

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

**Doc Type: Working Group Document****Title: Preliminary proposal for encoding the Mandaic script in the BMP of the UCS****Source: Michael Everson****Status: Individual Contribution****Action: For consideration by JTC1/SC2/WG2 and UTC****Date: 2008-01-18**

This is a preliminary proposal to encode the Mandaic script in the BMP of the UCS.

**1. Introduction.** The Mandaic script is used to write an eastern dialect of Late Aramaic, which, as Classical Mandaic, is used as the liturgical language of the Mandaean religion. A living language descended from Classical Mandaic is spoken by a small minority of people living near Ahvaz, Khūzestān, in Western Iran; speakers are also found in southern Iraq and emigrant communities in the United States. There is a considerable amount of Persian influence in the grammar and lexicon of Mandaic.

**2. Structure.** Mandaic is a right-to-left script. It is a true alphabet, using letters regularly for vowels rather than as the *matres lectionis* from which they derived. Mandaic ligates its letters as many right-to-left scripts do; the precise rules for this have yet to be formalized and require further study.

**3. Punctuation.** Punctuation is used, rather sparsely. Two script-specific marks are used; the smaller represents a minor break, and the larger a major break.

**4. Collating order.** The order of the letters in the code chart is their alphabetical order.

**5. Character names.** The transliteration in the character names follows the usual UCS naming conventions; the names are formed by adding -A to the consonant.

**6. Linebreaking.** Line-breaking properties for Mandaic are the same as those for Syriac.

**7. Unicode Character Properties.**

```
0840;MANDAIC LETTER A;Lo;0;R;;;;N;;;;;
0841;MANDAIC LETTER BA;Lo;0;R;;;;N;;;;;
0842;MANDAIC LETTER GA;Lo;0;R;;;;N;;;;;
0843;MANDAIC LETTER DA;Lo;0;R;;;;N;;;;;
0844;MANDAIC LETTER HA;Lo;0;R;;;;N;;;;;
0845;MANDAIC LETTER WA;Lo;0;R;;;;N;;;;;
0846;MANDAIC LETTER ZA;Lo;0;R;;;;N;;;;;
0847;MANDAIC LETTER EH;Lo;0;R;;;;N;;;;;
0848;MANDAIC LETTER TTA;Lo;0;R;;;;N;;;;;
0849;MANDAIC LETTER YA;Lo;0;R;;;;N;;;;;
084A;MANDAIC LETTER KA;Lo;0;R;;;;N;;;;;
084B;MANDAIC LETTER LA;Lo;0;R;;;;N;;;;;
084C;MANDAIC LETTER MA;Lo;0;R;;;;N;;;;;
084D;MANDAIC LETTER NA;Lo;0;R;;;;N;;;;;
084E;MANDAIC LETTER SA;Lo;0;R;;;;N;;;;;
084F;MANDAIC LETTER E;Lo;0;R;;;;N;;;;;
0850;MANDAIC LETTER PA;Lo;0;R;;;;N;;;;;
0851;MANDAIC LETTER SSA;Lo;0;R;;;;N;;;;;
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0852;MANDAIC LETTER QA;Lo;0;R;;;N;;;;;  
 0853;MANDAIC LETTER RA;Lo;0;R;;;N;;;;;  
 0854;MANDAIC LETTER SHA;Lo;0;R;;;N;;;;;  
 0855;MANDAIC LETTER TA;Lo;0;R;;;N;;;;;  
 0856;MANDAIC LETTER ADU;Lo;0;R;;;N;;;;;  
 085D;MANDAIC SMALL PUNCTUATION;Po;0;ON;;;N;;;;;  
 085E;MANDAIC LARGE PUNCTUATION;Po;0;ON;;;N;;;;;  
 085F;MANDAIC KASHIDA;Lm;0;R;;;N;;;;;

**8. Bibliography.**

Daniels, Peter T., and William Bright, eds. 1996. *The world's writing systems*. New York; Oxford: Oxford University Press. ISBN 0-19-507993-0  
 Faulmann, Carl. 1990 (1880). *Das Buch der Schrift*. Frankfurt am Main: Eichborn. ISBN 3-8218-1720-8  
 Haarmann, Harald. 1990. *Die Universalgeschichte der Schrift*. Frankfurt: Campus. ISBN 3-593-34346-0  
 Macuch, R., & E. S. Drower. 1963. *A Mandaic dictionary*. Oxford: Clarendon Press.

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**Figures**

MANDAEAN ALPHABET WITH LATIN AND HEBREW TRANSLITERATIONS

MANDAEAN	LATIN	HEBREW
Ⲁ	a	א
Ⲃ	b	ב
Ⲅ	g	ג
Ⲇ	d	ד
Ⲉ	h	ה
Ⲋ	u	ו
Ⲍ	z	ז
Ⲏ	h	ח
Ⲑ	t	ט
Ⲓ	i	י
Ⲕ	k	כ
Ⲗ	l	ל
Ⲙ	m	מ
Ⲛ	n	נ
Ⲝ	s	ס
Ⲟ	c	צ
Ⲡ	p	פ
Ⲣ	q	ק
Ⲥ	r	ר
ⲧ	s	ש
ⲩ	t	ת
ⲫ	q-	ך
	(as procl.,	
	in Ⲡⲩ as kd)	

**Figure 1.** Chart with transliterations from Macuch 1963.

§ 1. The Mandaic alphabet is called *abāgāda*, the letters being called *ā, bā, gā, dā* and not *alef, bēth, gimel, daleth* etc. The original number of letters of the Semitic alphabet, 22, was extended to the full number of day-hours by adding *d-* and repeating the first letter *a* at the end of the alphabet. Without this repetition the alphabet would not be considered as complete for magical purposes. The number 24 was not reached by counting the supplementary Arabic *'ayn*, as Nöldeke supposed<sup>2</sup>.

§ 2. Alphabet.

Form	With vowels	Transliteration		Pronunciation
		Latin	Hebrew	
Ⲁ	( <i>balqa</i> )	a	א	a, ā, ā
Ⲃ	bā	b	ב	b, β
Ⲅ	gā	g	ג	g, γ
Ⲇ	dā	d	ד	d, δ
Ⲉ	hā	h	ה	h
Ⲋ	( <i>-āšemma</i> )	u	ו	o, u, ū
Ⲍ	wā	u	ו	w, v
Ⲏ	zā	z	ז	z
Ⲑ	ṭā	ṭ	ט	ṭ
Ⲓ	( <i>aksa</i> )	i	י	e, i, ī
Ⲕ	yā	i	י	y
Ⲗ	kā	k	כ	k, χ
Ⲙ	lā	l	ל	l
Ⲛ	mā	m	מ	m
Ⲝ	nā	n	נ	n
Ⲟ	sā	s	ס	s
Ⲡ		.	.	ī (e, ī)
Ⲣ	pā	p	פ	p, f
Ⲥ	ṣā	ṣ	צ	ṣ
ⲧ	qā	q	ק	q
ⲩ	rā	r	ר	r
ⲫ	šā	š	ש	š
ⲭ	tā	t	ת	t, ṭ
ⲯ	( <i>adu, or dušemma</i> )	d-	ד-	(a) d
ⲱ		a	א	a

<sup>1</sup> MG, p. 487 and 1-13: Schriftlehre.

<sup>2</sup> Ibid., p. 1: paen.

Figure 2. Chart showing basic syllables in Mandaic.



Figure 3. Sample text in Mandaic.

THE MANDAIC ALPHABET

A	◊				
Ba	𐤁	Bu	𐤁	𐤁B	𐤁
Ga	𐤂	Gu	𐤂	𐤂G	𐤂
Da	𐤃	Du	𐤃	𐤃D	𐤃
Ha	𐤄	Hu	𐤄	𐤄H	𐤄
Za	𐤅	Zu	𐤅	𐤅Z	𐤅
Wa	𐤆	Wu	𐤆	𐤆W	𐤆
Tu	𐤇	Tu	𐤇	𐤇T	𐤇
Yu	𐤈	Yu	𐤈	𐤈Y	𐤈
Ka	𐤉	Ku	𐤉	𐤉K	𐤉
La	𐤊	Lu	𐤊	𐤊L	𐤊
Ma	𐤋	Mu	𐤋	𐤋M	𐤋
Na	𐤌	Nu	𐤌	𐤌N	𐤌
Sa	𐤍	Su	𐤍	𐤍S	𐤍
Ia	𐤎				
Pa	𐤏	Pu	𐤏	𐤏P	𐤏
Qa	𐤐	Qu	𐤐	𐤐Q	𐤐
Ra	𐤑	Ru	𐤑	𐤑R	𐤑
Ša	𐤒	Šu	𐤒	𐤒Š	𐤒
Tāa	𐤓	Tāu	𐤓	𐤓Tā	𐤓
adu	𐤔				
◊	◊				

Supplementary letters

GH 𐤅𐤈 3 𐤅𐤈𐤁𐤃 Fa 𐤅𐤈 Ja 𐤅𐤈

Figure 4. Chart showing basic syllables in Mandaic.

𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏  
 htqapn amla nm hnim tqapnd amšin kabuṭ kabuṭ←  
 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏  
 aišib rudd aruadl ḥbtiuhd airas argaplu amuliql  
 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏 𐤏𐤒𐤒𐤒𐤏  
 aigulpu aniq anisd akušhd amlal aiṭah ḥlukd artal

Figure 5. Sample of Mandaic text from Daniels 1996.

## MANDÄISCH.

Isolirt	Verbunden	Wert	Isolirt	Verbunden	Wert	Isolirt	Verbunden	Wert
⦿	⦿ ⦿	a	⦿	⦿	t	⦿ ⦿	⦿ ⦿	ʒ
⦿	⦿ ⦿	b	⦿	⦿	y	⦿	⦿	f
⦿	⦿ ⦿	g	⦿	⦿	k	⦿	⦿	s
⦿	⦿	d	⦿	⦿	l	⦿	⦿	q
⦿	⦿	h, χ	⦿	⦿	m	⦿	⦿	r
⦿	⦿	v	⦿	⦿	n	⦿ ⦿	⦿ ⦿	š
⦿	⦿	z	⦿ ⦿	⦿ ⦿	s	⦿	⦿	t

### Ligaturen.

Zeichen	Wert	Zeichen	Wert	Zeichen	Wert
⦿	di, de	⦿	nd	⦿	šv
⦿	kd	⦿	nv	⦿	sl
⦿	kr	⦿	ny	⦿	sr
⦿	ky	⦿	nt	⦿	nq
⦿	kl	⦿	pv	⦿	vt
⦿	kv	⦿	pl	⦿	š
⦿	kt	⦿	pr		

Die Umgebungen von Wasith, Howaizah und Bassora werden noch jetzt von einem Volke bewohnt, welches sich Šabier, Nazaräer oder Mandäer nennt. Die Araber nennen sie auch Nabathäer, Galiläer oder St. Johanneschristen. Der Glaube dieses Volkes ist eine Mischung von christlichen Lehren mit den alten Landestraktionen. Ihre Sprache ist die aramäische und nähert

sich der talmudisch-babylonischen. Die Schrift unterscheidet sich von den verwandten dadurch, dass ⦿ Vokale sind, die Gutturale ⦿ und ⦿, sowie ⦿ und ⦿ nicht unterschieden werden und geschrieben, wie gesprochen wird, daher auch alle Vokale geschrieben werden; das n dient als Konsonantenverdopplung. Die Schrift zeigt alterthümliche, an das Aramäische sich lehrende Formen.

Figure 6. Chart of Mandaic letters and ligatures from Faulmann 1880.

Row 08: MANDAIC DRAFT

	084	085
0	Ⲁ	ⲁ
1	Ⲃ	ⲃ
2	Ⲅ	ⲅ
3	Ⲇ	ⲇ
4	Ⲉ	ⲉ
5	Ⲋ	ⲋ
6	Ⲍ	ⲍ
7	ⲏ	
8	ⲑ	
9	ⲓ	
A	ⲕ	
B	ⲍ	
C	ⲏ	
D	Ⲑ	ⲑ
E	Ⲓ	ⲓ
F	ⲕ	Ⲍ

hex	Name
40	MANDAIC LETTER A
41	MANDAIC LETTER BA
42	MANDAIC LETTER GA
43	MANDAIC LETTER DA
44	MANDAIC LETTER HA
45	MANDAIC LETTER WA
46	MANDAIC LETTER ZA
47	MANDAIC LETTER EH
48	MANDAIC LETTER TTA
49	MANDAIC LETTER YA
4A	MANDAIC LETTER KA
4B	MANDAIC LETTER LA
4C	MANDAIC LETTER MA
4D	MANDAIC LETTER NA
4E	MANDAIC LETTER SA
4F	MANDAIC LETTER E
50	MANDAIC LETTER PA
51	MANDAIC LETTER SSA
52	MANDAIC LETTER QA
53	MANDAIC LETTER RA
54	MANDAIC LETTER SHA
55	MANDAIC LETTER TA
56	MANDAIC LETTER ADU
57	(This position shall not be used)
58	(This position shall not be used)
59	(This position shall not be used)
5A	(This position shall not be used)
5B	(This position shall not be used)
5C	(This position shall not be used)
5D	MANDAIC SMALL PUNCTUATION
5E	MANDAIC LARGE PUNCTUATION
5F	MANDAIC KASHIDA

## A. Administrative

1. Title

**Proposal for encoding the Mandaic script in the BMP of the UCS**

2. Requester's name

**Michael Everson**

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

**Individual contribution.**

4. Submission date

**2008-01-18**

5. Requester's reference (if applicable)

6. Choose one of the following:

6a. This is a complete proposal

**No.**

6b. More information will be provided later

**Yes.**

## B. Technical – General

1. Choose one of the following:

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

**Yes.**

1b. Proposed name of script

**Mandaic.**

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

**No.**

1d. Name of the existing block

2. Number of characters in proposal

**26.**

3. Proposed category (A-Contemporary; B.1-Specialized (small collection); B.2-Specialized (large collection); C-Major extinct; D-Attested extinct; E-Minor extinct; F-Archaic Hieroglyphic or Ideographic; G-Obscure or questionable usage symbols)

**Category B.1.**

4a. Is a repertoire including character names provided?

**Yes.**

4b. If YES, are the names in accordance with the "character naming guidelines" in Annex L of P&P document?

**Yes.**

4c. Are the character shapes attached in a legible form suitable for review?

**Yes.**

5a. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

**Michael Everson.**

5b. If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used:

**Michael Everson, Fontographer.**

6a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?

**Yes.**

6b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

**Yes.**

7. Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)?

**Yes.**

8. Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at <http://www.unicode.org> for such information on other scripts. Also see Unicode Character Database <http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html> and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

**See above.**

## C. Technical – Justification

1. Has this proposal for addition of character(s) been submitted before? If YES, explain.

**No.**

2a. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)?

**Yes.**

2b. If YES, with whom?

**Brian Mubarak**

2c. If YES, available relevant documents

3. Information on the user community for the proposed characters (for example: size, demographics, information technology use, or publishing use) is included?

**There are some 60,000-70,000 Mandaean worldwide.**

4a. The context of use for the proposed characters (type of use; common or rare)

**Traditional and liturgical use.**

4b. Reference

5a. Are the proposed characters in current use by the user community?

**Yes.**

5b. If YES, where?

**In Iran, Iraq, and elsewhere.**

6a. After giving due considerations to the principles in the P&P document must the proposed characters be entirely in the BMP?

**Yes.**

6b. If YES, is a rationale provided?

**Yes.**

6c. If YES, reference

**Contemporary use and accordance with the Roadmap.**

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

**Yes.**

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

**No.**

8b. If YES, is a rationale for its inclusion provided?

8c. If YES, reference

9a. Can any of the proposed characters be encoded using a composed character sequence of either existing characters or other proposed characters?

**No.**

9b. If YES, is a rationale for its inclusion provided?

9c. If YES, reference

10a. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character?

**No.**

10b. If YES, is a rationale for its inclusion provided?

10c. If YES, reference

11a. Does the proposal include use of combining characters and/or use of composite sequences (see clauses 4.12 and 4.14 in ISO/IEC 10646-1: 2000)?

**No.**

11b. If YES, is a rationale for such use provided?

11c. If YES, reference

11d. Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided?

**No.**

11e. If YES, reference

12a. Does the proposal contain characters with any special properties such as control function or similar semantics?

**No.**

12b. If YES, describe in detail (include attachment if necessary)

13a. Does the proposal contain any Ideographic compatibility character(s)?

**No.**

13b. If YES, is the equivalent corresponding unified ideographic character(s) identified?