

Conference material (29-11-2002)

Avestan

Proposal by M. Everson for the encoding of Avestan in the BMP of ISO/IEC 10646,
<<http://std.dkuug.dk/JTC1/SC2/WG2/docs/n1684/n1684.htm>>

Same as linked to from the server of Unicode.org, <<http://www.evertype.com/standards/iso10646/pdf/avestan.pdf>>

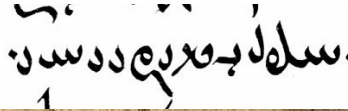
Alphabete und Schriftzeichen, **Table showing the Avestan script**

Karl Hoffmann, **Table showing the Avestan script**

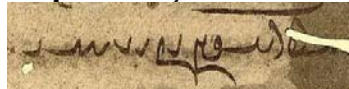
J.G., **History of the Avestan and Pahlavi scripts**

Occurrences of Avestan δ

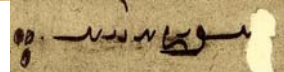
Example: *āfrīdiīāi* (Y. 71,13d) in ms. P1:



Example: *āfraeiīiāi* (Y. 71,13d) in ms. J2:



Example: *āfraeiīiāi* (Y. 71,13d) in ms. J2:



Complete digitisation of **ms. J2**

Complete digitisation of **ms. P1**

Complete digitisation of **ms. Pr1**

Complete digitisation of **Avesta**

Complete digitisation of **Yasna (with variant readings)**

Old Persian

Proposal by M. Everson for the encoding of Cuneiform Old Persian in Plane 1 of ISO/IEC 10646
<<http://std.dkuug.dk/JTC1/SC2/WG2/docs/n1639/n1639.htm>>

J.G., **Old Persian character inventory**

Complete digitisation of **Old Persian corpus**

Bactrian

Solved ?

Manichaean Script (Problem of mapping onto Syriac)

Alphabete und Schriftzeichen, **Manichaean Script**

W.B. Henning, **Table showing the Manichaean Script**

J.G., **History of the Manichaean script**

Unicode.org, **Syriac block in Unicode 3.0**

Rendering of Syriac in MS Windows 2000

Syriac NT text (transliteration)

Syriac NT text (Serto)

Syriac NT text (Estrangelo)

Syriac NT text (Nestorian)

Same, glyph representation in Manichean script

Rendering of Syriac in MS Windows XP

Syriac NT text (Estrangelo)

Complete digitisation of **Manichaean texts (reader version)**

Complete digitisation of **Manichaean texts (ms. based edition)**

Christian Sogdian

Solved ?

Complete digitisation of **Sogdian texts**

Middle Persian and Parthian Inscriptions etc. (Problem of mapping onto Aramaic)

Everson/ McGowan: UTC Working paper on the Aramaic script

<<http://std.dkuug.dk/JTC1/SC2/WG2/docs/n2042.pdf>>

Special case: **Pahlavi inscription of Istanbul**

Book Pahlavi (Problems of character distinction and mapping onto Avestan)

Alphabete und Schriftzeichen, **Pahlavi Script, Part 1**

Alphabete und Schriftzeichen, **Pahlavi Script, Part 2**

Alphabete und Schriftzeichen, **Pahlavi Script, Part 3**

D.N. McKenzie, **Table showing the Pahlavi Script**

H.S. Nyberg, **Table showing the Pahlavi Script**

J.G., **History of the Avestan and Pahlavi scripts**

J.G., Pahlavi vs. Manichaean script: Example **zamīg: transliterative (zmyk vs. zmyg)**

J.G., Pahlavi vs. Manichaean script: Example **zamīg: transcriptional (unified)**

J.G., Pahlavi vs. Manichaean script: Example **daryāb / drayāb: transliterative and transcriptional ununified**

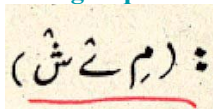
Digitisation of **Middle Persian texts**

Arabic / Persian

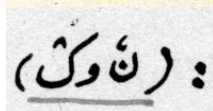
A. Korn, **Remarks on the encoding requirements of Balochi**

A. Korn, **Table showing the encoding requirements of Balochi**

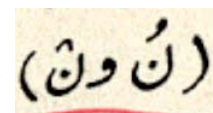
A. Korn, Example 1: **Balochi ē** (مے ش) :



A. Korn, Example 2: **Balochi ō** (ن وک) :



A. Korn, Example 3: **Balochi ū** (ن و ن) :



Digitisation of **New Persian texts**

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28.11.2002

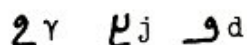


A v e s t a - S c h r i f t

Aus der Pahlavī-Buchschrift übernommene Avesta-Buchstaben


 a i k t p b m n r s z š x^v




Aus der "Psalter-Schrift" übernommene Avesta-Buchstaben












Pahlavī-Buchschrift


Psalter-Schrift

Avesta-Schrift

 k/γ
 ( c/j/z/ž)
 p/f/β

 k/γ
 c/j/z/ž

 k  k/γ
 c  c/j/z/ž
 p  p/f/β
 [ō]

 [ō]

Avesta-Alphabet

															-	
							-			-						-
				-									-			-
		-										-	-	-	-	-

The historical development of the Avestan Alphabet*

The historical development of the Avestan Alphabet*											
Semitic alphabets						Middle Iranian alphabets					Avestan
	Phoen.	Hebr.	Aram.	Palmyr.	Nabat.	Parth.	Mpers.I	Psalter	Mpers.B		Avestan
ʾ	𐤀	א	ܐ	Ⲁ	𐤀	𐎠	𐎠	𐎠	𐎠	𐎠	𐎠 a
											𐎠 ā
											𐎠 ā̇
									𐎠	ēw	𐎠 e
											𐎠 ē
											𐎠 ə
		𐎠 ē̄									
b	𐤁	ב	ܒ	Ⲃ	𐤁	𐎡	𐎡	𐎡	𐎡	b	𐎡 b
g	𐤂	ג	ܓ	Ⲅ	𐤂	𐎢	𐎢	𐎢	𐎢	g	𐎢 g
d	𐤃	ד	ܕ	Ⲇ	𐤃	𐎣	𐎣	𐎣	𐎣	d	
									𐎣	d	𐎣 d
h	𐤄	ה	ܗ	Ⲉ	𐤄	𐎤	𐎤	𐎤	𐎤	H	
w	𐤅	ו	ܘ	Ⲋ	𐤅	𐎥	𐎥	𐎥	𐎥	w	𐎥 u
											𐎥 ū
											𐎥 v
z	𐤆	ז	ܙ	Ⲍ	𐤆	𐎦	𐎦	𐎦	z	𐎦 z	
ḣ	𐤇	ח	ܚ	Ⲏ	𐤇	𐎧	𐎧	𐎧	𐎧	x	𐎧 h
											𐎧 x
											𐎧 ẋ
									𐎧	xw	𐎧 x ^v
t	𐤈	ט	ܛ	Ⲑ	𐤈	𐎨	𐎨			𐎨 t	
y	𐤉	י	ܝ	Ⲓ	𐤉	𐎩	𐎩	𐎩	𐎩	y	𐎩 i
											𐎩 ī
											𐎩 ÿ
									𐎩	ēnd	𐎩 ð
											𐎩 q
											𐎩 ṇ
k	𐤊	כ	ܟ	Ⲕ	𐤊	𐎪	𐎪	𐎪	𐎪	k	𐎪 k
											𐎪 γ
									𐎪	k	𐎪 ġ

The historical development of the Avestan Alphabet*

The historical development of the Avestan Alphabet*												
Semitic alphabets						Middle Iranian alphabets					Avestan	
	Phoen.	Hebr.	Aram.	Palmyr.	Nabat.	Parth.	Mpers.I	Psalter	Mpers.B		Avestan	
l	𐤀	ל	ܠ	𐤎	𐤎	𐬀	𐬁	𐬂	𐬃	l	𐬄	(r)
									𐬃	L	𐬃	o
									𐬃	ō	𐬃	ō
m	𐤎	מ	ܡ	𐤍	𐤍	𐬌	𐬍	𐬎	𐬏	m	𐬐	m
									𐬏		𐬏	ṃ
n	𐤎	נ	ܢ	𐤏	𐤏	𐬍			𐬏	n	𐬐	n
									𐬑		𐬑	ṇ
									𐬑	𐬒	𐬑	ṇ̄
									𐬑		𐬑	ṇ ^u
s	𐤑	ס	ܣ	𐤒	𐤒	𐬎	𐬏	𐬐	s	𐬑	s	
c	𐤑	צ	ܥ	𐤘	𐤘	𐬏	𐬐	𐬑	c			
p	𐤑	פ	ܦ	𐤒	𐤒	𐬏	𐬐	𐬑	𐬒	p,f	𐬓	p
									𐬒		𐬒	f
									𐬒		𐬒	β
s	𐤑	ש	ܫ	𐤓	𐤓	𐬑			𐬓	c,s	𐬔	δ
									𐬓		𐬓	δ
									𐬓		𐬓	ž
									𐬓	𐬔	𐬓	š
									𐬓		𐬓	č
									𐬓		𐬓	δ
q	𐤑	ק	ܩ	𐤔	𐤔	𐬐		𐬑	Q			
r	𐤓	ר	ܪ	𐤕	𐤕	𐬑	𐬒	𐬓	r	𐬔	r	
š	𐤔	שׁ	ܫׁ	𐤕	𐤕	𐬑	𐬒	𐬓	𐬔	š	𐬕	š
									𐬕		𐬕	š̄
									𐬕		𐬕	ṧ
									𐬕		𐬕	y (ž)
t	𐤕	ת	ܬ	𐤖	𐤖	𐬒	𐬓	𐬔	t		𐬕	t
									𐬕		𐬕	t̄

*after H.S. NYBERG and K. HOFFMANN

The Avestan alphabet:

𐬀	𐬁	𐬂	𐬃	𐬄	𐬅	𐬆	𐬇	𐬈	𐬉	𐬊	𐬋	𐬌	𐬍
<i>a</i>	<i>ā</i>	<i>ā̇</i>	<i>q</i>	<i>ə</i>	<i>ē</i>	<i>e</i>	<i>ē</i>	<i>o</i>	<i>ō</i>	<i>i</i>	<i>ī</i>	<i>u</i>	<i>ū</i>
𐬎	𐬏	𐬐	𐬑	𐬒	𐬓	𐬔				𐬕	𐬖		
<i>k</i>	<i>x</i>	<i>ẋ</i>	<i>x^v</i>	<i>g</i>	<i>g</i>	<i>γ</i>				<i>c</i>	<i>j</i>		
𐬗	𐬘	𐬙	𐬚	𐬛						𐬜	𐬝	𐬞	𐬟
<i>t</i>	<i>θ</i>	<i>d</i>	<i>δ</i>	<i>ṫ</i>						<i>p</i>	<i>f</i>	<i>b</i>	<i>β</i>
𐬠	𐬡	𐬢	𐬣	𐬤	𐬥		𐬦	𐬧		𐬨	𐬩	𐬪	𐬫
<i>z</i>	<i>ż</i>	<i>z^v</i>	<i>n</i>	<i>ṅ</i>	<i>n̄</i>		<i>m</i>	<i>m̄</i>		<i>y</i>	<i>v</i>		<i>r</i>
		𐬬	𐬭	𐬮	𐬯	𐬰	𐬱	𐬲		𐬳			
		<i>s</i>	<i>z</i>	<i>š</i>	<i>ṧ</i>	<i>š̄</i>	<i>y=ž̄</i>	<i>ž̄</i>		<i>h</i>			
				𐬲	𐬳	𐬴							
				<i>ç</i>	<i>ç̇</i>	<i>ç̄</i>							

The Pahlavī alphabet:

	𐬀	𐬁	𐬂	𐬃	𐬄	𐬅	𐬆	𐬇	𐬈	𐬉	𐬊	𐬋	𐬌	𐬍	𐬎	𐬏	𐬐	𐬑	𐬒	𐬓	𐬔	𐬕	𐬖	𐬗	𐬘	𐬙	𐬚	𐬛	𐬜	𐬝	𐬞	𐬟	𐬠	𐬡	𐬢	𐬣	𐬤	𐬥	𐬦	𐬧	𐬨	𐬩	𐬪	𐬫	𐬬	𐬭	𐬮	𐬯	𐬰	𐬱	𐬲	𐬳	𐬴	𐬵	𐬶	𐬷	𐬸	𐬹	𐬺	𐬻	𐬼	𐬽	𐬾	𐬿	𐭀	𐭁	𐭂	𐭃	𐭄	𐭅	𐭆	𐭇	𐭈	𐭉	𐭊	𐭋	𐭌	𐭍	𐭎	𐭏	𐭐	𐭑	𐭒	𐭓	𐭔	𐭕	𐭖	𐭗	𐭘	𐭙	𐭚	𐭛	𐭜	𐭝	𐭞	𐭟	𐭠	𐭡	𐭢	𐭣	𐭤	𐭥	𐭦	𐭧	𐭨	𐭩	𐭪	𐭫	𐭬	𐭭	𐭮	𐭯	𐭰	𐭱	𐭲	𐭳	𐭴	𐭵	𐭶	𐭷	𐭸	𐭹	𐭺	𐭻	𐭼	𐭽	𐭾	𐭿	𐮀	𐮁	𐮂	𐮃	𐮄	𐮅	𐮆	𐮇	𐮈	𐮉	𐮊	𐮋	𐮌	𐮍	𐮎	𐮏	𐮐	𐮑	𐮒	𐮓	𐮔	𐮕	𐮖	𐮗	𐮘	𐮙	𐮚	𐮛	𐮜	𐮝	𐮞	𐮟	𐮠	𐮡	𐮢	𐮣	𐮤	𐮥	𐮦	𐮧	𐮨	𐮩	𐮪	𐮫	𐮬	𐮭	𐮮	𐮯	𐮰	𐮱	𐮲	𐮳	𐮴	𐮵	𐮶	𐮷	𐮸	𐮹	𐮺	𐮻	𐮼	𐮽	𐮾	𐮿	𐯀	𐯁	𐯂	𐯃	𐯄	𐯅	𐯆	𐯇	𐯈	𐯉	𐯊	𐯋	𐯌	𐯍	𐯎	𐯏	𐯐	𐯑	𐯒	𐯓	𐯔	𐯕	𐯖	𐯗	𐯘	𐯙	𐯚	𐯛	𐯜	𐯝	𐯞	𐯟	𐯠	𐯡	𐯢	𐯣	𐯤	𐯥	𐯦	𐯧	𐯨	𐯩	𐯪	𐯫	𐯬	𐯭	𐯮	𐯯	𐯰	𐯱	𐯲	𐯳	𐯴	𐯵	𐯶	𐯷	𐯸	𐯹	𐯺	𐯻	𐯼	𐯽	𐯾	𐯿	𐰀	𐰁	𐰂	𐰃	𐰄	𐰅	𐰆	𐰇	𐰈	𐰉	𐰊	𐰋	𐰌	𐰍	𐰎	𐰏	𐰐	𐰑	𐰒	𐰓	𐰔	𐰕	𐰖	𐰗	𐰘	𐰙	𐰚	𐰛	𐰜	𐰝	𐰞	𐰟	𐰠	𐰡	𐰢	𐰣	𐰤	𐰥	𐰦	𐰧	𐰨	𐰩	𐰪	𐰫	𐰬	𐰭	𐰮	𐰯	𐰰	𐰱	𐰲	𐰳	𐰴	𐰵	𐰶	𐰷	𐰸	𐰹	𐰺	𐰻	𐰼	𐰽	𐰾	𐰿	𐱀	𐱁	𐱂	𐱃	𐱄	𐱅	𐱆	𐱇	𐱈	𐱉	𐱊	𐱋	𐱌	𐱍	𐱎	𐱏	𐱐	𐱑	𐱒	𐱓	𐱔	𐱕	𐱖	𐱗	𐱘	𐱙	𐱚	𐱛	𐱜	𐱝	𐱞	𐱟	𐱠	𐱡	𐱢	𐱣	𐱤	𐱥	𐱦	𐱧	𐱨	𐱩	𐱪	𐱫	𐱬	𐱭	𐱮	𐱯	𐱰	𐱱	𐱲	𐱳	𐱴	𐱵	𐱶	𐱷	𐱸	𐱹	𐱺	𐱻	𐱼	𐱽	𐱾	𐱿	𐲀	𐲁	𐲂	𐲃	𐲄	𐲅	𐲆	𐲇	𐲈	𐲉	𐲊	𐲋	𐲌	𐲍	𐲎	𐲏	𐲐	𐲑	𐲒	𐲓	𐲔	𐲕	𐲖	𐲗	𐲘	𐲙	𐲚	𐲛	𐲜	𐲝	𐲞	𐲟	𐲠	𐲡	𐲢	𐲣	𐲤	𐲥	𐲦	𐲧	𐲨	𐲩	𐲪	𐲫	𐲬	𐲭	𐲮	𐲯	𐲰	𐲱	𐲲	𐲳	𐲴	𐲵	𐲶	𐲷	𐲸	𐲹	𐲺	𐲻	𐲼	𐲽	𐲾	𐲿	𐳀	𐳁	𐳂	𐳃	𐳄	𐳅	𐳆	𐳇	𐳈	𐳉	𐳊	𐳋	𐳌	𐳍	𐳎	𐳏	𐳐	𐳑	𐳒	𐳓	𐳔	𐳕	𐳖	𐳗	𐳘	𐳙	𐳚	𐳛	𐳜	𐳝	𐳞	𐳟	𐳠	𐳡	𐳢	𐳣	𐳤	𐳥	𐳦	𐳧	𐳨	𐳩	𐳪	𐳫	𐳬	𐳭	𐳮	𐳯	𐳰	𐳱	𐳲	𐳳	𐳴	𐳵	𐳶	𐳷	𐳸	𐳹	𐳺	𐳻	𐳼	𐳽	𐳾	𐳿	𐴀	𐴁	𐴂	𐴃	𐴄	𐴅	𐴆	𐴇	𐴈	𐴉	𐴊	𐴋	𐴌	𐴍	𐴎	𐴏	𐴐	𐴑	𐴒	𐴓	𐴔	𐴕	𐴖	𐴗	𐴘	𐴙	𐴚	𐴛	𐴜	𐴝	𐴞	𐴟	𐴠	𐴡	𐴢	𐴣	𐴤	𐴥	𐴦	𐴧	𐴨	𐴩	𐴪	𐴫	𐴬	𐴭	𐴮	𐴯	𐴰	𐴱	𐴲	𐴳	𐴴	𐴵	𐴶	𐴷	𐴸	𐴹	𐴺	𐴻	𐴼	𐴽	𐴾	𐴿	𐵀	𐵁	𐵂	𐵃	𐵄	𐵅	𐵆	𐵇	𐵈	𐵉	𐵊	𐵋	𐵌	𐵍	𐵎	𐵏	𐵐	𐵑	𐵒	𐵓	𐵔	𐵕	𐵖	𐵗	𐵘	𐵙	𐵚	𐵛	𐵜	𐵝	𐵞	𐵟	𐵠	𐵡	𐵢	𐵣	𐵤	𐵥	𐵦	𐵧	𐵨	𐵩	𐵪	𐵫	𐵬	𐵭	𐵮	𐵯	𐵰	𐵱	𐵲	𐵳	𐵴	𐵵	𐵶	𐵷	𐵸	𐵹	𐵺	𐵻	𐵼	𐵽	𐵾	𐵿	𐶀	𐶁	𐶂	𐶃	𐶄	𐶅	𐶆	𐶇	𐶈	𐶉	𐶊	𐶋	𐶌	𐶍	𐶎	𐶏	𐶐	𐶑	𐶒	𐶓	𐶔	𐶕	𐶖	𐶗	𐶘	𐶙	𐶚	𐶛	𐶜	𐶝	𐶞	𐶟	𐶠	𐶡	𐶢	𐶣	𐶤	𐶥	𐶦	𐶧	𐶨	𐶩	𐶪	𐶫	𐶬	𐶭	𐶮	𐶯	𐶰	𐶱	𐶲	𐶳	𐶴	𐶵	𐶶	𐶷	𐶸	𐶹	𐶺	𐶻	𐶼	𐶽	𐶾	𐶿	𐷀	𐷁	𐷂	𐷃	𐷄	𐷅	𐷆	𐷇	𐷈	𐷉	𐷊	𐷋	𐷌	𐷍	𐷎	𐷏	𐷐	𐷑	𐷒	𐷓	𐷔	𐷕	𐷖	𐷗	𐷘	𐷙	𐷚	𐷛	𐷜	𐷝	𐷞	𐷟	𐷠	𐷡	𐷢	𐷣	𐷤	𐷥	𐷦	𐷧	𐷨	𐷩	𐷪	𐷫	𐷬	𐷭	𐷮	𐷯	𐷰	𐷱	𐷲	𐷳	𐷴	𐷵	𐷶	𐷷	𐷸	𐷹	𐷺	𐷻	𐷼	𐷽	𐷾	𐷿	𐸀	𐸁	𐸂	𐸃	𐸄	𐸅	𐸆	𐸇	𐸈	𐸉	𐸊	𐸋	𐸌	𐸍	𐸎	𐸏	𐸐	𐸑	𐸒	𐸓	𐸔	𐸕	𐸖	𐸗	𐸘	𐸙	𐸚	𐸛	𐸜	𐸝	𐸞	𐸟	𐸠	𐸡	𐸢	𐸣	𐸤	𐸥	𐸦	𐸧	𐸨	𐸩	𐸪	𐸫	𐸬	𐸭	𐸮	𐸯	𐸰	𐸱	𐸲	𐸳	𐸴	𐸵	𐸶	𐸷	𐸸	𐸹	𐸺	𐸻	𐸼	𐸽	𐸾	𐸿	𐹀	𐹁	𐹂	𐹃	𐹄	𐹅	𐹆	𐹇	𐹈	𐹉	𐹊	𐹋	𐹌	𐹍	𐹎	𐹏	𐹐	𐹑	𐹒	𐹓	𐹔	𐹕	𐹖	𐹗	𐹘	𐹙	𐹚	𐹛	𐹜	𐹝	𐹞	𐹟	𐹠	𐹡	𐹢	𐹣	𐹤	𐹥	𐹦	𐹧	𐹨	𐹩	𐹪	𐹫	𐹬	𐹭	𐹮	𐹯	𐹰	𐹱	𐹲	𐹳	𐹴	𐹵	𐹶	𐹷	𐹸	𐹹	𐹺	𐹻	𐹼	𐹽	𐹾	𐹿	𐺀	𐺁	𐺂	𐺃	𐺄	𐺅	𐺆	𐺇	𐺈	𐺉	𐺊	𐺋	𐺌	𐺍	𐺎	𐺏	𐺐	𐺑	𐺒	𐺓	𐺔	𐺕	𐺖	𐺗	𐺘	𐺙	𐺚	𐺛	𐺜	𐺝	𐺞	𐺟	𐺠	𐺡	𐺢	𐺣	𐺤	𐺥	𐺦	𐺧	𐺨	𐺩	𐺪	𐺫	𐺬	𐺭	𐺮	𐺯	𐺰	𐺱	𐺲	𐺳	𐺴	𐺵	𐺶	𐺷	𐺸	𐺹	𐺺	𐺻	𐺼	𐺽	𐺾	𐺿	𐻀	𐻁	𐻂	𐻃	𐻄	𐻅	𐻆	𐻇	𐻈	𐻉	𐻊	𐻋	𐻌	𐻍	𐻎	𐻏	𐻐	𐻑	𐻒	𐻓	𐻔	𐻕	𐻖	𐻗	𐻘	𐻙	𐻚	𐻛	𐻜	𐻝	𐻞	𐻟	𐻠	𐻡	𐻢	𐻣	𐻤	𐻥	𐻦	𐻧	𐻨	𐻩	𐻪	𐻫	𐻬	𐻭	𐻮	𐻯	𐻰	𐻱	𐻲	𐻳	𐻴	𐻵	𐻶	𐻷	𐻸	𐻹	𐻺	𐻻	𐻼	𐻽	𐻾	𐻿	𐼀	𐼁	𐼂	𐼃	𐼄	𐼅	𐼆	𐼇	𐼈	𐼉	𐼊	𐼋	𐼌	𐼍	𐼎	𐼏	𐼐	𐼑	𐼒	𐼓	𐼔	𐼕	𐼖	𐼗	𐼘	𐼙	𐼚	𐼛	𐼜	𐼝	𐼞	𐼟	𐼠	𐼡	𐼢	𐼣	𐼤	𐼥	𐼦	𐼧	𐼨	𐼩	𐼪	𐼫	𐼬	𐼭	𐼮	𐼯	𐼰	𐼱	𐼲	𐼳	𐼴	𐼵	𐼶	𐼷	𐼸	𐼹	𐼺	𐼻	𐼼	𐼽	𐼾	𐼿	𐽀	𐽁	𐽂	𐽃	𐽄	𐽅	𐽆	𐽇	𐽈	𐽉	𐽊	𐽋	𐽌	𐽍	𐽎	𐽏	𐽐	𐽑	𐽒	𐽓	𐽔	𐽕	𐽖	𐽗	𐽘	𐽙	𐽚	𐽛	𐽜	𐽝	𐽞	𐽟	𐽠	𐽡	𐽢	𐽣	𐽤	𐽥	𐽦	𐽧	𐽨	𐽩	𐽪	𐽫	𐽬	𐽭	𐽮	𐽯	𐽰	𐽱	𐽲	𐽳	𐽴	𐽵	𐽶	𐽷	𐽸	𐽹	𐽺	𐽻	𐽼	𐽽	𐽾	𐽿	𐾀	𐾁	𐾂	𐾃	𐾄	𐾅	𐾆	𐾇	𐾈	𐾉	𐾊	𐾋	𐾌	𐾍	𐾎	𐾏	𐾐	𐾑	𐾒	𐾓	𐾔	𐾕	𐾖	𐾗	𐾘	𐾙	𐾚	𐾛	𐾜	𐾝	𐾞	𐾟	𐾠	𐾡	𐾢	𐾣	𐾤	𐾥	𐾦	𐾧	𐾨	𐾩	𐾪	𐾫	𐾬	𐾭	𐾮	𐾯	𐾰	𐾱	𐾲	
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DATE: 1998-01-18

ISO/IEC JTC1/SC2/WG2
Universal Multiple-Octet Coded Character Set (UCS) – ISO/IEC 10646
Secretariat: ANSI

DOC TYPE: Expert contribution
TITLE: **Proposal to encode Avestan in the BMP of ISO/IEC 10646**
SOURCE: Michael Everson, EGT (IE)
PROJECT: JTC1.02.18.01
STATUS: Proposal.
ACTION ID: FYI
DUE DATE: --
DISTRIBUTION: Worldwide
MEDIUM: Paper and web
NO. OF PAGES: 3 (printed at 80%)

A. Administrative

1. Title	Proposal to encode Avestan in Plane 1 of ISO/IEC 10646-2
2. Requester's name	Michael Everson
3. Requester type	Expert request
4. Submission date	1998-01-18
5. Requester's reference	
6a. Completion	This is a complete proposal.
6b. More information to be provided?	No

B. Technical -- General

1a. New script? Name?	Yes. Avestan
1b. Addition of characters to existing block? Name?	No.
2. Number of characters	61
3. Proposed category	Category B.1
4. Proposed level of implementation and rationale	Level 1
5a. Character names included in proposal?	Yes
5b. Character names in accordance with guidelines?	Yes
5c. Character shapes reviewable?	Yes
6a. Who will provide computerized font?	Michael Everson
6b. Font currently available?	Michael Everson
6c. Font format?	TrueType

7a. Are references (to other character sets, dictionaries, descriptive texts, etc.) provided?	Yes.
7b. Are published examples (such as samples from newspapers, magazines, or other sources) of use of proposed characters attached?	No
8. Does the proposal address other aspects of character data processing?	Yes

C. Technical -- Justification

1. Contact with the user community?	Yes. Joseph Peterson, Jan Pieter Kunst.
2. Information on the user community?	Avestan enjoys both scholarly and ecclesiastical use.
3a. The context of use for the proposed characters?	Used to represent texts in the Avestan and Old Persian languages.
3b. Reference	See below.
4a. Proposed characters in current use?	Yes.
4b. Where?	By scholars and Zoroastrians.
5a. Characters should be encoded entirely in BMP?	Yes
5b. Rationale	Accordance with the Roadmap.
6. Should characters be kept in a continuous range?	Yes
7a. Can the characters be considered a presentation form of an existing character or character sequence?	No.
7b. Where?	
7c. Reference	
8a. Can any of the characters be considered to be similar (in appearance or function) to an existing character?	No
8b. Where?	
8c. Reference	
9a. Combining characters or use of composite sequences included?	No.
9b. List of composite sequences and their corresponding glyph images provided?	No.
10. Characters with any special properties such as control function, etc. included?	No

D. SC2/WG2 Administrative

To be completed by SC2/WG2

1. Relevant SC 2/WG 2 document numbers:	
2. Status (list of meeting number and corresponding action or disposition)	
3. Additional contact to user communities, liaison organizations etc.	
4. Assigned category and assigned priority/time frame	
Other Comments	

The script known as Avestan is related to the Arabic alphabet. It is a true superset of the consonantal alphabet Pahlavi, and it is proposed here to unify the two scripts (i.e. to subsume Pahlavi into Avestan). This proposal is similar to the proposal of Rick McGowan in UTR #3. The Avestan default directionality is RTL. Unlike Arabic, the numbers seem also to have RTL directionality (but see the issue on numbers below).

Issues:

- Are ligatures obligatory? Some ligatures are formed and Pahlavi and Avestan fonts will need to take those into account. If the ligatures are not obligatory, then ZWJ should be used to make them.
- Faulmann gives this set of numbers. This needs to be looked into with more modern sources and experts.
- Is the punctuation coded correctly?
- The names given here are versions of their Latin transliterations. Do actual names exist for these characters?
- Two forms of Y and V are coded here; these are found in a current Avestan font set and the two are included here along the same lines as Greek has SIGMA and FINAL SIGMA and Hebrew has PE and FINAL PE. Avestan, though it looks like Arabic, is much more strongly alphabetic, like Greek and Hebrew, and it would be better to follow those scripts as models than to force the character/glyph model onto this script. Again, existing fonts encode initial and medial Y and V as separate characters.
- The hyphen may be unifiable.

U+0001xx00	AVESTAN LETTER A		xx0	xx1	xx2	xx3
U+0001xx00	AVESTAN LETTER AA					
U+0001xx00	AVESTAN LETTER AE					
U+0001xx00	AVESTAN LETTER AEE					
U+0001xx00	AVESTAN LETTER E	0	𐬀	𐬁	𐬂	·
U+0001xx00	AVESTAN LETTER EE					
U+0001xx00	AVESTAN LETTER O					
U+0001xx00	AVESTAN LETTER OO	1	𐬃	𐬄	𐬅	·
U+0001xx00	AVESTAN LETTER AO					
U+0001xx00	AVESTAN LETTER AN					
U+0001xx00	AVESTAN LETTER I	2	𐬇	𐬈	𐬉	·
U+0001xx00	AVESTAN LETTER II					
U+0001xx00	AVESTAN LETTER U	3	𐬋	𐬌	𐬍	𐬎
U+0001xx00	AVESTAN LETTER UU					
U+0001xx00	AVESTAN LETTER K					
U+0001xx00	AVESTAN LETTER G					
U+0001xx00	AVESTAN LETTER GH	4	𐬏	𐬐	𐬑	—
U+0001xx00	AVESTAN LETTER X					
U+0001xx00	AVESTAN LETTER C	5	𐬔	𐬕	𐬖	
U+0001xx00	AVESTAN LETTER J					
U+0001xx00	AVESTAN LETTER T	6	𐬙	𐬚	𐬛	
U+0001xx00	AVESTAN LETTER D					
U+0001xx00	AVESTAN LETTER DH					
U+0001xx00	AVESTAN LETTER TH					
U+0001xx00	AVESTAN LETTER TT	7	𐬟	𐬠	𐬡	
U+0001xx00	AVESTAN LETTER P					
U+0001xx00	AVESTAN LETTER B	8	𐬤	𐬥	𐬦	𐬧
U+0001xx00	AVESTAN LETTER W					
U+0001xx00	AVESTAN LETTER F					
U+0001xx00	AVESTAN LETTER NG	9	𐬩	𐬪	𐬫	𐬬
U+0001xx00	AVESTAN LETTER NNG					
U+0001xx00	AVESTAN LETTER N					
U+0001xx00	AVESTAN LETTER NN					
U+0001xx00	AVESTAN LETTER M	A	𐬭	𐬮	𐬯	𐬰
U+0001xx00	AVESTAN LETTER INITIAL Y					
U+0001xx00	AVESTAN LETTER Y	B	𐬲	𐬳	𐬴	𐬵
U+0001xx00	AVESTAN LETTER INITIAL V					
U+0001xx00	AVESTAN LETTER V					
U+0001xx00	AVESTAN LETTER R	C	𐬶	𐬷	𐬸	𐬹
U+0001xx00	AVESTAN LETTER S					
U+0001xx00	AVESTAN LETTER Z	D	𐬼	𐬽	𐬾	𐬿
U+0001xx00	AVESTAN LETTER SH					
U+0001xx00	AVESTAN LETTER SHH					
U+0001xx00	AVESTAN LETTER SSH					
U+0001xx00	AVESTAN LETTER ZH	E	𐬻	𐬼	𐬽	𐬾
U+0001xx00	AVESTAN LETTER H					
U+0001xx00	AVESTAN LETTER HH					
U+0001xx00	AVESTAN LETTER XV	F	𐬿	𐬿	𐬿	𐬿
U+0001xx00	AVESTAN WORD BREAK					
U+0001xx00	AVESTAN SEMICOLON					
U+0001xx00	AVESTAN COLON					
U+0001xx00	AVESTAN STOP					
U+0001xx00	AVESTAN HYPHEN					
U+0001xx00	(This position shall not be used)					
U+0001xx00	(This position shall not be used)					
U+0001xx00	(This position shall not be used)					
U+0001xx00	AVESTAN NUMBER ONE					
U+0001xx00	AVESTAN NUMBER TWO					

U+0001xx00	AVESTAN NUMBER THREE
U+0001xx00	AVESTAN NUMBER FOUR
U+0001xx00	AVESTAN NUMBER TEN
U+0001xx00	AVESTAN NUMBER TWENTY
U+0001xx00	AVESTAN NUMBER FORTY
U+0001xx00	AVESTAN NUMBER ONE THOUSAND

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