭᑦᑦᑦ ᑭᑭᑦᑦᑦ
 ensin nazekfwi yekpa tek'inte? adi. Eyitta 'ub
 ᑭᑭᑦᑦᑦ ᑭᑭᑦᑦᑦᑦᑦᑦ ᑭᑭᑦᑦᑦ ᑭᑭᑦᑦᑦ ᑭᑭᑦᑦᑦ ᑭᑭᑦᑦᑦ
 bekfwi tadarinkkaw bekfwi deka adja sip.

Figure 14. Sample showing \in CANADIAN SYLLABICS CARRIER GWA in $\triangleleft' \in$ *adja*.

Syllabartum.						
INITIALS.	a	e	i	o	u	FINALS.
	◁	▽	△	▷	▷̇	◁wa, ▽we
b	◁̇	▽̇	△̇	▷̇	▷̇̇	◁wi, ▷̇wo
ch	◻	◻	◻	◻	◻̇	+ i
d	◻	◻	◻	◻	◻̇	◻ d
g	◻	◻	◻	◻	◻̇̇	◻ g
k	◻	◻	◻	◻	◻̇̇̇	◻ k
kl	◻	◻	◻	◻	◻̇̇̇̇	◻ r
l	◻	◻	◻	◻	◻̇̇̇̇̇	◻ l
m	◻	◻	◻	◻	◻̇̇̇̇̇̇	◻ m
n	◻	◻	◻	◻	◻̇̇̇̇̇̇̇	◻ n
s	◻	◻	◻	◻	◻̇̇̇̇̇̇̇̇	◻ s
sl	◻	◻	◻	◻	◻̇̇̇̇̇̇̇̇̇	
t	◻	◻	◻	◻	◻̇̇̇̇̇̇̇̇̇̇	◻ t
th	◻	◻	◻	◻	◻̇̇̇̇̇̇̇̇̇̇̇	◻ th
tth	◻	◻	◻	◻	◻̇̇̇̇̇̇̇̇̇̇̇̇	◻ accent
tz	◻	◻	◻	◻	◻̇̇̇̇̇̇̇̇̇̇̇̇̇	X Christ
y	◻	◻	◻	◻	◻̇̇̇̇̇̇̇̇̇̇̇̇̇̇	

Figure 15. Sample in Chipewyan showing ̃ CANADIAN SYLLABICS CARRIER DENE GEE as Chipewyan ̃ ču,
 ̣ CANADIAN SYLLABICS SAYISI HOO as Chipewyan ̣ gu,
 ̤ CANADIAN SYLLABICS TLHOO as Chipewyan ̤ tlu,
 ̥ CANADIAN SYLLABICS WEST-CREE LOO as Chipewyan ̥ lu,
 ̦ CANADIAN SYLLABICS SAYISI SHOO as Chipewyan ̦ šu, ̧ CANADIAN SYLLABICS TTHOO ̧ tθu,
 and ̨ CANADIAN SYLLABICS SAYISI JUU as Chipewyan ̨ tsu.

A. Administrative

1. Title

Proposal to encode additional Unified Canadian Aboriginal Syllabics in the UCS

2. Requester's name

UC Berkeley Script Encoding Initiative (Universal Scripts Project); authors: Michael Everson and Chris Harvey

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

Liaison contribution.

4. Submission date

2008-10-06

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

Yes.

6b. More information will be provided later

No.

B. Technical – General

1. Choose one of the following:

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

No.

1b. Proposed name of script

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

Yes and No.

1d. Name of the existing block

Unified Canadian Aboriginal Syllabics Extended-C

2. Number of characters in proposal

43.

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, Fontographer.

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?

Chris Harvey has worked in partnership with the First Nations' University, one of the northern Saskatchewan Cree Education boards, and a Plains Cree community in Alberta. He also consulted and received guidance from the Dene language centre in the North West Territories.

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 in Canada.

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 Canada.

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, accordance with the Roadmap, and to keep these with the other Syllabics characters which are in the BMP.

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

No.

8a. Can any of the proposed characters be considered a presentation form of an existing character or character sequence?

No, since they conform to the unification model for Canadian Syllabics.

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?