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Title: The Working Meeting on Mongolian Encoding Attended by Representatives of China and Mongolia

Source: China, Mongolia

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A Summary of the Working Meeting on Mongolian Encoding Attended by Representatives of China and Mongolia

I Document Status and Present Situation

1) After we mailed to scholars concerned the Mongolian Encoding proposal adopted at the 4th International Conference on Mongolian Encoding in Ulanbaatar in August, 1997, attended by representatives from China, Germany and Mongolia, we have received some feedbacks. Chinese and Mongolian experts concerned have a working meeting for Monglian encoding in Hohhot on February 12-15, 1998, at which the feedbacks are carefully discussed.

2) Participants in the working meeting:

From China:

—Jimuyan (NACIM)

—Sergeleng (IMATS)

—Choijinzhab (IMU)

—Huashabao (IMU)

—Nasan—urtu (IMU)

—Garudi (IMNU)

—Jirumtu (IMCC)

—Altansha (NACIM)

—Heshigduureng (NACIM)

From Mongolia:

—D. Orgilt (MNCSM)

—Yu. Namsrai (TUN)

Ⅱ Agreement of the Working Meeting

Participants of both sides reach the following agreement:

1) Since there exists, in the Mongolian writing system, a connection rule to link up all letters with the nirugu as their middle axis, each letter has at least two or even as many as some ten variations depending on their different positions in a word. Therefore, quite different from the orthography of Western languages like Latin, Cyrillic or Greek, the Mongolian encoding requires a rule for changing the forms of its letters, i. e. , to change its canonical characters into presentation forms. However, then there appears a shortcoming in changing the forms of letters according to such a rule, i. e. , the inability to express arbitrary sequences of characters not to be governed by the rule.

2) In view of the above, in order to make enable the expressing of arbitrary sequences not governed by the letter-changing rule, while taking the letter-changing rule in the Mongolian Encoding Proposal adopted at Ulaanbaatar in 1997 as

our basis, we have decided to remove the position marker [*] from the proposal and instead, add to it four new position markers: the isolated form [ISF], the initial form [INF], the medial form [MEF] and the final form [FIF], and put all these four position markers in places 028, 029, 030 and 031 in the Mongolian Basic Character Set. Rules for using these four position markers are to be indicated in Appendix III.

3) Relevant articles in Appendix I and Appendix II of the proposal are to be modified in accordance with 2) as mentioned above.

4) Apart from the two free variation selectors already found in the proposal, a third one [FVS3] is adopted and these three selectors are placed respectively in the positions 013, 014 and 015 in the Mongolian Basic Character Set. Cases where they are applied should be indicated in the Mongolian Reference Table and instructions for the usage of [FVS1], [FVS2] and [FVS3] in brackets to be included in Appendix I.

5) In Appendix I, a new variation ᠷ of Mongolian letter E is to be added after the form ᠷ under 033-ᠵ and a new variation ᠨ of Mongolian letter NA added after the form ᠨ under 040-ᠨ.

6) In Appendix III, the explanation of the nirugu should be changed into "a connection line used merely for the linking-up of letters".

7) In Appendix II, the term SYLLABLE is to be changed into LIGATURE.

8) The position markers [ISF], [INF], [MEF] and [FIF] take priority of any other rules except that for the ligature, which is to be indicated in Appendix III.

III Measures to be Adopted

1) Based on what is agreed upon at the present meeting, a new revised version of the Mongolian Encoding Proposal should be worked out without delay and be submitted for discussion to the Mongolian Encoding Group of the 34 th ISO/IEC/JTC1/SC2/WG2 Conference that will be held in Seattle, U. S. A., in March, 1998.

2) We work closely together in order to transform the results of our meeting into an international standard. Therefore, we will submit our decisions not only to ISO/IEC JTC1/SC2/WG2 but will also introduce and explain them to other

standardization bodies, interested parties and experts. Since it is difficult to avoid that some decisions of the agreed document may again undergo technical revision, the participants will settle these issues in another meeting. After the participants have reached an agreement, that document will be submitted to ISO.

Jimuyan, NACIM, China

Sergeleng, IMATS, China

Choijinzhab, IMU, China

Huashabao, IMU, China

Nasan—urtu, IMU, China

Garudi IMNU, China

Jirumtu IMCC, China

Altansha NACIM, China

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Yu. Namsrai, TUN, Mongolia

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Universal Multiple — Octet Coded Character Set (UCS)

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Document Status and Present Situation

After we mailed to scholars concerned the Mongolian Encoding proposal (N 1691) adopted at the 4th International Conference on Mongolian Encoding in Ulanbaatar in August, 1997, attended by representatives from China, Germany and Mongolia, we have received some feedbacks. Chinese and Mongolian experts concerned have a working meeting for Monglian encoding in Hohhot on February 12-15, 1998, at which the feedbacks are carefully discussed. The participants have reached a consistent opinion on the questions discussed and made some corresponding modifications to《 N 1691 》. Thus this proposal is produced. The meeting has decided to submit "Mongolian Character Set" to the WG2 meeting to be held in March, 1998.

Participants in the working meeting:

From China:

—Jimuyan (NACIM)

—Sergeleng (IMATS)

—Choijinzhab (IMU)

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From Mongolia:

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Mongolian Character Encoding Conventions

1. The Mongolian script character set is an encoding proposal of Mongolian scripts which includes Mongolian letters, Todo letters, Sibe letters, Manchu letters and the Ali Gali letters (used for the transcription of Tibetan and Sanskrit), their punctuation marks, digits and control characters. The written languages Todo, Sibe and Manchu all share the Mongolian letters.

This proposal only encodes nominal characters. Ligatures which are logically larger than one character unit and graphemes which are logically smaller than one character unit are excluded from the encoding.

2. The encoding is given in the sequence
   - punctuation marks
   - digits
   - letters

The letters comprise Mongolian letters, Mongolian Todo letters, Mongolian Sibe letters, Mongolian Manchu letters and the Ali Gali letters.

Many Mongolian, Todo, Sibe and Manchu characters have variants according to their different positions in the word (initial, medial or final). Sometimes, there can be more than ten variants for a given character.

According to the relevant principles of ISO/IEC 10646, only one of those variants is to be encoded. This form is named "basic character". For the vowels, their isolated forms are adopted. For the consonants, only their variant appearing before the vowel "A" is adopted. All other forms are classified as "presentation forms". Some characters of these different scripts have the same shape as the canonical character or the initial form but different shapes when used in medial or final position. As an exception to the previous rule, in order to indicate such difference between characters in different scripts, presentation forms are adopted as basic characters. For example, the medial form of the character ANG in Mongolian, Todo, Sibe and Manchu is  , its final form is  in Mongolian and Manchu, in Todo, and in Sibe. In order to emphasize this difference, the medial form is chosen as basic character for Mon-

golian and Manchu, the final form is chosen for Todo and the final form is chosen for Sibe. This exceptional treatment covers the following Todo, Sibe and Manchu letters:

(TODO BA), (TODO MA), (TODO TSA), (TODO YA), (TODO HAA); (SIBE E), (SIBE I), (SIBE U), (SIBE KA), (SIBE TA), (SIBE DA), (SIBE JA); (MANCHU), (MANCHU KA), (MANCHU RA), (MANCHU FA).

3. Four characters require special treatment. The two Mongolian character pairs O and U as well as OE and UE have almost the same shape both as basic characters and in their presentation forms. However, in Mongolian, these four characters are independent, mutually exclusive and have different meanings despite of their identical forms. For example, (BODO) means "to think", (BUDU) means "to dye", (OEGELEHUE) means "to trim" and (UEGELEHUE) means "to make a statement". These words are distinguished by different treatments of the four vowels O, U, OE, and UE. Thus, in the Basic Character Set, the four vowels are encoded as (isolated form of O), (initial form of U), (isolated form of OE), and (initial form of UE). In this way, the problems specific to Mongolian vowels are settled and accordance with ISO/IEC 10646 is achieved.

4. The basic characters of Mongolian, Todo, Sibe and Manchu are unified according to their shapes. The names of the unified characters are listed in the order of Mongolian, Todo, Sibe and Manchu; the name of the first representative in this list is taken as the character name. Letters used only in Mongolian and letters shared with in the other scripts are found under MONGOLIAN LETTER. The letters used exclusively in Todo are under MONGOLIAN LETTER TODO. The letters used exclusively in Sibe and those shared with Manchu are under MONGOLIAN LETTER SIBE. The letters used exclusively in Manchu are under MONGOLIAN LETTER MANCHU.

The punctuation marks and the control symbols used in more than two of the scripts are indicated as "MONGOLIAN"; the digits are shown as "MONGOLIAN DIGIT"; the punctuation marks used exclusively in Todo, Sibe or Manchu are indicated as "MONGOLIAN TODO", "MONGOLIAN SIBE" or "MONGOLIAN MANCHU" respectively. The Ali Gali letters in the three scripts Mongolian, Todo and Manchu are named "MONGOLIAN LETTER AG", "MONGOLIAN LETTER TODO AG", "MONGOLIAN LETTER MANCHU AG".

5. The unified forms of the basic characters of the four scripts and variants of their respective

names are recorded in the "Mongolian Reference Table".

6. The unified basic characters are arranged in the order of Mongolian, Todo, Sibe, Manchu and Ali Gali characters.

7. In the majority of cases, the presentation forms of all four scripts can be determined by their position and other constraints. However, there is a very small number of cases where the proper forms cannot be distinguished by word-internal constraints alone. In order to distinguish these, various control characters are used. Their use is explained in the text accompanying the Mongolian Reference Table and Explanation of Peculiar Punctuation Marks and Control Symbols in Mongolian.

8. The presentation form set of Mongolian, Todo, Sibe, and Manchu as well as Ali Gali is listed separately in the Mongolian Reference Table.

A Grammar Describing the Transition
from Mongolian Canonical Letters
to their Corresponding Presentation Forms

1 Fundamentals

The following text states, in shortest form possible, the properties of the Mongolian Basic Character Set (which contains canonical characters) and the rules necessary to generate the presentation forms out of the Basic Character Set.

D 1 Mongolian is an alphabetical script.

D 2 Most Mongolian basic letters assume different presentational forms.

D 3 Form variation can be obligatory or free.

-**Obligatory** form variation is caused by one or more of the following factors:

Position which can be one of five:

1. isolated,
2. initial,
3. medial,
4. final, or
5. the syllable count (in case of front vowels);

Vowel Gender which influences certain consonants;

Graphical Properties which make the graphical form of a character dependant on the graphical form of the immediate neighbour, resulting in so-called compulsary ligatures;

-**Free** form variation cannot be decided by any of the above mentioned context; it is determined by lexical meaning; unlike the previous conditions, more than one graphical form is legal in a given position.

D 4 The rules for generating any of presentational forms must not change. They are independent of positional etc. considerations.

2 Transition Grammar

From the four definitions above we derive the following grammatical rules:

D 5 A sequence of 3 tokens is enough to decide all cases.

$$T_{n-1} + T_n + T_{n+1}$$

The machine keeps T_{n-1} and its transformation result in a state table and processes only the central token (Tn) while looking ahead one token, here T_{n+1}.

D 6 A token is : a character or

- an unspecified ,non-boundary environment represented by the Environment Marker,
- a boundary;

D 7 A character is : a basic character or

- a basic character followed by Free Variation Selecter,
- the Nirugu,
- the non-printing Mongolian Space,
- the non-printing Mongolian Vowel Separator;

D 8 A boundary is : ordinary white space or

- the beginning of the line,
- the end of the line,
- the beginning of the file,
- the end of the file,
- any punctuation mark or number,
- any non-Mongolian character.

Mongolian Basic Character Set

	00	01	02	03	04	05	06	07
0	000	016	032	048	064	080	096	112
1	001	017	033	049	065	081	097	113
2	002	018	034	050	066	082	098	114
3	003	019	035	051	067	083	099	115
4	004	020	036	052	068	084	100	116
5	005	021	037	053	069	085	101	117
6	006	022	038	054	070	086	102	118
7	007	023	039	055	071	087	103	119
8	008	024	040	056	072	088	104	120
9	009	025	041	057	073	089	105	121
A	010	026	042	058	074	090	106	122
B	011	MVS 027	043	059	075	091	107	123
C	012	ISF 028	044	060	076	092	108	124
D	FVS1 013	INF 029	045	061	077	093	109	125
E	FVS2 014	MEF 030	046	062	078	094	110	126
F	FVS3 015	FIF 031	047	063	079	095	111	127

	08	09	0A	0B	0C	0D	0E	0F
0	০ 128	ৰ 144	ৰ৷ 160	176	192	208	224	240
1	৪ 129	ৱ 145	ৱ় 161	177	193	209	225	241
2	৲ 130	৲ 146	৲় 162	178	194	210	226	242
3	৩ 131	৳ 147	৴ 163	179	195	211	227	243
4	৩ 132	৵ 148	৵় 164	180	196	212	228	244
5	৯ 133	৶ 149	৶় 165	181	197	213	229	245
6	২২২ 134	৷ 150	৷় 166	182	198	214	230	246
7	৻ 135	৸ 151	৸় 167	183	199	215	231	247
8	৷ 136	৹ 152	৹় 168	184	200	216	232	248
9	৺ 137	৺ 153	’ 169	185	201	217	233	249
A	৻ 138	৻ 154	৻় 170	186	202	218	234	250
B	৷ 139	৷ 155	৷় 171	187	203	219	235	251
C	৸ 140	৸ 156	৸় 172	188	204	220	236	252
D	৹ 141	৹ 157	৹় 173	189	205	221	237	253
E	৺ 142	৺ 158	৺় 174	190	206	222	238	254
F	৻ 143	৻ 159	৻় 175	191	207	223	239	255

Names of Mongolian Basic Characters

dec	hex	Name
000	00	MONGOLIAN SPACE
001	01	MONGOLIAN BIRGA
002	02	MONGOLIAN ELLIPSIS
003	03	MONGOLIAN COMMA
004	04	MONGOLIAN PERIOD
005	05	MONGOLIAN COLON
006	06	MONGOLIAN FOUR DOTS
007	07	MONGOLIAN COMBINATION SYMBOL
008	08	MONGOLIAN TODO SOFT HYPHEN
009	09	MONGOLIAN SIBE SYLLABLE BOUNDARY MARKER
010	0A	MONGOLIAN MANCHU COMMA
011	0B	MONGOLIAN MANCHU PERIOD
012	0C	MONGOLIN NIRUGU
013	0D	MONGOLIAN FREE VARIATION SELECTOR ONE
014	0E	MONGOLIAN FREE VARIATION SELECTOR TWO
015	0F	MONGOLIAN FREE VARIATION SELECTOR THREE
016	10	MONGOLIAN DIGIT ZERO
017	11	MONGOLIAN DIGIT ONE
018	12	MONGOLIAN DIGIT TWO
019	13	MONGOLIAN DIGIT THREE
020	14	MONGOLIAN DIGIT FOUR
021	15	MONGOLIAN DIGIT FIVE
022	16	MONGOLIAN DIGIT SIX
023	17	MONGOLIAN DIGIT SEVEN
024	18	MONGOLIAN DIGIT EIGHT
025	19	MONGOLIAN DIGIT NINE
026	1A	(THIS POSITION SHALL NOT BE USED)
027	1B	MONGOLIAN VOWEL SEPARATOR
028	1C	MONGOLIAN ISOLATED FORM.
029	1D	MONGOLIAN INITIAL FORM.
030	1E	MONGOLIAN MEDIAL FORM.
031	1F	MONGOLIAN FINAL FORM.
032	20	MONGOLIAN LETTER A
033	21	MONGOLIAN LETTER E
034	22	MONGOLIAN LETTER I
035	23	MONGOLIAN LETTER O
036	24	MONGOLIAN LETTER U
037	25	MONGOLIAN LETTER OE
038	26	MONGOLIAN LETTER UE
039	27	MONGOLIAN LETTER EE
040	28	MONGOLIAN LETTER NA
041	29	MONGOLIAN LETTER ANG
042	2A	MONGOLIAN LETTER BA
043	2B	MONGOLIAN LETTER PA
044	2C	MONGOLIAN LETTER QA
045	2D	MONGOLIAN LETTER GA
046	2E	MONGOLIAN LETTER MA
047	2F	MONGOLIAN LETTER LA
048	30	MONGOLIAN LETTER SA
049	31	MONGOLIAN LETTER SHA
050	32	MONGOLIAN LETTER TA
051	33	MONGOLIAN LETTER DA
052	34	MONGOLIAN LETTER CHA
053	35	MONGOLIAN LETTER JA
054	36	MONGOLIAN LETTER YA
055	37	MONGOLIAN LETTER RA
056	38	MONGOLIAN LETTER WA
057	39	MONGOLIAN LETTER FA
058	3A	MONGOLIAN LETTER KA
059	3B	MONGOLIAN LETTER KHA
060	3C	MONGOLIAN LETTER TSA
061	3D	MONGOLIAN LETTER ZA
062	3E	MONGOLIAN LETTER HAA
063	3F	MONGOLIAN LETTER ZRA

dec	hex	Name
064	40	MONGOLIAN LETTER LHA
065	41	MONGOLIAN LETTER ZHI
066	42	MONGOLIAN LETTER CHI
067	43	MONGOLIAN LETTER TODO LONG VOWEL SIGN
068	44	MONGOLIAN LETTER TODO E
069	45	MONGOLIAN LETTER TODO I
070	46	MONGOLIAN LETTER TODO O
071	47	MONGOLIAN LETTER TODO U
072	48	MONGOLIAN LETTER TODO OE
073	49	MONGOLIAN LETTER TODO UE
074	4A	MONGOLIAN LETTER TODO ANG
075	4B	MONGOLIAN LETTER TODO BA
076	4C	MONGOLIAN LETTER TODO PA
077	4D	MONGOLIAN LETTER TODO QA
078	4E	MONGOLIAN LETTER TODO GA
079	4F	MONGOLIAN LETTER TODO MA
080	50	MONGOLIAN LETTER TODO TA
081	51	MONGOLIAN LETTER TODO DA
082	52	MONGOLIAN LETTER TODO CHA
083	53	MONGOLIAN LETTER TODO JA
084	54	MONGOLIAN LETTER TODO TSA
085	55	MONGOLIAN LETTER TODO YA
086	56	MONGOLIAN LETTER TODO WA
087	57	MONGOLIAN LETTER TODO KA
088	58	MONGOLIAN LETTER TODO GAA
089	59	MONGOLIAN LETTER TODO HAA
090	5A	MONGOLIAN LETTER TODO JIA
091	5B	MONGOLIAN LETTER TODO NIA
092	5C	MONGOLIAN LETTER TODO DZA
093	5D	MONGOLIAN LETTER SIBE E
094	5E	MONGOLIAN LETTER SIBE I
095	5F	MONGOLIAN LETTER SIBE IY
096	60	MONGOLIAN LETTER SIBE UE
097	61	MONGOLIAN LETTER SIBE U
098	62	MONGOLIAN LETTER SIBE ANG
099	63	MONGOLIAN LETTER SIBE KA
100	64	MONGOLIAN LETTER SIBE GA
101	65	MONGOLIAN LETTER SIBE HA
102	66	MONGOLIAN LETTER SIBE PA
103	67	MONGOLIAN LETTER SIBE SHA
104	68	MONGOLIAN LETTER SIBE TA
105	69	MONGOLIAN LETTER SIBE DA
106	6A	MONGOLIAN LETTER SIBE JA
107	6B	MONGOLIAN LETTER SIBE FA
108	6C	MONGOLIAN LETTER SIBE GAA
109	6D	MONGOLIAN LETTER SIBE HAA
110	6E	MONGOLIAN LETTER SIBE TSA
111	6F	MONGOLIAN LETTER SIBE ZA
112	70	MONGOLIAN LETTER SIBE RAA
113	71	MONGOLIAN LETTER SIBE CHA
114	72	MONGOLIAN LETTER SIBE ZHA
115	73	MONGOLIAN LETTER MANCHU I
116	74	MONGOLIAN LETTER MANCHU KA
117	75	MONGOLIAN LETTER MANCHU RA
118	76	MONGOLIAN LETTER MANCHU FA
119	77	MONGOLIAN LETTER MANCHU ZHA
120	78	(THIS POSITION SHALL NOT BE USED)
121	79	(THIS POSITION SHALL NOT BE USED)
122	7A	(THIS POSITION SHALL NOT BE USED)
123	7B	(THIS POSITION SHALL NOT BE USED)
124	7C	(THIS POSITION SHALL NOT BE USED)
125	7D	(THIS POSITION SHALL NOT BE USED)
126	7E	(THIS POSITION SHALL NOT BE USED)
127	7F	(THIS POSITION SHALL NOT BE USED)

dec	hex	Name
128	80	MONGOLIAN LETTER AG ANUSVARA ONE
129	81	MONGOLIAN LETTER AG VISARGA ONE
130	82	MONGOLIAN LETTER AG DAMARU
131	83	MONGOLIAN LETTER AG UBADAMA
132	84	MONGOLIAN LETTER AG INVERTED UBADAMA
133	85	MONGOLIAN LETTER AG BALUDA
134	86	MONGOLIAN LETTER AG THREE BALUDA
135	87	MONGOLIAN LETTER AG A
136	88	MONGOLIAN LETTER AG I
137	89	MONGOLIAN LETTER AG KA
138	8A	MONGOLIAN LETTER AG NGA
139	8B	MONGOLIAN LETTER AG CA
140	8C	MONGOLIAN LETTER AG TTA
141	8D	MONGOLIAN LETTER AG TTHA
142	8E	MONGOLIAN LETTER AG DDA
143	8F	MONGOLIAN LETTER AG NNA
144	90	MONGOLIAN LETTER AG TA
145	91	MONGOLIAN LETTER AG DA
146	92	MONGOLIAN LETTER AG PA
147	93	MONGOLIAN LETTER AG PHA
148	94	MONGOLIAN LETTER AG SSA
149	95	MONGOLIAN LETTER AG ZHA
150	96	MONGOLIAN LETTER AG ZA
151	97	MONGOLIAN LETTER AG AH
152	98	MONGOLIAN LETTER MANCHU AG TA
153	99	MONGOLIAN LETTER MANCHU AG ZHA
154	9A	MONGOLIAN LETTER MANCHU AG GHA
155	9B	MONGOLIAN LETTER MANCHU AG NGA
156	9C	MONGOLIAN LETTER MANCHU AG CA
157	9D	MONGOLIAN LETTER MANCHU AG JHA
158	9E	MONGOLIAN LETTER MANCHU AG TTA
159	9F	MONGOLIAN LETTER MANCHU AG DDHA
160	A0	MONGOLIAN LETTER MANCHU AG TA
161	A1	MONGOLIAN LETTER MANCHU AG DHA
162	A2	MONGOLIAN LETTER MANCHU AG SSA
163	A3	MONGOLIAN LETTER MANCHU AG CYA
164	A4	MONGOLIAN LETTER MANCHU AG ZHA
165	A5	MONGOLIAN LETTER MANCHU AG ZA
166	A6	MONGOLIAN LETTER AG HALF U
167	A7	MONGOLIAN LETTER AG HALF YA
168	A8	MONGOLIAN LETTER MANCHU AG BHA
169	A9	MONGOLIAN LETTER AG DAGALGA
170	AA	(THIS POSITION SHALL NOT BE USED)
171	AB	(THIS POSITION SHALL NOT BE USED)
172	AC	(THIS POSITION SHALL NOT BE USED)
173	AD	(THIS POSITION SHALL NOT BE USED)
174	AE	(THIS POSITION SHALL NOT BE USED)
175	AF	(THIS POSITION SHALL NOT BE USED)

Appendix I

《 Mongolian Reference Table 》

Explanation of《 Mongolian Reference Table》

1. The present table is compiled with a view to ensuring a unified use of《Mongolian Character Encoding Conventions》as well as meeting the needs for popularizing such an encoding system.

2. The content of《Basic Characters》in the present table and their names in it are identical to those in《Mongolian Basic Character Set》of our proposal.

3. In《Presentation Forms》of the present table are listed all varied presentation characters and their names.
   ① Varied presentation forms are grouped under their respective letters, and arranged in the order indicated in《Mongolian Basic Character Set》.
   ② The varied presentation forms of each letter are arranged in the order of《independent form》,《initial form》,《medial form》and《final form》, with the《masculine form》preceeding the《feminine form》where there is such a gender distinction.
   ③ When a certain varied presentation form appears for the first time, we should indicate its serial number among all the varied presentation forms of the letter concerned, and also its general serial number in the column《Presentation Total No. 》; when it appears for a second time or repeatedly, then we should smear the block《Presentation Form》in light black, indicating only the serial number of《Basic Characters》or the serial number among the varied presentation forms of the given letter for its first appearance.
   ④ The name of a varied presentation form should be written in lower case with a view to distinguish it from the name in《Basic Characters》.

4. In the《Unification Table》, each letter is unified in the order of Mongolian,

Todo, Sibe and Manchu languages with its name in each language marked.

5. In the《Presentation Rule》is listed the separately recorded forms (the different《Varied Presentation Forms》not within a word) of each letter, i. e. , a basic character is combined with a varied presentation form in use. When doing this, the white black changes and brackets of the "variation selector" should be igored, only the form of the black printing on white base is used.

In normal cases, the "position markers" [ISF]、[INF]、[MEF] and [FIF] are deleted when writing these variants in words.

When writing these variants in words together with the using of the "variation selector", there are the following cases:

① Black printing of "variation selector" written on white base are remained.

② White printing of "variation selector" written on black base are deleted.

③ It is determined by certain concrete conditions whether to remain or delete "variation selector" in brackets. See the concrete conditions in Appendix 3.

Mongolian Reference Table

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARACTERS	NAME	No		GLYPH	NAME	M⑤	T⑥	S⑦	MA⑧	RULE	TOTAL NO
000		M.① SPACE					msp	msp	msp	msp		
001		M. BIRGA					br	br				
				1		birga first form	br	br			ISF	000
				2		birga second form	br	br			INF	001
				3		birga third form	br	br			MEF	002
				4		birga fourth form	br	br			FIF	003
002		M. ELLIPSIS					el	el	el	el		
003		M. COMMA					cm					
004		M. PERIOD					pr					
005		M. COLON					cl	cl	cl	cl		
006		M. FOUR DOTS					fd	fd				
007	?!	M. COMBINATORY SYMBOL			?!		cs	cs			?!	
				1	!?	combinatory symbol alternative form	cs	cs			?! VS1	004
008		MT.② SOFT HYPHEN						sh				
009		MS.③ SILLABLE BOUNDARY MARKER							sbm			
010		MM.④ COMMA								cm		
011		MM. PERIOD								pr		

① M. = MONGOLIAN
② MT. = MONGOLIAN TODO
③ MS. = MONGOLIAN SIBE
④ MM. = MONGOLIAN MANCHU
⑤ M = MONGOL
⑥ T = TODO
⑦ S = SIBE
⑧ MA = MANCHU

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
012	ᠨ	M. NIRUGU			ᠨ		nr	nr	nr	nr	ᠨ	
016	᠐	MD.①ZERO			᠐		ze	ze			᠐	
017	᠑	MD. ONE			᠑		on	on			᠑	
018	᠒	MD. TWO			᠒		tw	tw			᠒	
019	᠓	MD. THREE			᠓		th	th			᠓	
020	᠔	MD. FOUR			᠔		fo	fo			᠔	
021	᠕	MD. FIVE			᠕		fi	fi			᠕	
022	᠖	MD. SIX			᠖		si	si			᠖	
023	᠗	MD. SEVEN			᠗		se	se			᠗	
024	᠘	MD. EIGHT			᠘		ei	ei			᠘	
025	᠙	MD. NINE			᠙		ni	ni			᠙	
032	ᠠ	ML.② A			ᠠ	ml. a first isolate form	a	a	a	a	ᠠ ISF	
			033		ᠡ	ml. a second isolate form	a				ᠠ ISF FVS1	
				1	ᠠ	ml. a initial form	a	a	a	a	ᠠ INF	005
				2	᠊	ml. a first medial form	a	a	a	a	ᠠ MEF	006
				3	᠊	ml. a second medial form	a				ᠠ MEF FVS2	007
				4	᠊	ml. a third medial form	a	a			ᠠ MEF FVS1	008
				5	᠊	ml. a final form	a	a	a	a	ᠠ FIF	009
				6	᠊	ml. a connected final form	a				ᠠ FIF FVS1	010
				7	᠊	ml. a separate final form	a	a	a	a	ᠠ FIF FVS2	011

① MD. = MONGOLIAN DIGIT
② ML. = MONGOLIAN LETTER

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARA – CTERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
033	ഇ	ML. E			ഇ	ml. e isolate form	e		e	e	ഇ ISF	
			032 – 3		ഺ	ml. e first initial form	e		e	e	ഇ INF	
			032 – 1		ഽ	ml. e second initial form	e				ഇ INF FVS1	
			032 – 2		ൎ	ml. e medial form	e		e	e	ഇ MEF	
			032 – 5		ൔ	ml. e final form	e				ഇ FIF	
			032 – 7		ൕ	ml. e separate final form	e				ഇ FIF FVS1	
034	ഈ	ML. I			ഈ	ml. i isolate form	i				ഈ ISF	
				1	഻	ml. i initial form	i				ഈ INF	012
			053		ൗ	ml. i first medial form	i				ഈ MEF	
			094		ൎ	ml. i second medial form	i				ഈ MEF FVS1	
				2	ൌ	ml. i final form	i				ഈ FIF	013
035	ഉ	ML. O			ഉ	ml. o isolate form	o		o	o	ഉ ISF	
			036		ൈ	ml. o initial form	o		o	o	ഉ INF	
				1	ൊ	ml. o first medial form	o		o	o	ഉ MEF	014
				2	ോ	ml. o second medial form	o				ഉ MEF FVS1	015
				3	ൌ	ml. o first final form	o		o	o	ഉ FIF	016
				4	ൎ	ml. o second final form	o				ഉ FIF FVS1	017

BASIC CHARACTERS			PRESENTATION FORMS					UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME		M	T	S	MA	RULE	TOTAL NO
036	൳	ML. U	035		൳	ml. u isolate form		u				൳ ISF	
					൳	ml. u initial form		u				൳ INF	
			035 – 1		ൎ	ml. u first medial form		u				൳ MEF	
			035 – 2		൳	ml. u second medial form		u				൳ MEF FVS1	
			035 – 3		൏	ml. u final form		u				൳ FIF	
037	൴	ML. OE			൴	ml. oe isolate form		oe				൴ ISF	
			038		൵	ml. oe initial form		oe				൴ INF	
			097		ൕ	ml. oe first medial form		oe				൴ MEF FVS1	
			035 – 1		ൎ	ml. oe second medial form		oe				൴ MEF	
				1	൶	ml. oe third medial form		oe				൴ MEF FVS2	018
			035 – 3		൏	ml. oe first final form		oe				൴ FIF	
				2	൱	ml. oe second final form		oe				൴ FIF FVS1	019
038	൵	ML. UE	037		൴	ml. ue first isolate form		ue				൵ ISF	
			073		൶	ml. ue second isolate form		ue				൵ ISF FVS1	
					൵	ml. ue initial form		ue				൵ INF	
			097		ൕ	ml. ue first medial form		ue				൵ MEF FVS1	
			035 – 1		ൎ	ml. ue second medial form		ue				൵ MEF	
			037 – 1		൶	ml. ue third medial form		ue				൵ MEF FVS2	
			035 – 3		൏	ml. ue first final form		ue				൵ FIF	
			037 – 2		൱	ml. ue second final form		ue				൵ FIF FVS1	

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC – TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
039	ൽ	ML. EE			ൽ	ml. ee isolate form	ee				ൽ ISF	
				1	ൽ	ml. ee initial form	ee				ൽ INF	020
			056		◌ൽ	ml. ee medial form	ee				ൽ MEF	
				2	ൽ	ml. ee final form	ee				ൽ FIF	021
040	ന	ML. NA			ന	ml. na first initial form	na	na	na	na	ന INF	
			032 – 3		ന	ml. na second initial form	na				ന INF FVS1	
				1	ന	ml. na medial form with dots	na	na	na	na	ന MEF (FVS1)	022
			032 – 2		◌ന	ml. na medial form	na	na	na	na	ന (FVS2)	
				2	ന	ml. na final form with dots	na	na	na	na	ന FIF (FVS1)	023
			032 – 5		◌ന	ml. na final form	na	na	na	na	ന (FVS2)	
				3	ന	ml. na medial separate form		na			ന MEF FVS2	024
041	ങ	ML. ANG			ങ	ml. ang medial form	ang			ang	ങ MEF	
				1	ങ	ml. ang final form	ang			ang	ങ FIF	025
042	ബ	ML. BA			ബ	ml. ba initial form	ba		ba	ba	ബ INF	
			042		◌ബ	ml. ba medial form	ba		ba	ba	ബ MEF	
				1	ബ	ml. ba final form	ba		ba	ba	ബ FIF	026
			075		ബ	ml. ba alternative form	ba				ബ FIF FVS1	
043	പ	ML. PA			പ	ml. pa initial form	pa				പ INF	
			043		◌പ	ml. pa medial form	pa				പ MEF	
				1	പ	ml. pa final form	pa				പ FIF	027

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
044		ML. QA				ml. qa initial form	qa					
			045			ml. qa initial form with dots	qa					
			032 – 4			ml. qa first medial form	qa					
			045 – 1			ml. qa first medial form with dots	qa					
				1		ml. qa second medial form	qa					028
			045 – 2			ml. qa second medial form with dots	qa					
			137			ml. qa feminine isolate form	qa					
				2		ml. qa feminine isolate form with dots	qa					029
045		ML. GA				ml. ga initial form with dots	ga					
			044			ml. ga initial form	ga					
			032 – 4			ml. ga medial form	ga					
				1		ml. ga first medial form with dots	ga					030
				2		ml. ga second medial form with dots	ga					031
			044 – 1			ml. ga final form	ga					
			137			ml. ga feminine isolate form	ga					
				3		ml. ga feminine medial form	ga					032
				4		ml. ga feminine final form	ga					033
046		ML. MA				ml. ma initial form	ma		ma	ma		
				1		ml. ma medial form	ma		ma	ma		034
				2		ml. ma final form	ma		ma	ma		035

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
047	ൽ	ML. LA			ൽ	ml. la initial form	la	la	la	la	ൽ INF	
				1	ൽ	ml. la medial form	la	la	la	la	ൽ MEF	036
				2	ൽ	ml. la final form	la	la	la	la	ൽ FIF	037
048	ശ	ML. SA			ശ	ml. sa initial form	sa	sa	sa	sa	ശ INF	
				1	ശ	ml. sa medial form	sa	sa	sa	sa	ശ MEF	038
				2	ശ	ml. sa first final form	sa	sa	sa	sa	ശ FIF	039
				3	ശ	ml. sa old final form	sa				ശ FIF EVS1	040
				4	ശ	ml. sa second final form				sa	ശ FIF EVS2	041
049	ഷ	ML. SHA			ഷ	ml. sha initial form	sha	sha			ഷ INF	
				1	ഷ	ml. sha medial form	sha	sha			ഷ MEF	042
				2	ഷ	ml. sha final form	sha	sha			ഷ FIF	043
050	ത	ML. TA			ത	ml. ta initial form	ta				ത INF	
			051		ത	ml. ta first medial form	ta				ത MEF	
				1	ത	ml. ta second medial form	ta				ത MEF EVS1	044
				2	ത	ml. ta final form	ta				ത FIF	045
051	ദ	ML. DA			ദ	ml. da first initial form	da				ദ INF EVS1	
			050		ത	ml. da second initial form	da				ദ INF	
			051		ദ	ml. da first medial form	da				ദ MEF (EVS1)	
				1	ദ	ml. da second medial form	da				ദ MEF	046
				2	ദ	ml. da first final form	da				ദ FIF	047
				3	ദ	ml. da second final form	da				ദ FIF EVS1	048

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARA – CTERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
052	ചാ	ML. CHA			ചാ	ml. cha initial form	cha	za	cha	cha	ചാ FIF	
				1	ചാ	ml. cha medial form	cha	za	cha	cha	ചാ MEF	049
				2	ച്	ml. cha final form	cha		cha	cha	ചാ FIF	050
053	ജാ	ML. JA			ജാ	ml. ja initial form	ja		ja	ja	ജാ INF	
				1	ജാ	ml. ja medial form	ja			ja	ജാ MEF	051
			034 – 2		◌ൗ	ml. ja first final form	ja				ജാ FIF FVS1	
				2	ജ്	ml. ja second final form	ja				ജാ FIF	052
054	ഞാ	ML. YA			ഞാ	ml. ya first initial form	ya		ya	ya	ഞാ INF	
			053		◌ാ	ml. ya second initial form	ya				ഞാ INF FVS1	
			054		◌ാ	ml. ya first medial form	ya		ya	ya	ഞാ MEF (FVS1)	
			053		◌ാ	ml. ya second medial form	ya				ഞാ MEF	
			034 – 2		◌ൗ	ml. ya final form	ya				ഞാ FIF	
055	റാ	ML. RA			റാ	ml. ra initial form	ra	ra	ra	ra	റാ INF	
			055		റാ	ml. ra medial form	ra	ra	ra	ra	റാ MEF	
				1	ർ	ml. ra final form	ra	ra	ra		റാ FIF	053
056	വാ	ML. WA			വാ	ml. wa initial form	wa	fa	wa	wa	വാ INF	
			056		വാ	ml. wa medila form	wa	fa	wa	wa	വാ MEF	
			039 – 2		വ്	ml. wa first final form	wa				വാ FIF	
			035 – 3		◌ൗ	ml. wa second final form	wa				വാ FIF FVS1	

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
057	ഩ	ML. FA			ഩ	ml. fa initial form	fa				ഩ INF	
			057		ഩ	ml. fa medial form	fa				ഩ MEF	
				1	ഺ	ml. fa final form	fa				ഩ FIF	054
058	പ	ML. KA			പ	ml. ka initial form	ka	ka	kaa	kaa	പ INF	
			058		പ	ml. ka medial form	ka	ka	kaa	kaa	പ MEF	
				1	഻	ml. ka final form	ka				പ FIF	055
059	ഫ	ML. KHA			ഫ	ml. kha initial form	kha	qa			ഫ INF	
			059		ഫ	ml. kha medial form	kha	qa			ഫ MEF	
				1	഼	ml. kha final form	kha	qa			ഫ FIF	056
060	ബ	ML. TSA			ബ	ml. tsa initial form	tsa				ബ INF	
				1	ബ	ml. tsa medial form	tsa				ബ MEF	057
				2	ഽ	ml. tsa final form	tsa				ബ FIF	058
061	ഭ	ML. ZA			ഭ	ml. za initial form	za				ഭ INF	
				1	ഭ	ml. za medial form	za				ഭ MEF	059
				2	ഽ	ml. za final form	za				ഭ FIF	060
062	മ	ML. HAA			മ	ml. haa initial form	haa				മ INF	
			065		മ	ml. haa medila form	haa				മ MEF	
				1	ഩ	ml. haa final form	haa				മ FIF	061

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
063		ML. ZRA				ml. zra initial form	zra				INF	
			063			ml. zra medial form	zra				MEF	
				1		ml. zra final form	zra				FIF	062
064		ML. LHA				ml. lha initial form	lha	lha			INF	
				1		ml. lha medial form	lha	lha			MEF	063
065		ML. ZHI					zhi					
066		ML. CHI					chi					
067		MLT ①LONG VOWEL SIGN				mlt. long vowel sign medial form		lvs			MEF	
				1		mlt. long vowel sign final form		lvs			FIF	064
068		MLT. E				mlt. e initial form		e			INF	
				1		mlt. e first medial form		e			MEF	065
				2		mlt. e second medial form		e			MEF FVS1	066
069		MLT. I				mlt. i isolate form		i			ISF	
				1		mlt. i initial form		i			INF	067
				2		mlt. i first medial form		i			MEF	068
				3		mlt. i second medial form		i			MEF FVS1	069
				4		mlt. i final form		i			FIF	070

① MLT. = MONGOLIAN LETTER TODO

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
070	ದೆ	MLT. O			ದೆ	mlt. o isolate form		o			ದೆ ISF	
				1	ದೆ	mlt. o initial form		o			ದೆ INF	071
				2	ದ	mlt. o first medial form		o			ದೆ MEF	072
				3	ದ	mlt. o second medial form		o			ದೆ MEF FVS1	073
				4	ದ	mlt. o final form		o			ದೆ FIF	074
071	ಕು	MLT. U			ಕು	mlt. u first isolate form		u			ಕು ISF	
				1	ಕ	mlt. u second isolate form		u			ಕು ISF FVS1	075
				2	ಕ	mlt. u initial form		u			ಕು INF	076
			035 – 1		ು	mlt. u first medial form		u			ಕು MEF	
				3	ು	mlt. u second medial form		u			ಕು MEF FVS2	077
				4	ು	mlt. u third medial form		u			ಕು MEF FVS1	078
				5	ು	mlt. u first final form		u			ಕು FIF	079
			035 – 3		ು	mlt. u second final form		u			ಕು FIF FVS1	
072	ದೊ	MLT. OE			ದೊ	mlt. oe isolate form		oe			ದೊ ISF	
				1	ದೊ	mlt. oe initial form		oe			ದೊ INF	080
				2	ದ	mlt. oe first medial form		oe			ದೊ MEF	081
				3	ದ	mlt. oe second medial form		oe			ದೊ MEF FVS1	082
				4	ದ	mlt. oe final form		oe			ದೊ FIF	083

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
073		MLT. UE				mlt. ue first isolate form		ue			ISF	
			035			mlt. ue second isolate form		ue			ISF FVS1	
			036			mlt. ue initial form		ue			INF	
			035 – 1			mlt. ue first medial form		ue			MEF	
			035 – 2			mlt. ue second medial form		ue			MEF FVS1	
			035 – 3			mlt. ue final form		ue			FIF	
			041			mlt. ang medial form		ang			MEF	
074		MLT. ANG				mlt. ang final form		ang			FIF	
			042			mlt. ba initial form		ba			INF	
			042			mlt. ba medial form		ba			MEF	
075		MLT. BA				mlt. ba final form		ba			FIF	
076		MLT. PA				mlt. pa initial form		pa			INF	
			076			mlt. pa medial form		pa			MEF	
				1		mlt. pa final form		pa			FIF	084
077		MLT. QA				mlt. qa initial form		qa			INF	
			045 – 1			mlt. qa medial form with dots		qa			MEF	
			059			mlt. qa feminine initial form		qa			INF FVS1	
			059			mlt. qa feminine medial form		qa			MEF FVS1	
			059 – 1			mlt. qa final form		qa			FIF	

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
078	ᠭ	MLT. GA			ᠭ	mlt. ga initial form		ga			ᠭ INF	
				1	ᠭ	mlt. ga first medial form		ga			ᠭ MEF	085
				2	ᠭ	mlt. ga second medial form		ga			ᠭ MEF FVS1	086
				3	ᠭ	mlt. ga final form		ga			ᠭ FIF	087
			137		ᠭ	mlt. ga feminine isolate form		ga			ᠭ ISF	
			046		ᠮ	mlt. ma initial form		ma			ᠮ INF	
			046 – 1		ᠮ	mlt. ma medial form		ma			ᠮ MEF	
079	ᠮ	MLT. MA			ᠮ	mlt. ma final form		ma			ᠮ FIF	
080	ᠲ	MLT. TA			ᠲ	mlt. ta initial form		ta			ᠲ INF	
			080		ᠲ	mlt. ta medial form		ta			ᠲ MEF	
				1	ᠲ	mlt. ta final form		ta			ᠲ FIF	088
081	ᠳ	MLT. DA			ᠳ	mlt. da initial form		da			ᠳ INF	
			081		ᠳ	mlt. da medial form		da			ᠳ MEF	
082	ᠴ	MLT. CHA			ᠴ	mlt. cha initial form		cha			ᠴ INF	
				1	ᠴ	mlt. cha medial form		cha			ᠴ MEF	089
				2	ᠴ	mlt. cha final form		cha			ᠴ FIF	090
083	ᠵ	MLT. JA			ᠵ	mlt. ja initial form		ja			ᠵ INF	
				1	ᠵ	mlt. ja medial form		ja			ᠵ MEF	091
				2	ᠵ	mlt. ja final form		ja			ᠵ FIF	092

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
084	ᠵ	MLT. TSA			ᠵ	mlt. tsa initial form		tsa			ᠵ INF	
			053 – 1		ᠵ	mlt. tsa medial form		tsa			ᠵ MEF	
			053 – 2		ᠵ	mlt. tsa final form		tsa			ᠵ FIF	
085	ᠶ	MLT. YA			ᠶ	mlt. ya initial form		ya			ᠶ INF	
			085		ᠶ	mlt. ya medial form		ya			ᠶ MEF	
086	ᠸ	MLT. WA			ᠸ	mlt. wa initial form		wa			ᠸ INF	
			086		ᠸ	mlt. wa medial form		wa			ᠸ MEF	
				1	ᠹ	mlt. wa final form		wa			ᠸ FIF	093
087	ᠺ	MLT. KA			ᠺ	mlt. ka initial form		ka			ᠺ INF	
			087		ᠺ	mlt. ka medial form		ka			ᠺ MEF	
				1	ᠻ	mlt. ka final form		ka			ᠺ FIF	094
088	ᠺ	MLT. GAA			ᠺ			gaa			ᠺ	
			062		ᠼ	mlt. haa initial form		haa			ᠽ INF	
				1	ᠽ	mlt. haa medial form		haa			ᠽ MEF	095
089	ᠽ	MLT. HAA			ᠽ	mlt. haa final form		haa			ᠽ FIF	
090	ᠿ	MLT. JIA			ᠿ			jia			ᠿ	
091	ᡀ	MLT. NIA			ᡀ			nia			ᡀ	

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
092		MLT. DZA				mlt. dza initial form		dza			INF	
				1		mlt. dza medial form		dza			MEF	096
				2		mlt. dza final form		dza			FIF	097
			033			mls. e isolate form			e	e	ISF	
			032 – 3			mls. e initial form			e	e	INF	
				1		mls. e first medial form			e	e	MEF	098
			032 – 2			mls. e second medial form			e	e	MEF FVS1	
093		MLS① E				mls. e first final form			e	e	FIF	
			032 – 5			mls. e second final form			e	e	FIF FVS1	
			034			mls. i isolate form			i		ISF	
			034 – 1			mls. i initial form			i		INF	
			053			mls. i first medial form			i		MEF	
094		MLS. I				mls. i second medial form			i		MEF FVS1	
				1		mls. i third medial form			i		MEF FVS2	099
			034 – 2			mls. i first final form			i		FIF	
				2		mls. i second final form			i		FIF FVS1	100
				3		mls. i third final form			i		FIF FVS2	101
095		MLS. IY				mls. iy medial form			iy		MEF	
				1		mls. iy final form			iy		FIF	102

① MLS. = MONGOLIAN LETTER SIBE

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
096		MLS. UE				mls. ue isolate form			ue	ue	ISF	
				1		mls. ue initial form			ue	ue	INF	103
				2		mls. ue first medial form			ue	ue	MEF	104
			035 – 2			mls. ue second medial form			ue	ue	MEF FVS1	
				3		mls. ue first final form			ue	ue	FIF	105
			035 – 4			mls. ue second final form			ue	ue	FIF FVS1	
			037			mls. u isolate form				u	ISF	
			038			mls. u initial form				u	INF	
097		MLS. U				mls. u medial form			u	u	MEF	
			037 – 2			mls. u final form			u	u	FIF	
			041			mls. ang medial form			ang		MEF	
098		MLS. ANG				mls. ang final form			ang		FIF	
			044			mls. ka masculine initial form			ka		INF	
			032 – 4			mls. ka first medial form			ka		MEF	
				1		mls. ka second medial form			ka		MEF FVS1	106
099		MLS. KA				mls. ka final form			ka		FIF	
			137			mls. ka feminine isolate form			ka		ISF	

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC – TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
100		MLS. GA				mls. ga initial form			ga	ga	INF	
				1		mls. ga medial form			ga	ga	MEF	107
				2		mls. ga feminine isolate form			ga	ga	ISF	108
101		MLS. QA				mls. qa initial form			qa	qa	INF	
				1		mls. qa medial form			qa	qa	MEF	109
				2		mls. qa feminine isolate form			qa	qa	ISF	110
102		MLS. PA				mls. pa initial form			pa	pa	INF	
			102			mls. pa medial form			pa	pa	MEF	
103		MLS. SHA				mls. sha initial form			sha	sha	INF	
				1		mls. sha medial form			sha	sha	MEF	111
				2		mls. sha final form				sha	FIF	112
104		MLS. TA				mls. ta first initial form			ta	ta	INF	
			050			mls. ta second initial form			ta	ta	 INF FVS1	
			051			mls. ta first medial form			ta	ta	MEF FVS1	
				1		mls. ta second medial form			ta	ta	MEF	113
			051 – 1			mls. ta third medial form			ta	ta	MEF FVS2	
			051 – 2			mls. ta final form			ta	ta	FIF	
105		MLS. DA				mls. da first initial form			da	da	INF	
				1		mls. da second initial form			da	da	INF FVS1	114
				2		mls. da first medial form			da	da	MEF FVS1	115
				3		mls. da second medial form			da	da	MEF	116

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC – TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
			053			mls. ja initial form			ja		INF	
106		MLS. JA				mls. ja medial form			ja		MEF	
107		MLS. FA				mls. fa initial form			fa		INF	
			118			mls. fa medial form			fa		MEF	
108		MLS. GAA							gaa	gaa		
109		MLS. HAA							haa	haa		
110		MLS. TSA				mls. tsa initial form			tsa	tsa	INF	
				1		mls. tsa medial form			tsa	tsa	MEF	117
111		MLS. ZA				mls. za first initial form			za	za	INF	
				1		mls. za second initial form			za	za	INF FVS1	118
				2		mls. za first medial form			za	za	MEF	119
				3		mls. za second medial form			za	za	MEF FVS1	120
112		MLS. RAA							ra	ra		
113		MLS. CHA				mls. cha initial form			cha	cha	INF	
				1		mls. cha medial form			cha	cha	MEF	121
			119			mls. zha initial form			zha		INF	
114		MLS. ZHA				mls. zha medial form			zha		MEF	

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
			034			mlm. i isolate form				i	ISF	
			034 – 1			mlm. i initial form				i	INF	
			053			mlm. i first medial form				i	MEF	
			094			mlm. i second medial form				i	MEF FVS1	
115		MLM.① I				mlm. i third medial form				i	MEF FVS3	
			094 – 1			mlm. i fourth medial form				i	MEF FVS2	
			034 – 2			mlm. i first final form				i	FIF	
			094 – 2			mlm. i second final form				i	FIF FVS1	
			094 – 3			mlm. i third final form				i	FIF FVS2	
			044			mlm. ka masculine initial form				ka	INF	
			032 – 4			mlm. ka masculine first medial form				ka	MEF	
			045 – 1			mlm. ka masculine second medial form				ka	MEF FVS1	
116		MLM. KA				mlm. ka masculine final form				ka	FIF	
			137			mlm. ka feminine isolate form				ka	ISF	
			045 – 3			mlm. ka feminine medial form				ka	MEF FVS2	
				1		mlm. ka feminine medial form with dots				ka	MEF FVS3	122
				2		mlm. ka feminine final form				ka	FIF FVS1	123
				3		mlm. ka feminine final form with dots				ka	FIF FVS2	124

① MLM. = MONGOLIAN LETTER MANCHU

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
			055			mlm. ra initial form				ra	INF	
			055			mlm. ra medial form				ra	MEF	
117		MLM. RA				mlm. ra final form				ra	FIF	
			107			mlm. fa first initial form				fa	INF	
			056			mlm. fa second initial form				fa	INF FVS1	
118		MLM. FA				mlm. fa first medial form				fa	MEF	
			056			mlm. fa second medial form				fa	MEF FVS1	
119		MLM. ZHA				mlm. zha initial form				zha	INF	
				1		mlm. zha medial form				zha	MEF	125
128		MLA.① ANUSVARA ONE				mla. anusvara first form	an			an		
				1		mla. anusvara second form		an			FVS1	126
129		MLA. VISARGA ONE				mla. visarga first form	vi	vi		vi		
				1		mla. visarga second form	vi				FVS1	127
130		MLA. DAMARU					dm	dm		dm		
131		MLA. UBADAMA					ub	ub		ub		
132		MLA. INVERTED UBADAMA					iu	iu		iu		
133		MLA. BALUDA					bl	bl		bl		
134		MLA. THREE BALUDA					tb	tb		tb		

① MLA. = MONGOLIAN LETTER ALI - GALI

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
135	𑒁	MLA. A			𑒁	mla. a first isolate form	a			a	𑒁 ISF	
				1	𑒂	mla. a second isolate form	a				𑒁 ISF FVS1	128
				2	𑒃	mla. a final form	a			a	𑒁 FIF	129
				3	𑒄	mla. a final short form	a				𑒁 FIF FVS1	130
				4	𑒅	mla. a final forward form	a	a			𑒁 FIF FVS2	131
				5	𑒆	mla. a final form with sidu	a	a			𑒁 FIF FVS3	132
136	𑒇	MLA. I			𑒇	mla. i isolate form	i				𑒇 ISF	
				1	𑒈	mla. i first final form	i				𑒇 FIF	133
			094 – 3			mla. i second final form				i	𑒇 FIF FVS1	
137	𑒉	MLA. KA			𑒉		ka	ga			𑒉	
				1	𑒉	mla. ka initial form	ka	ka			𑒉 INF	134
138	𑒊	MLA. NGA			𑒊	mla. nga initial form	nga	nga			𑒊 INF	
				1	𑒋	mla. nga initial short form	nga	nga			𑒊 INF FVS1	135
				2	𑒊	mla. nga medial form	nga	nga			𑒊 MEF	136
				3	𑒋	mla. nga medial short form	nga	nga			𑒊 MEF FVS1	137
139	𑒌	MLA. CA			𑒌	mla. ca initial form	ca	tsa			𑒌 INF	
				1	𑒌	mla. ca medial form	ca	tsa			𑒌 MEF	138
140	𑒍	MLA. TTA			𑒍		tta	tta			𑒍	
141	𑒎	MLA. TTHA			𑒎		ttha	ttha			𑒎	

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
142	ᠭ	MLA. DDA			ᠭ		dda	dda			ᠭ	
143	ᠨ	MLA. NNA			ᠨ		nna	nna		nna	ᠨ	
144	ᠲ	MLA. TA			ᠲ		ta				ᠲ	
145	ᠳ	MLA. DA			ᠳ		da				ᠳ	
146	ᠫ	MLA. PA			ᠫ		pa			pa	ᠫ	
147	ᠬ	MLA. PHA			ᠬ		pha				ᠬ	
148	ᠰ	MLA. SSA			ᠰ	mla. ssa initial form	ssa	ssa			ᠰ INF	
		MLA. SSA		1	ᠰ	mla. ssa medial form	ssa	ssa			ᠰ MEF	139
149	ᠵ	MLA. ZHA			ᠵ		zha				ᠵ	
150	ᠶ	MLA. ZA			ᠶ	mla. za initial form	za	za			ᠶ INF	
				1	ᠶ	mla. za medial form	za	za			ᠶ MEF	140
151	ᠠ	MLA. AH			ᠠ		ah	ah			ᠠ	
152	ᢈ	MLTA.①TA			ᢈ			ta			ᢈ	
153	ᢐ	MLTA. ZHA			ᢐ			zha			ᢐ	
154	ᡂ	MLMA.② GHA			ᡂ	mlma. gha initial form				gha	ᡂ INF	
				1	ᡂ	mlma. gha medial form				gha	ᡂ MEF	141
155	ᡅ	MLMA. NGA			ᡅ	mlma. nga initial form				nga	ᡅ INF	
				1	ᡅ	mlma. nga medial form				nga	ᡅ MEF	142

① MLTA. = MONGOLIAN LETTER TODO ALI – GALI
② MLMA. = MONGOLIAN LETTER MANCHU ALI – GALI

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
156		MLMA. CA				mlma. ca initial form				ca	INF	
				1		mlma. ca medial form				ca	MEF	143
157		MLMA. JHA				mlma. jha initial form				jha	INF	
				1		mlma. jha medial form				jha	MEF	144
158		MLMA. TTA				mlma. tta initial form				tta	INF	
				1		mlma. tta medial form				tta	MEF	145
159		MLMA. DDHA				mlma. ddha initial form				ddha	INF	
				1		mlma. ddha medial form				ddha	MEF	146
160		MLMA. TA								ta		
161		MLMA. DHA				mlma. dha initial form				dha	INF	
				1		mlma. dha medial form				dha	MEF	147
162		MLMA. SSA				mlma. ssa initial form				ssa	INF	
			148 – 1			mlma. ssa medial form				ssa	MEF	
163		MLMA. CYA				mlma. cya initial form				cya	INF	
				1		mlma. cya medial form				cya	MEF	148
164		MLMA. ZHA				mlma. zha initial form				zha	INF	
				1		mlma. zha medial form				zha	MEF	149

BASIC CHARACTERS			PRESENTATION FORMS				UNIFICATION TABLE				PRESENTATION	
No	CHARAC-TERS	NAME	No		GLYPH	NAME	M	T	S	MA	RULE	TOTAL NO
165		MLMA. ZA				mlma. za initial form				za	INF	
				1		mlma. za medial form				za	MEF	150
166		MLA. HALF U					hu					
167		MLTA. HALF YA						hy				
168		MLMA. BHA								bha		
169		MLA. DAGAGULGA					dag					

Appendix Ⅱ

《 Mongolian Ligature Set 》

Explanation of 《 Mongolian Ligature Set 》

(1) This set is compiled for the purpose to clarify Mongolian ligatures in Mongolian encoding.

(2) The table consists of seven columns, viz., "Serial number", "Ligature graph", "Name", "Unification & recording rule for Mongolian ligature", "Unification & recording rule for Todo ligature", "Unification & recording rule for Sibe ligature" and "Unificafion & recording rule for Manchu ligature".

(3) In the column of Graphic Symbols of Ligatures are listed all ligatures required in Mongolian, Todo, Sibe and Manchu writing systems. They are arranged in the alphabetic order as indicated in "Mongolian Basic Character Set".

(4) In principle, graphes of ligatures in the table are named according to the naming method set forth in "Mongolian Character Encoding Conventions", the only thing we have to do being to replace "MONGOLIAN LETTER" with "MONGOLIAN LIGATURE (ML)".

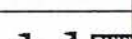
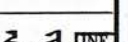
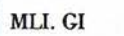
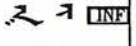
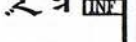
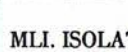
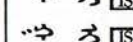
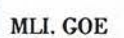
(5) In the table, all graphes of ligatures of the four languages are unified with their names being marked ; and rules for recording separate syllables unified acceptable among clients are indicated.

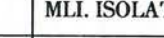
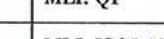
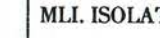
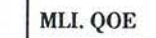
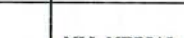
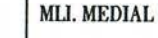
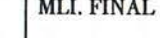
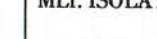
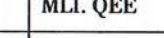
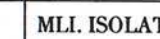
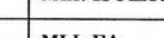
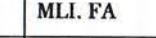
MONGOLIAN LIGATURE SET

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO②	INI③	MED④	FIN⑤	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
1		MLI.① BA		ba be	ba be		INF INF		ba	ba		INF		ba	ba		INF		ba	ba		INF
2		MLI. ISOLATE BA	ba be			ba be	ISF ISF	ba			ba	ISF	ba			ba	ISF	ba			ba	ISF
3		MLI. BI		bi	bi		INF							bi	bi		INF		bi	bi		INF
4		MLI. ISOLATE BI	bi			bi	ISF						bi			bi	ISF	bi			bi	ISF
5		MLI. BO		bo bu	bo bu boe bue		INF INF MEF MEF		bo bue	bo bue		INF INF		bo	bo		INF		bo	bo		INF
6		MLI. ISOLATE BO	bo bu			bo bu boe bue	ISF ISF FIF FIF	bo bue			bo bue	ISF ISF	bo			bo	ISF	bo			bo	ISF
7		MLI. BOE		boe bue			INF INF												bu	bu		INF
8		MLI. ISOLATE BOE	boe bue			boe bue	ISF ISF											bu			bu	ISF
9		MLI. BEE		bee	bee		INF															
10		MLI. ISOLATE BEE	bee			bee	ISF															

① MLI. = MONGOLIAN LIGATURE ② ISO = ISOLATE ③ INI = INITIAL ④ MED = MEDIAL ⑤ FIN = FINAL

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
11		MLI. PA		pa pe	pa pe		INF INF																
12		MLI. ISOLATE PA	pa pe			pa pe	ISF  ISF																
13		MLI. PI		pi	pi		INF																
14		MLI. ISOLATE PI	pi			pi	ISF																
15		MLI. PO		po pu poe pue	po pu poe pue		INF INF INF INF																
16		MLI. ISOLATE PO	po pu			po pu poe pue	ISF ISF FIF  FIF																
17		MLI. POE		poe pue			INF INF																
18		MLI. ISOLATE POE	poe pue			poe pue	ISF ISF																
19		MLI. PEE		pee	pee		 INF																
20		MLI. ISOLATE PEE	pee			pee	ISF																
21		MLI. GE		qe ge	qe ge		 INF INF							ke	ke		 INF		ke	ke		 INF

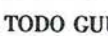
No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
22		MLI. ISOLATE GE	qe ge			qe ge	ISF							ke	ke		 INF	ke			ke	 ISF
23		MLI. GI		qi gi	qi gi		 INF							ki	ki		 INF		ki	ki		 INF
24		MLI. ISOLATE GI	qi gi			qi gi	ISF						ki			ki	ISF	ki			ki	 ISF
25		MLI. GOE		qoe que goe gue			 INF															
26		MLI. MEDIAL GUE			qoe que goe gue		MEF		gue	gue		 INF		kue	kue		 INF		kue	kue		INF
27		MLI. FINAL GOE				qoe que goe gue	FIF	gue			gue	 ISF	kue			kue	ISF	kue			kue	 ISF
28		MLI. ISOLATE GOE	qoe que goe gue			qoe que goe gue	ISF															
29		MLI. GEE		gee	gee		 INF															
30		MLI. ISOLATE GEE	gee			gee	ISF															

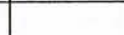
No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
31		MLI. QE		qe	qe		 INF															
32		MLI. ISOLATE QE	qe			qe	 ISF															
33		MLI. QI		qi	qi		 INF															
34		MLI. ISOLATE QI	qi			qi	 ISF															
35		MLI. QOE		qoe que			 INF  INF															
36		MLI. MEDIAL QOE			qoe que		 MEF  MEF															
37		MLI. FINAL QOE				qoe que	 FIF  FIF															
38		MLI. ISOLATE QOE	qoe que			qoe que	 ISF  ISF															
39		MLI. QEE		qee	qee		 INF															
40		MLI. ISOLATE QEE	qee			qee	 ISF															
41		MLI. FA		fa	fa		 INF															
42		MLI. ISOLATE FA	fa fe			fa fe	 ISF  ISF															
43		MLI. FI		fi	fi		 INF															
44		MLI. ISOLATE FI	fi			fi	 ISF															
45		MLI. FO		fo	fo		 INF															
46		MLI. ISOLATE FO	fo fu			fo fu	 ISF  ISF															

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
47		MLI. FUE		fue	fue		ᠣ ᡩᡝ INF															
48		MLI. ISOLATE FUE	foe fue			foe fue	ᠣ ᡩᡝ ISF ᠣ ᡩᡝ ISF															
49		MLI. FEE		fee	fee		ᠣ ᡩᡞ INF															
50		MLI. ISOLATE FEE	fee			fee	ᠣ ᡩᡞ ISF															
51		MLI. KA		ka	ka		ᠤ ᡭᡝ INF															
52		MLI. ISOLATE KA	ka ke			ka ke	ᠤ ᡭᡝ ISF ᠤ ᡭᡞ ISF															
53		MLI. KI		ki	ki		ᠤ ᡭᡳ INF															
54		MLI. ISOLATE KI	ki			ki	ᠤ ᡭᡳ ISF															
55		MLI. KO		ko	ko		ᠤ ᡭᡡ INF															
56		MLI. ISOLATE KO	ko ku			ko ku	ᠤ ᡭᡡ ISF ᠤ ᡭᡡ ISF															
57		MLI. KUE		kue	kue		ᠤ ᡭᡩᡝ INF															
58		MLI. ISOLATE KUE	koe kue			koe kue	ᠤ ᡭᡩᡝ ISF ᠤ ᡭᡩᡝ ISF															
59		MLI. KEE		kee	kee		ᠤ ᡭᡩᡞ INF															
60		MLI. ISOLATE KEE	kee			kee	ᠤ ᡭᡩᡞ ISF															
61		MLI. KHA		kha	kha		ᠤ ᡮᡝ INF															
62		MLI. ISOALTE KHA	kha			kha	ᠤ ᡮᡝ ISF															

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
63		MLI. KHI		khi	khi		INF															
64		MLI. ISOLATE KHI	khi			khi	ISF															
65		MLI. KHO		kho	kho		INF		que	que		INF										
66		MLI. ISOLATE KHO	kho khu			kho khu	ISF ISF	que			que	ISF										
67		MLI. KHUE		khue	khue		INF															
68		MLI. ISOLATE KHUE	khoe khue			khoe khue	ISF ISF															
69		MLI. KHEE		khee	khee		INF															
70		MLI. ISOLATE KHEE	khee			khee	ISF															
71		MLI. TODO BE						be	be	be	be	ISF										
72		MLI. TODO BI							bi	bi		INF										
73		MLI. TODO ISOLATE BI						bi			bi	ISF										
74		MLI. TODO BU							bu	bu		INF										
75		MLI. TODO ISOLATE BU						bu			bu	ISF										
76		MLI. TODO BOE							boe	boe		INF										
77		MLI. TODO ISOLATE BOE						boe			boe	ISF										
78		MLI. TODO PA							pa	pa		INF										
79		MLI. TODO ISOLATE PA						pa			pa	ISF										
80		MLI. TODO PE						pe	pe	pe	pe	ISF										
81		MLI. TODO PI							pi	pi		INF										

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
82		MLI. TODO ISOLATE PI						pi			pi	 ISF										
83		MLI. TODO PO							po	po		INF										
									pue	pue		 INF										
84		MLI. TODO ISOLATE PO						po			po	ISF										
								pue			pue	 ISF										
85		MLI. TODO PU							pu	pu		INF										
86		MLI. TODO ISOLATE PU						pu			pu	 ISF										
87		MLI. TODO POE							poe	poe		 INF										
88		MLI. TODO ISOLATE POE						poe			poe	 ISF										
89		MLI. TODO QE						qe	qe	qe	qe	 ISF										
90		MLI. TODO QI							qi	qi		 INF										
91		MLI. TODO ISOLATE QI						qi			qi	 ISF										
92		MLI. TODO QOE							qoe	qoe		 INF										
93		MLI. TODO ISOLATE QOE						qoe			qoe	 ISF										
94		MLI. TODO GE						ge	ge	ge	ge	 ISF										
95		MLI. TODO GI							gi	gi		 INF										
96		MLI. TODO ISOLATE GI						gi			gi	 ISF										
97		MLI. TODO GOE							goe	goe		 INF										
98		MLI. TODO ISOLATE GOE						goe			goe	 ISF										
99		MLI. TODO KA							ka	ka		 INF										
100		MLI. TODO ISOLATE KA						ka			ka	 ISF										

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
101		MLI. TODO KO							ko	ko		 INF										
102		MLI. TODO ISOLATE KO						ko			ko	 ISF										
103		MLI. TODO KU							ku	ku		 INF										
104		MLI. TODO ISOLATE KU						ku			ku	ISF										
105		MLI. TODO GAA							gaa	gaa		 INF										
106		MLI. TODO ISOLATE GAA						gaa			gaa	 ISF										
107		MLI. TODO GOO							goo	goo		 INF										
108		MLI. TODO ISOLATE GOO						goo			goo	 ISF										
109		MLI. TODO GUU							guu	guu		 INF										
110		MLI. TODO ISOLATE GUU						guu			guu	 ISF										
111		MLI. SIBE GE												ge	ge		INF		ge	ge		INF
112		MLI. SIBE ISOLATE GE											ge			ge	ISF	ge			ge	ISF
113		MLI. SIBE GI												gi	gi		INF		gi	gi		INF
114		MLI. SIBE ISOLATE GI											gi			gi	ISF	gi			gi	ISF
115		MLI. SIBE GUE												gue	gue		INF		gue	gue		INF
116		MLI. SIBE ISOLATE GUE											gue			gue	ISF	gue			gue	ISF

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
117		MLI. SIBE QE												qe	qe				qe	qe		
118		MLI. SIBE ISOLATE QE											qe			qe		qe			qe	
119		MLI. SIBE QI												qi	qi				qi	qi		
120		MLI. SIBE ISOLATE QI											qi			qi		qi			qi	
121		MLI. SIBE QUE												que	que				que	que		
122		MLI. SIBE ISOLATE QUE											que			que		que			que	
123		MLI. SIBE BE												be	be				be	be		
124		MLI. SIBE ISOLATE BE											be			be		be			be	
125		MLI. SIBE BUE												bue	bue				bue	bue		
126		MLI. SIBE ISOLATE BUE											bue			bue		bue			bue	
127		MLI. SIBE PA												pa	pa				pa	pa		
128		MLI. SIBE ISOLATE PA											pa			pa		pa			pa	
129		MLI. SIBE PE												pe	pe				pe	pe		
130		MLI. SIBE ISOLATE PE											pe			pe		pe			pe	
131		MLI. SIBE PI												pi	pi				pi	pi		
132		MLI. SIBE ISOLATE PI											pi			pi		pi			pi	
133		MLI. SIBE PO												po	po				po	po		
134		MLI. SIBE ISOLATE PO											po			po		po			po	
135		MLI. SIBE PUE												pue	pue				pue	pue		
136		MLI. SIBE ISOLATE PUE											pue			pue		pue			pue	

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
137		MLI. SIBE PU																	pu	pu		INF
138		MLI. SIBE ISOLATE PU																pu			pu	ISF
139		MLI. SIBE GAA												gaa	gaa		INF		gaa	gaa		INF
140		MLI. SIBE ISOLATE GAA											gaa			gaa	ISF	gaa			gaa	ISF
141		MLI. SIBE GOO												goo	goo		INF		goo	goo		INF
142		MLI. SIBE ISOLATE GOO											goo			goo	ISF	goo			goo	ISF
143		MLI. SIBE QAA												qaa	qaa		INF		qaa	qaa		INF
144		MLI. SIBE ISOLATE QAA											qaa			qaa	ISF	qaa			qaa	ISF
145		MLI. SIBE QOO												qoo	qoo		INF		qoo	qoo		INF
146		MLI. SIBE ISOLATE QOO											qoo			qoo	ISF	qoo			qoo	ISF
147		MLI. AG PA		pa	pa		INF												pa	pa		INF
148		MLI. AG ISOLATE PA	pa			pa	ISF											pa			pa	ISF
149		MLI. AG PE																	pe	pe		INF
150		MLI. AG ISOLATE PE																pe			pe	ISF
151		MLI. AG PI		pi	pi		INF												pi	pi		INF
152		MLI. AG ISOLATE PI	pi			pi	ISF											pi			pi	ISF
153		MLI. AG PO		po	po		INF												po	po		INF
154		MLI. AG ISOLATE PO	po			po	ISF											po			po	ISF
155		MLI. AG PUE																	pue	pue		INF
156		MLI. AG ISOLATE PUE																pue			pue	ISF
157		MLI. AG PUE		pue	pue		INF															

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
158		MLI. AG ISOLATE PUE	pue			pue	ISF															
159		MLI. AG PEE		pee	pee		INF															
160		MLI. AG ISOLATE PEE	pee			pee	ISF															
161		MLI. TODO AG PE						pe	pe	pe	pe	ISF										
162		MLI. TODO AG PI							pi	pi		INF										
163		MLI. TODO AG ISOLATE PI						pi			pi	ISF										
164		MLI. TODO AG PU							pu	pu		INF										
165		MLI. TODO AG ISOLATE PU						pu			pu	ISF										
166		MLI. AG PHA		pha	pha		INF															
167		MLI. AG ISOLATE PHA	pha			pha	ISF															
168		MLI. AG PHI		phi	phi		INF															
169		MLI. AG ISOLATE PHI	phi			phi	ISF															
170		MLI. AG PHO		pho	pho		INF															
171		MLI. AG ISOLATE PHO	pho			pho	ISF															
172		MLI. AG PHUE		phue			INF															
173		MLI. AG ISOLATE PHUE	phue			phue	ISF															
174		MLI. AG PHEE		phee	phee		INF															
175		MLI. AG ISOLATE PHEE	phee			phee	ISF															
176		MLI. TODO AG KE						ke	ke	ke	ke	ISF										
177		MLI. TODO AG KI							ki	ki		INF										

No	graphic symbols of ligature	NAME	MONGOL					TODO					SIBE					MANCHU				
			ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE	ISO	INI	MED	FIN	RULE
178		MLI. TODO AG ISOLATE KI						ki			ki	ISF										
179		MLI. TODO AG KU							ku	ku		INF										
180		MLI. TODO AG ISOLATE KU						ku			ku	ISF										
181		MLI. TODO AG KHU							khu	khu		INF										
182		MLI. TODO AG ISOLATE KHU						khu			khu	ISF										
183		MLI. TODO AG GU							gu	gu		INF										
184		MLI. TODO AG ISOLATE GU						gu			gu	ISF										
185		MLI. MANCHU AG BHA																	bha	bha		INF
186		MLI. MANCHU AG ISOLATE BHA																bha			bha	ISF
187		MLI. MANCHU AG BHE																	bhe	bhe		INF
188		MLI. MANCHU AG ISOLATE BHE																bhe			bhe	ISF
189		MLI. MANCHU AG BHI																	bhi	bhi		INF
190		MLI. MANCHU AG ISOLATE BHI																bhi			bhi	ISF
191		MLI. MANCHU AG BHO																	bho	bho		INF
192		MLI. MANCHU AG ISOLATE BHO																bho			bho	ISF
193		MLI. MANCHU AG BHUE																	bhue	bhue		INF
194		MLI. MANCHU AG ISOLATE BHUE																bhue			bhue	ISF

Appendix Ⅲ

Explanation of Peculiar Punctuation Marks & Control Symbols in Mongolian

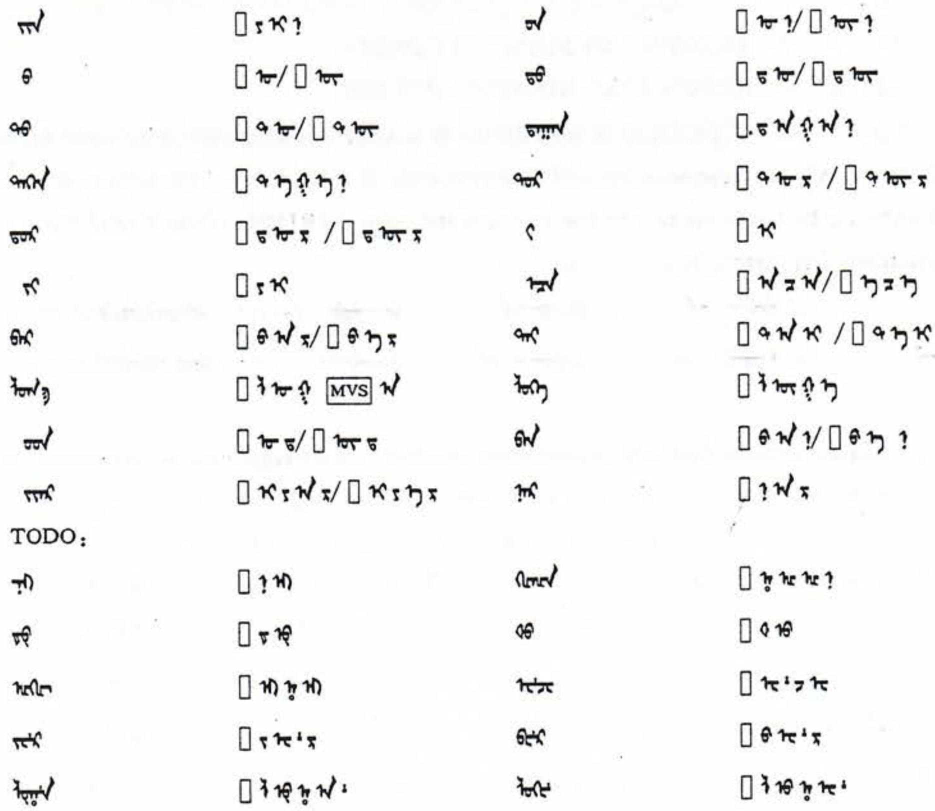
Some directions should be offered to users to Mongolian encoding system concerning the usage of the punctuation marks & control symbols peculiar to Mongolian, Todo, Sibe, or Manchu scripts.

1. ▭ — MONGOLIAN SPACE. In Mongolian, Todo, Sibe, and Manchu scripts, apart from the space for common use, a "Mongolian space" shoud be adopted. This is a non-breaking space. This "Mongolian space" is used before a separated suffix. The figure ▭ should be shown on the computer screen , but in printing it suffices to leave a space.

Examples of the usage of "Mongolian space"

suffix	way of input	suffix	way of input

MONGOLIAN:



SIBE & MANCHU:

2. ᠀ — MONGOLIAN BIRGA. It is used at the beginning of an article or a paragraph in Mongolian and Todo scripts.

3. ᠁ — MONGOLIAN ELLIPSIS. The ellipsis in Mongolian and Todo scripts is four dots.

4. ᠂ — MONGOLIAN COMMA. Peculiar comma of the Mongolian script.

5. ᠃ — MONGOLIAN PERIOD. Peculiar period of the Mongolian script.

6. ᠄ — MONGOLIAN COLON. Colon of Mongolian and the other three scripts.

7. ᠅ — MONGOLIAN FOUR DOTS. It is used at the end of an article or paragraph in Mongolian and Todo scripts.

8. ?! —MONGOLIAN COMBINATORY SYMBOL 。

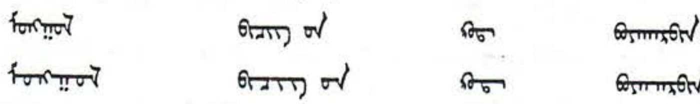
9. ᠆ — MONGOLIAN TODO LINE-SHIFT HYPHEN. Peculiar line-shift hyphen in Todo writing. It is placed at the beginning of the shifted line.

10. ᠇ — MONGOLIAN SIBE SYLLABLE BOUNDARY MARKER.

11. ᠈ — MONGOLIAN MANCHU COMMA.

12. ᠉ — MONGOLIAN MANCHU PERIOD.

13. ᠊ — MONGOLIAN NIRUGU. It is used in Mongolian and Todo scripts and it is different from the hyphen-minus of common use. It must link up the upper and lower characters as one, its width should be the same as the spine of a word. The NIRUGU is used mainly to lengthen the characters. For example:



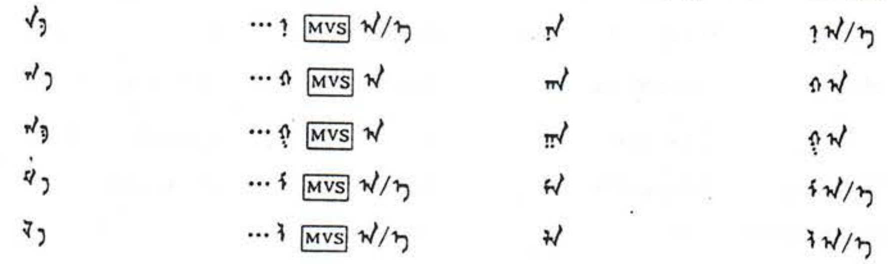
(Normal characters)

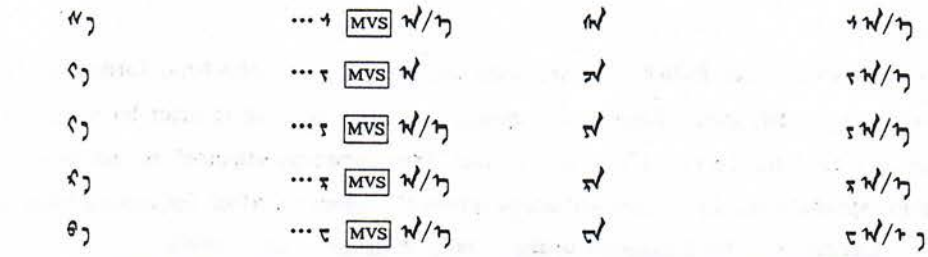
(Lengthened characters)

14. [MVS] — MONGOLIAN VOWEL SEPARATOR. The mongolian vowel separator is used to separate the vowel A/E at the end of a word and the consonant before them.

Examples for the usage of MVS.

The form using MVS	Record	The form not using MVS	Record





15. ISF — — MONGOLIAN ISOLATED FORM. In arbitrary sequences, when the isolated forms of characters are written obligatorily and without any rules, ISF is used. It is used after basic characters. If there are several isolated forms of characters, the " free variation selector" is used according to the rules in Appendix I. The "free variation selector" is located after ISF.

Examples for the usage of ISF.

The form using ISF	Record	The form not using ISF	Record
			
			

16. INF — — MONGOLIAN INITIAL FORM. In arbitrary sequences, when the initial forms of characters are written obligatorily and without any rules, INF is used. It is used after basic characters. If there are several initial forms of characters, the "free variation selector" is used according to the rules in Appendix I. The "free variation selector" is placed after INF.

Examples for the usage of INF.

The form using INF	Record	The form not using INF	Record
			
			
			

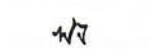
17. MEF — — MONGOLIAN MEDIAL FORM. In arbitrary sequences, when the medial forms of characters are written obligatorily and without any rules, MEF is used. It is used after basic characters. If there are several medial forms of characters, the "free variation selector" is used according to the rules in Appendix I. The "free variation selector" is placed after MEF.

Examples for the usage of MEF.

The form using MEF	Record	The form not using MEF	Record
			

18. FIF — —MONGOLIAN FINAL FORM. In arbitrary sequences, when the final forms of characters are written obligatorily and without any rules, FIF is used. It is used after basic characters. If there are several final forms of characters, the "free variation selector" is used according to the rules in Appendix I. The "free variation selector" is located after FIF.

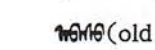
Examples for the usage of MVS.

The form using MVS	Record	The form not using MVS	Record
			
			
			

ISF INF MEF and FIF are position markers. The priority degree of these position markers are greater than any other rules except that for ligatures.

19. FVS1 — MONGOLIAN FREE VARIATION SELECTOR ONE. Mongolian free variation selector one FVS1, Mongolian free variation selector two FVS2 and Mongolian free variation selector three FVS3 are used to distinguish the different variants of the same letter appearing under the same condition .

Examples for the usage of the free variation selsctor

The Variants using the"selector"	Record	The Variants not using the "selector"	Record
			
			
(old form)			
		(wrong spelling)	
(old form)			
(old form)			
(old form)			
		(wrong spelling)	
		(wrong spelling)	

ᠰᠤ (old form)	ᠰᠤ᠋ FVS1	ᠰᠤ	ᠰᠤ᠋
ᠪᠦ(old form)	ᠪᠦ FVS2	ᠪᠦ	ᠪᠦ ···
ᠭᠠᠵᠠᠷ(old form)	ᠭᠠᠵᠠᠷ FVS1 ···	ᠭᠠᠵᠠᠷ	ᠭᠠᠵᠠᠷ ···
ᠮᠣᠩᠭᠣᠯ(old form)	ᠮᠣᠩᠭᠣᠯ FVS1 ···	ᠮᠣᠩᠭᠣᠯ	ᠮᠣᠩᠭᠣᠯ ···
ᠬᠡᠯᠡ	ᠬᠡᠯᠡ᠋ FVS1	ᠬᠡᠯᠡ	ᠬᠡᠯᠡ᠋
ᠬᠡ(old form)	ᠬᠡ FVS1	ᠬᠡ	ᠬᠡ
ᠪᠢᠴᠢᠭ	ᠪᠢᠴᠢᠭ FVS1 ···	ᠪᠢᠴᠢᠭ(wrong spelling)	ᠪᠢᠴᠢᠭ ···
ᠪᠢᠴᠢᠭᠡᠨ	ᠪᠢᠴᠢᠭᠡᠨ FVS1	ᠪᠢᠴᠢᠭᠡᠨ	ᠪᠢᠴᠢᠭᠡᠨ ···
ᠪᠢᠴᠢᠭᠡᠨᠦ	ᠪᠢᠴᠢᠭᠡᠨᠦ FVS1 ···	ᠪᠢᠴᠢᠭᠡᠨᠦ(wrong spelling)	ᠪᠢᠴᠢᠭᠡᠨᠦ ···
ᠪᠢᠴᠢᠭᠦ	ᠪᠢᠴᠢᠭᠦ FVS1	ᠪᠢᠴᠢᠭᠦ (wrong spelling)	ᠪᠢᠴᠢᠭᠦ
ᠪᠢ(old form)	ᠪᠢ FVS1 ···	ᠪᠢ	ᠪᠢ ···
ᠪᠢᠰᠮᠢᠯ	ᠪᠢᠰᠮᠢᠯ FVS1 ···	ᠪᠢᠰᠮᠢᠯ	ᠪᠢᠰᠮᠢᠯ ···

20. FVS2 — MONGOLIAN FREE VARIATION SELECTOR TWO.
21. FVS3 — MONGOLIAN FREE VARIATION SELECTOR THREE.