

Title: Summary of the Revised User's Agreement Related to Phags-pa Script

Source: China National Information Technology Standardization Technical Committee.,
Mongolian Agency for Standardization & Metrology

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A Users' Agreement Related to Phags-pa Script

At the China-Mongolia Meeting held in Hohhot, China on March 31 – April 2, 2004, on the Encoding of the Phags-pa Script, experts of both sides consider it necessary to stipulate *A Users' Agreement Related to Phags-pa Script* in order to standardize certain technical details in the use of the Phags-pa encoding which are not included in the *UCS*, and at the second China-Mongolia Meeting held in Changsha, China on October 24 – 25, 2004, on the Encoding of the Phags-pa Script, experts of both sides revised it again.

The present Agreement includes: (I) General Principle for the Encoding of Phags-pa Script; (II) Nominal Glyphs and Their Names in the Phags-pa Script; (III) Variant Presentation Glyphs and Their Names in Phags-pa Script; and (IV) The Reference Table.

I General Principle for the Encoding of Phags-pa Script

(1) **Method of Encoding:** The majority of letters in Phags-pa writing have their respective “variant presentation forms”, the only difference being that some letters have relatively more variant presentation forms, others have fewer. So, according to relevant regulations in the *UCS*, a method called “nominal glyph” should be used to encode the Phags-pa script, i.e., at first, we have to divide each letter in Phags-pa script into “nominal glyph” and “variant presentation glyph”, and then to encode each “nominal glyph.” At the same time, we have to prepare “a variant presentation glyph set” and “regulations on the use of control symbol”.

(2) **Nominal Glyph:** According to the *UCS*, the “nominal glyph” is a glyph “to be used to denote, transmit, exchange, handle, input and present the written forms as well as additional signs of

various languages". The majority of Phags-pa letters have a few variants for one and the same sound, from which one should be chosen as its "nominal glyph". It is above all the isolate form of a letter which is chosen, or, in the case of there being a few isolate forms, the one which appears the most frequently is to be chosen.

(a) Each of the letters ༀ A840, ༆ A841, ༇ A842, ༉ A844 and ་ A84B has only one isolate form, which is naturally chosen as its nominal glyph.

(b) Letters like ༌ A853 and ། A85F have each two isolate forms ༌ ༌ and ། །. Out of which we choose as nominal glyphs ༌ and ། which have a high frequency of appearance, ༌ and ། should be free variants of ༌ A853 and ། A85F.

(c) The three letters ༎ A866, ༏ A867 and ༐ A868 have no isolate forms, so we adopt forms ༎, ༏ and ༐ which appear the most frequently.

(d) ༑ A869, 'OE' and ༒ A86A 'UE' are two indispensable basic vowels in the Mongolian

language. Although their variant presentation glyphs are "compound letters" each consisting of two or three "lexeme", they are regarded in numerous academic monographs

(e.g., N. Poppe, 1941,1957; B.Rinchen, 1956; L.Ligeti, 1964,1972; D.Čojjilsüreng, 1974;

Č. Šagdarsüreng, 1981, 2001; B. Bulag, 1983; Bao Xiang, 1984; A. Damdinsüreng, 1985,

Tulgaguri, 1998; Y. Jančiw, 2002 et al) as compound yet isolate letters listed in their

respective alphabet. Other scholars who have not included these two letters in alphabet,

also say that "sometimes a double letter is used to represent one sound". The forms of the

two vowel letters ༑ and ༒ in the Phags-pa system are based on the forms that represent

the two vowel letters in Mongolian writing. The sounds they mark are not the mere

combinations of their original glyphs A+E+O and A+E+U, instead what they mark are two

other simple sounds ö and ü which have nothing to do with them. It is very much like the

letter ༔ A864 of N2719. Therefore, it is necessary, like the handling of the letter

༔, to distinguish them as two independent vowel letters instead of anything like

"compound vowels" even in terms of information treatment; if not, these two vowel letters





which take up 14.8% of the total number of letters, would cause numerous inconveniences

in retrieval and sequential arrangement. ༑ OE ༒ UE under "Mongol" in the UCS are












handled in such a way, too. The same is true if we take into consideration the "automatic





transliteration of Phags-pa text into Latin alphabet".





(3) **Variant Presentation Glyph:** As is regulated in the *UCS*, the "variant presentation glyph" shows, "in presenting certain characters, the graphic symbol of an individual glyph; this symbol depends on the position of the given glyph with relation to other glyphs."





(a) Strictly speaking, each Phags-pa letter has several "variant presentation forms". The majority of consonants can be divided into four variants which somewhat differ from each other, viz., isolate form, initial (in syllable or word) form, medial (in syllable or word) form and final (in syllable or word) form. For example, the letter A846 has its isolate form , syllable-initial form , syllable-medial form  and syllable-final form . A few letters each have less than four variants. Owing to different styles of script, there may appear cases in which several variants have the same form.


(b) The "variant presentation forms" of the Phags-pa script are divided into "conditional variants" and "free variants" so far as different conditions of their appearance are concerned.











“**Conditional variants**” are those that appear "with relation to the position of other glyphs", which include in turn "positional variant" and "postpositive variant". The four variants of the letter A846 are "positional variants", while the six variants , , , ,  and  which appear only after the five "reversed letters" , , ,  and  are "postpositive variants" conditioned by their preceding glyphs.

“**Free variants**” are those of one and the same letter that appear under the same condition.  and , or  and  which differ in strokes but mark the same sound, are "free variants".

(c) Certain glyphs mark two sounds in one language, but one sound in another language. The former are two different letters; the latter two free variants of one letter. Such pairs of glyphs as  and  and  and  mark one sound in Mongolian, but two sounds in Chinese texts. In our encoding, we'd better handle such glyphs as individual letters.

(d) By the "stroke variants" are meant variants slightly different in their size, thickness, length or sharpness of turn in the stroke. Glyph figures like , ,  and , which do not mark different sounds, nor any variant of a letter in certain cases, show only slight difference in calligraphy. Such "stroke variants" are not expressed in our encoding system.

(e) A vowel letter has more "positional variants". Apart from its normal isolate, syllable-initial, syllable-medial and syllable-final forms, it also has "postpositive variants" which appear after "reversed letters". One may distinguish a postpositive variant through its preceding letter. Still, there are cases in which normal letter variants (i.e., variants of non reversed letters) appear after "reversed letters", e.g., , which is to be chosen with the "variant selector".

(f) Various "free variants" are to be chosen with the "variant selector". For example, the letter  has its 1st syllable-initial form , 2nd syllable-initial form  and 3rd syllable-initial form . Its free variants distinguished by the variant selector are for example  ←  ;  ←  .

(g) The figures of variant presentation glyphs and the use of the “control symbol” should be

regulated in “A Users’ Agreement Related to Phags-pa Script” so as to facilitate common use by various kinds of users (See the Supplement “A Users’ Agreement” itself.)

(4) Control Symbols: The encoding of Phags-pa script requires several control symbols:

(a) Three "free variant" selectors are needed in order to distinguish different “free variants” of a glyph that appear under the same conditions. The three variant selectors in UCS may be used, viz., VS1 (U+FE00), VS2 (U+FE01) and VS3 (U+FE02).

(b) A "syllable delimiter" should be designed so as to distinguish the limit of a syllable and that of a word. It means that the limit of the syllables in a word ought to have a gap equal to one third of a space.. We may use the narrow non-break space in the UCS NNB/SP (U+202F). རྩམས་པུ་ཤེས་པུ་མེ་ཅུ་ལྷ་ (of which རྩམས་པུ་ is a disyllabic word, and ཤེས་པུ་མེ་ཅུ་ལྷ་ is a trisyllabic word) ought to be recorded like མ་སྒྲ་NNB/SPཤ་SPསྒྲ་NNB/SPཤ་NNB/SPལྷ་SPལྷ་.

(c) In order to present the positions of certain letters, we choose from the *General Punctuation* of the UCS the following two punctuation marks: ZWJ (ZERO WIDTH JOINER, U+200D) and ZWNJ (ZERO WIDTH NON-JOINER, U+200C).

ZWJ (ZERO WIDTH JOINER, U+200D) is used as follows:

1. Independent form: (letter) , e.g., མ → མ; ག → ག
2. Syllable-initial form: (letter) ZWJ, e.g., མZWJ → མ; གZWJ → ག
3. Syllable-medial form: ZWJ(letter) ZWJ, e.g., ZWJམZWJ → མ; ZWJགZWJ → ག
4. Syllable-final form: ZWJ(letter), e.g., ZWJམ → མ; ZWJག → ག

ZERO WIDTH NON-JOINER (U+200C) is used as follows:

is used in recording when normal positions are violated. Thus, a syllable-initial form at the end of a syllable can be recorded like: མZWNJག → ག, or the common ག when ZWJ is not used.

(5) Punctuation Marks: Very few punctuation marks are used in Phags-pa writing. Judging by the monuments and sources now extant, we find the following marks, whose figures are the same as Mongolian and Chinese punctuation marks, which can be borrowed for use from the UCS.

- (1) ◆ (1802)
- (2) ✦ (1803)
- (3) ✧ (1805)
- (4) 。 (02DA)

(6) Joiner. Since in Phags-pa script, the syllable is the unit for joining, so the letters in one

selection, using the preceding and following glyphs as the condition. For example, ←

after non “reversed letters” are special joining, there is need for special selection of the joiner,

⤿ is to be joined with its preceding glyph or with its following glyph, medial part connection is required; however, seeing that it is difficult to standardize the length of the joiner, we can design no medial joiner, and instead, handle it by means of such variants as ⤿ ⤿. To use the joiner will facilitate the connection of various letters, and also enable us to select the joined parts, moreover, it will decrease the number of variant presentation glyphs.

- (7) Signs of Indication:**

- (8) Order of Encoding:** The letters of the Phags-pa alphabet are arranged in quite different orders by various schools; hence, there has never existed, so to speak, a standard and universally acknowledged alphabet for the Phags-pa script.

















































(a) Following the example of Mongolian encoding, the vowel letters are to be arranged before the consonant letters.

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(9) Styles of Script: The letter figures found in Phags-pa monuments can be classified under three styles, viz., regular style, decorative style and square style. We think it's preferable to adopt a style which has been frequently used in monuments written in Phags-pa letters and at the same time to some extent standardized and look smooth and beautiful. In the present encoding of Phags-pa script, we advocate using the Khubilai style because this style is not only the style of the original texts of Emperor Khubilai's edicts (1277-1289), it has also been used for nearly 20 years in the computerized composing system in Mongolia.

II Nominal Glyphs and Names in the Pags-pa Script

PHAGS-PA

	A84	A85	A86	A87
0	 A840	 A850	 A860	 A870
1	 A841	 A851	 A861	 A871
2	 A842	 A852	 A862	 A872
3	 A843	 A853	 A863	 A873
4	 A844	 A854	 A864	 A874
5	 A845	 A855	 A865	
6	 A846	 A856	 A866	
7	 A847	 A857	 A867	
8	 A848	 A858	 A868	
9	 A849	 A859	 A869	
A	 A84A	 A85A	 A86A	
B	 A84B	 A85B	 A86B	
C	 A84C	 A85C	 A86C	
D	 A84D	 A85D	 A86D	
E	 A84E	 A85E	 A86E	
F	 A84F	 A85F	 A86F	

A840

- A840** ༀ PHAGS-PA LETTER KA
Use: Han. Tib. San.
→ 0F40 ༀ tibetan letter ka
- A841** ༆ PHAGS-PA LETTER KHA
Use: Mon. Han. Tib. San. Uig.
- A842** ༇ PHAGS-PA LETTER GA
Use: Mon. Han. Tib. San. Uig.
- A843** ༈ PHAGS-PA LETTER NGA
Use: Mon. Han. Tib. San. Uig.
- A844** ༉ PHAGS-PA LETTER CA
Use: Han. Tib.
→ 0F45 ༉ tibetan letter ca
- A845** ༊ PHAGS-PA LETTER CHA
Use: Mon. Han. Tib. Uig.
→ 0F46 ༊ tibetan letter cha
- A846** ་ PHAGS-PA LETTER JA
Use: Mon. Han. Tib. Uig.
→ 0F47 ་ tibetan letter ja
- A847** ༌ PHAGS-PA LETTER NYA
Use: Han. Tib. San.
→ 0F49 ༌ tibetan letter nya
- A848** ། PHAGS-PA LETTER TA
Use: Mon. Han. Tib. San.
- A849** ༎ PHAGS-PA LETTER THA
Use: Mon. Han. Tib. San. Uig.
→ 0F50 ༎ tibetan letter tha
- A84A** ༏ PHAGS-PA LETTER DA
Use: Mon. Han. Tib. San. Uig.
→ 0F51 ༏ tibetan letter da
- A84B** ༐ PHAGS-PA LETTER NA
Use: Mon. Han. Tib. San. Uig.
→ 0F53 ༐ tibetan letter na
- A84C** ༑ PHAGS-PA LETTER PA
Use: Han. Tib. San. Uig.
→ 0F54 ༑ tibetan letter pa
- A84D** ༒ PHAGS-PA LETTER PHA
Use: Han. Tib. San. Uig.
- A84E** ༓ PHAGS-PA LETTER BA
Use: Mon. Han. Tib. San. Uig.
Use: Mon. Han. Tib. San. Uig.
→ 0F56 ༓ tibetan letter ba

PHAGS-PA

A85C

- A84F** ༔ PHAGS-PA LETTER MA
Use: Mon. Han. Tib. San. Uig.
→ 0F58 ༔ tibetan letter ma
- A850** ༕ PHAGS-PA LETTER TSA
Use: Han. Tib. San.
→ 091E ༕ devanagari letter nya
- A851** ༖ PHAGS-PA LETTER TSHA
Use: Han. Tib. San.
→ 091C ༖ devanagari letter ja
- A852** ༗ PHAGS-PA LETTER DZA
Use: Han. Tib. San.
- A853** ༘ PHAGS-PA LETTER WA
Use: Mon. Han. Tib. San.
- A854** ༙ PHAGS-PA LETTER ZHA
Use: Han. Tib.
→ 0F5E ༙ tibetan letter zha
- A855** ༚ PHAGS-PA LETTER ZA
Use: Mon. Han. Tib.
→ 0F5F ༚ tibetan letter za
- A856** ༛ PHAGS-PA LETTER MINUSCULE A
Use: Mon. Han. Tib. San. Uig.
→ 0F60 ༛ tibetan letter -a
- A857** ༜ PHAGS-PA LETTER YA
Use: Mon. Han. Tib. San. Uig.
→ 0F61 ༜ tibetan letter ya
- A858** ༝ PHAGS-PA LETTER RA
Use: Mon. Han. Tib. San. Uig.
→ 0F62 ༝ tibetan letter ra
- A859** ༞ PHAGS-PA LETTER LA
Use: Mon. Han. Tib. San. Uig.
→ 0F63 ༞ tibetan letter la
- A85A** ༟ PHAGS-PA LETTER SHA
Use: Mon. Han. Tib. San. Uig.
≡ 0F64 ༟ tibetan letter sha
- A85B** ༠ PHAGS-PA LETTER SA
Use: Mon. Han. Tib. San. Uig.
→ 0F66 ༠ tibetan letter sa
- A85C** ༡ PHAGS-PA LETTER HA Use: Mon.
Use: Han. Tib. San. Uig.
→ 0F67 ༡ tibetan letter ha

A85D

A85D ཨ PHAGS-PA LETTER A

Use: Mon. Han. Tib. San. Uig.

→ 0F68 ཨ tibetan letter a

A85E ཨ PHAGS-PA LETTER I

Use: Mon. Han. Tib. San. Uig.

→ 0F72 ཨ tibetan vowel sign i

A85F ཨ PHAGS-PA LETTER U

Use: Mon. Han. Tib. San. Uig.

→ 0F74 ཨ tibetan vowel sign u

A860 ए PHAGS-PA LETTER E

Use: Mon. Han. Tib. San. Uig.

≡ 090F ए devanagari letter e

A861 ཨ PHAGS-PA LETTER O

Use: Mon. Han. Tib. San. Uig.

→ 0F7C ཨ tibetan vowel sign o

A862 ཨ PHAGS-PA LETTER QA

Use: Mon. Han. Tib. San. Uig.

→ 0F41 ཨ tibetan letter kha

A863 ཨ PHAGS-PA LETTER XA

Use: Han.

A864 ཨ PHAGS-PA LETTER FA

Use: Han.

A865 ཨ PHAGS-PA LETTER QA

Use:

→ 0F42 ཨ tibetan letter ga

A866 ཨ PHAGS-PA LETTER EE

Use: Mon. Han. Tib. San. Uig.

A867 ཨ PHAGS-PA LETTER SUBJOINED WA

Use: Han. Tib. San.

→ 18A6 ཨ mongolian letter ag half u

→ 0FAD ཨ tibetan subjoined letter wa

A868 ཨ PHAGS-PA LETTER SUBJOINED YA

Use: Han. Tib. San.

→ 18A7 ཨ mongolian letter ag half ya

→ 0FB1 ཨ tibetan subjoined letter ya

A869 ཨ PHAGS-PA LETTER OE

Use: Mon. Han.

≡ 0911 ओ DEVANAGARI LETTER CANDRA O

PHAGS-PA

A87C

A86A ཨ PHAGS-PA LETTER UE

Use: Mon. Han.

A86B ཨ PHAGS-PA LETTER TTA

Use: San.

= reversed ta

A86C ཨ PHAGS-PA LETTER TTHA

Use: San.

= reversed tha

→ 0F4B ཨ tibetan letter ttha

A86D ཨ PHAGS-PA LETTER DDA

Use: San.

= reversed da

→ 0F4C ཨ tibetan letter dda

A86E ཨ PHAGS-PA LETTER NNA

Use: San.

= reversed na

→ 0F4E ཨ Tibetan letter nna

A86F ཨ PHAGS-PA LETTER OA

Use: Han.

≡ 0F61 ཨ tibetan letter ya

A870 ཨ PHAGS-PA LETTER VOICELESS SHA

Use: Han.

A871 ཨ PHAGS-PA LETTER VOICED HA

Use: Mon. Han. Tib. San. Uig.

≡ 0F67 ཨ tibetan letter ha

A872 ཨ PHAGS-PA LETTER ASPIRATED FA

Use: Han.

A873 ཨ PHAGS-PA JOINER

Use: Mon. Han. Tib. San. Uig.

A874 ཨ CANDARABINDU

Use: Tib. San.

A875 (This position shall not be used)

A876 (This position shall not be used)

A877 (This position shall not be used)

A878 (This position shall not be used)

A879 (This position shall not be used)

A87A (This position shall not be used)

A87B (This position shall not be used)

A87C (This position shall not be used)

A87D

PHAGS-PA

A87F

A87D (This position shall not be used)

A87E (This position shall not be used)

A87F (This position shall not be used)

III Variant Presentation Glyphs and Their Names in Pags-pa Script

Phags-pa Presentation Characters

	000	001	002	003	004	005
0	𑖀	𑖁	𑖂	𑖃	𑖄	𑖅
1	𑖆	𑖇	𑖈	𑖉	𑖊	𑖋
2	𑖌	𑖍	𑖎	𑖏	𑖐	𑖑
3	𑖒	𑖓	𑖔	𑖕	𑖖	𑖗
4	𑖘	𑖙	𑖚	𑖛	𑖜	𑖝
5	𑖞	𑖟	𑖠	𑖡	𑖢	𑖣
6	𑖤	𑖥	𑖦	𑖧	𑖨	𑖩
7	𑖪	𑖫	𑖬	𑖭	𑖮	𑖯
8	𑖰	𑖱	𑖲	𑖳	𑖴	𑖵
9	𑖶	𑖷	𑖸	𑖹	𑖺	𑖻
A	𑖼	𑖽	𑖾	𑖿	𑗀	𑗁
B	𑗂	𑗃	𑗄	𑗅	𑗆	𑗇
C	𑗈	𑗉	𑗊	𑗋	𑗌	𑗍
D	𑗎	𑗏	𑗐	𑗑	𑗒	
E	𑗓	𑗔	𑗕	𑗖	𑗗	
F	𑗘	𑗙	𑗚	𑗛	𑗜	

Names of Phags-pa Presentation Characters

0000	PHAGS-PA	0045
0000 ཀ phal. ka initial, medial form	0025 ཨ phal. a initial form	
0001 ཁ phal. kha initial, medial form	0026 ཨ phal. i first initial form	
0002 ག phal. ga initial, medial form	0027 ཨ phal. I initial second form	
0003 ལ phal. nga initial, medial form	0028 ཨ phal. i medial form	
0004 ལ phal. ca initial, medial form	0029 ཨ phal. i reversed medial form	
0005 ལ phal. cha initial, medial form	002A ཨ phal. i final form	
0006 ལ phal. ja initial, medial form	002B ཨ phal. i reversed final form	
0007 ལ phal. nya initial, medial form	002C ཨ phal. u first initial form	
0008 ལ phal. ta first initial, medial form	002D ཨ phal. u second initial form	
0009 ལ phal. tha initial, medial form	002E ཨ phal. u third initial form	
000A ལ phal. da initial, medial form	002F ཨ phal. u medial form	
000B ལ phal. na initial, medial form	0030 ཨ phal. u final form	
000C ལ phal. pa initial, medial form	0031 ཨ phal. u reversed final form	
000D ལ phal. pha first initial, medial form	0032 ཨ phal. e second isolate form	
000E ལ phal. ba isolate, final form	0033 ཨ phal. e first initial form	
000F ལ phal. ma isolate, final form	0034 ཨ phal. e second initial form	
0010 ལ phal. tsa isolate, final form		
0011 ལ phal. tsha isolate, final form	0035 ཨ phal. e third initial form	
0012 ལ phal. dza first initial, medial form	0036 ཨ phal. e first medial form	
0013 ལ phal. wa second isolate, final form	0037 ཨ phal. e second medial form	
0014 ལ phal. wa first initial, medial form	0038 ཨ phal. e first final form	
0015 ལ phal. wa second initial, medial form	0039 ཨ phal. e second final form	
0016 ལ phal. nya second initial, medial form	003A ཨ phal. e first reversed final form	
	003B ཨ phal. e second reversed final form	
0017 ལ phal. za second initial, medial form		
0018 ལ phal. va initial, medial form	003C ཨ phal. o first initial form	
0019		
001A ལ phal. ya initial, medial form	003D ཨ phal. o second initial form	
001B ལ phal. ra first initial, medial form	003E ཨ phal. o medial form	
001C ལ phal. ra second initial form	003F ཨ phal. o first final form	
001D ལ phal. ra second medial form	0040 ཨ phal. qa initial, medial form	
001E ལ phal. ra second final form	0041 ཨ phal. xa initial, medial form	
001F ལ phal. la initial, medial form		
0020 ལ phal. sha initial, medial form	0042 ཨ phal. fa initial, medial form	
0021 ལ phal. sa initial, medial form	0043 ཨ phal. qa initial-medial form	
0022 ལ phal. ha initial, medial form	0044 ཨ phal. ee first initial, medial form	
0023 ལ phal. ha reversed medial form		
0024 ལ phal. ha reversed final form	0045 ཨ phal. subjoined wa initial form	

0046

PHAGS-PA

005F

- 0046 ༄ phal. subjoined wa medial form
0047 ༅ phal. subjoined wa final form
0048 ༆ phal. subjoined ya medial form
0049 ༇ phal. subjoined ya second medial form
004A ༈ phal. subjoined ya final form
004B ༉ phal. subjoined ya second final form
004C ༊ phal. subjoined ya reversed final form

004D ་ phal. oe initial form
004E ༌ phal. oe first medial form
004F ། phal. oe first final form

0050 ༎ phal. ue initial form
0051 ༏ phal. ue first medial form
0052 ༐ phal. ue first final form

0053 ༑ phal. tta initial, medial form
0054 ༒ phal. ttha first initial, medial form
0055 ༓ phal. ttha second initial, medial form
0056 ༔ phal. dda initial, medial form
0057 ༕ phal. nna initial, medial form
0058 ༖ phal. 0a initial, medial form
0059 ༗ phal. voiceless sha initial, medial form
005A ༘ phal. voiced ha initial, medial form
005B ༙ phal. aspirated fa initial, medial form
005C ༚ vpha. left joiner
005D (This position shall not be used)
005E (This position shall not be used)
005F (This position shall not be used)

pha. = phags-pa


phal.= phags-pa letter

IV The Reference Table for Pags-pa Script

Explanations:

The present Reference Table is prepared in order that our users may use the Control Symbols in one and the same way and are provided with detailed regulations for the recording of individual variant presentation glyph.








Theoretically, each HPhags-pa letter has two or more “variant presentation glyphs”. Generally speaking, the majority of consonant letters have fewer variants and differ slightly in their figures. The vowel letters, however, have more variants and differ more clearly in their figures. From such a point of view, the HPhags-pa letters can be divided into “regular letters” and “multi-variant letters”.

By regular letters we mean those variant glyphs which do not differ much in their figures and have at most “isolate-syllable-final form” and “syllable-initial and syllable-medial form” (Due to the features of various styles of writing, a letter may have different numbers of variant glyphs in writing), but do not have “free variant”, so there is no need to use “control symbol” letters for regular recording. The following 38 letters are “regular letters”: 𐀀 𐀁 𐀂 𐀃 𐀄 𐀅 𐀆 𐀇 𐀈 𐀉 𐀊 𐀋 𐀌 𐀍 𐀎 𐀏 𐀐 𐀑 𐀒 𐀓 𐀔 𐀕 𐀖 𐀗 𐀘 𐀙 𐀚 𐀛 𐀜 𐀝 𐀞 𐀟 𐀠 𐀡 𐀢 𐀣 𐀤 𐀥 𐀦 𐀧 𐀨 𐀩 𐀪 𐀫 𐀬 𐀭 𐀮 𐀯 𐀰 𐀱 𐀲 𐀳 𐀴 𐀵 𐀶 𐀷 𐀸 𐀹 𐀺 𐀻 𐀼 𐀽 𐀾 𐀿. According to the UCS regulations, it suffices to use the  to record individual variant presentation glyph of such letters.

By “multi-variant letters” are meant letters which differ more clearly in their figures and have more than three “positional variants” or have “free variants”, and require the use of the “control symbol” letters to get recorded in a regular way. In the following table such “multi-variant letters” are clearly explained. The table includes two parts: nominal glyphs and variant presentation glyphs. The part of “nominal glyphs” repeats the part of HPhags-pa script in the *UCS*. In the part of “variant presentation glyphs” are found the number of each variant presentation glyph of a letter; figure of each variant presentation glyph and the name of each variant presentation glyph (such names are printed in minuscule so as to distinguish them from the names of the nominal glyphs in the *UCS*); and the method of how to record individual glyph of that variant presentation glyph.































































- (1) The number of each variant presentation glyph indicates the order of that glyph in that letter;

- (2) The name in minuscule in the “NAME” column is that of the variant presentation glyph, while in the brackets () are nominal glyphs used as variant presentation glyphs.

- (3) In the column “PRESENTATION RULE” for the variant presentation glyphs is shown how to record individual glyph of the variant presentation glyphs. For regular presentation (writing of words or syllables) we may just remove the zero-break joiner  but retain the variant selectors ,  and . The “variant selectors” in the brackets () ,  and  are used only to write individual glyphs and we should remove the “variant selectors” in the brackets during regular presentation.

Reference Table

BASIC CHARACTERS			PRESENTATION CHARACTERS			
№	GRAPHIC SYMBOL	NAME	№	GRAPHIC SYMBOL	NAME	PRESENTATION RULE
A853	𑀓	PHAL. WA	000		(first isolate-final form)	𑀓
			001	𑀓	phal. wa second isolate-final form	𑀓 𑀓
			002	𑀓	phal. wa first initial, medial form	𑀓 𑀓
			003	𑀓	phal. wa second initial-medial form	𑀓 𑀓 𑀓
A856	𑀔	PHAL. MINUSCUE A	000		(isolate-final form)	𑀔
			001	𑀔	phal. minuscul a initial-medial form	𑀔 𑀔
			002	𑀔	phal. minuscul a reversed initial-medial form	𑀔 𑀔 𑀔
A858	𑀕	PHAL. RA	000		(first isolate-final form)	𑀕
			001	𑀕	phal. ra first initial-medial form	𑀕 𑀕
			002	𑀕	phal. ra second initial form	𑀕 𑀕 𑀕
			003	𑀕	phal. ra second medial form	𑀕 𑀕
			004	𑀕	phal. ra second final form	𑀕 𑀕 𑀕
A85C	𑀖	PHAL. HA	000		(isolat-final form)	𑀖
			001	𑀖	phal. ha initial-medial form	𑀖 𑀖
			002	𑀖	phal. ha reversed medial form	𑀖 𑀖 𑀖 𑀖
			003	𑀖	phal. ha reversed final form	𑀖 𑀖 𑀖 𑀖
A85E	𑀗	PHAL. I	000		(isolate form)	𑀗
			001	𑀗	phal. i first initial form	𑀗 𑀗
			002	𑀗	phal. i second initial form	𑀗 𑀗 𑀗

BASIC CHARACTERS			PRESENTATION CHARACTERS			
№	GRAPHIC SYMBOL	NAME	№	GRAPHIC SYMBOL	NAME	PRESENTATION RULE
			001		phal. o first initial form	 
			002		phal. o second initial form	  
			003		phal. o medial form	  
			004		phal. o final form	 
A867		PHAL. SUBJOINED WA	000		(final form)	
			001		phal. subjoined wa initial form	 
			002		phal. subjoined wa medial form	  
			003		phal. subjoined wa final form	 
A868		PHAL. SUBJOINED YA	000		(first final form)	
			001		phal. subjoined ya half i first medial form	  
			002		phal. subjoined ya second medial form	  (FVS1) 
			003		phal. subjoined ya first final form	 
			004		phal. subjoined ya second final form	  (FVS1)
			005		phal. subjoined ya reversed final form	  (FVS2)
A869		PHAL. OE	000		(isolate form)	
			001		phal. oe initial form	 
			002		phal. oe first medial form	  
			003		phal. oe second medial form	   
			004		phal. oe first final form	 

BASIC CHARACTERS			PRESENTATION CHARACTERS			
№	GRAPHIC SYMBOL	NAME	№	GRAPHIC SYMBOL	NAME	PRESENTATION RULE
			005	𑄤	phal. oe second final form	𑄤 [ZW] [FVS1]
A86A	𑄡	PHAL. UE	000		(isolate form)	𑄡
			001	𑄢	phal. ue initial form	𑄢 [ZW]
			002	𑄣	phal. ue first medial form	𑄣 [ZW] 𑄣 [ZW]
			003	𑄤	phal. ue second medial form	𑄤 [ZW] 𑄤 [FVS1] [ZW]
			004	𑄥	phal. ue first final form	𑄥 [ZW] 𑄥
			005	𑄦	phal. ue second final form	𑄦 [ZW] 𑄦 [FVS1]
186C	𑄧	PHAL. TTHA	000		(isolate-final form)	𑄧
			001	𑄨	phal. ttha first initial-medial form	𑄨 [ZW] [J]
			002	𑄩	phal. ttha second initial-medial form	𑄩 [FVS1] [ZW] [J]