

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

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Title: Proposed Latin glyphs for next edition of 10646-1

Source: Michael Everson (IE)

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Although the AFII wishes to use the same set of fonts to print both the Unicode Standard and the second edition of ISO/IEC 10646-1. However, in the case of Latin, and to an extent Cyrillic, the fonts which have been selected by the UTC to print are, in my opinion, unsuitable for printing the International Standard.

The fonts are idiosyncratic and contain a number of “fancy” design features which make the fonts “non-vanilla” in a large number of cases. Some comments which I made to the UTC were taken into account (such as the use of the aspostrophe instead of the caron for Czech letters) but still many of the basic glyph shapes, especially for the less-well-known characters (such as the medieval English and IPA characters), are either strangely designed, and in some cases still badly or incorrectly designed.

As part of my input to the UTC, I prepared a full repertoire of Latin characters using the Utopia font by Adobe, which is freely available on the net. This is the font I have routinely used for new characters which go out for PDAM ballots, and has therefore been acceptable to the National Bodies. I have raised the question of whether AFII could use this font to print the second edition of 10646-1 with some people in Adobe. I have not had a conclusive response from Adobe (though there should not be a problem as the one is permitted modify a font for one’s own use), but am preparing now another font of my own, which will be available to AFII for use without any problems should we not get a positive answer from Adobe.

I appreciate that AFII may find it convenient to use the same font for both the second edition of 10646-1 and the Unicode Standard, but the font they have chosen for Latin, as well as the one they are using for non-Slavic Cyrillic, is not acceptable, and revisions made by the designer of that font after the first round of detailed discussion on the draft of the Unicode text have not satisfied me. It doesn’t matter to me what font UTC uses to print the Unicode Standard, but that’s up to them. WG2, however, has to approve the fonts used for the UCS. For my part, I do *not* approve the font chosen by AFII for presenting Latin in the second edition of 10646-1. The problems with the font are both subtle and gross, and a more generic font should be used to print the International Standard. Attached is a sample of the Utopia-based font which I prepared earlier for comparison with the samples provided by AFII.

Row 00: BASIC LATIN

	000	001	002	003	004	005	006	007
0	☐ 000	☐ 016	SP 032	0 048	@ 064	P 080	` 096	p 112
1	☐ 001	☐ 017	! 033	1 049	A 065	Q 081	a 097	q 113
2	☐ 002	☐ 018	" 034	2 050	B 066	R 082	b 098	r 114
3	☐ 003	☐ 019	# 035	3 051	C 067	S 083	c 099	s 115
4	☐ 004	☐ 020	\$ 036	4 052	D 068	T 084	d 100	t 116
5	☐ 005	☐ 021	% 037	5 053	E 069	U 085	e 101	u 117
6	☐ 006	☐ 022	& 038	6 054	F 070	V 086	f 102	v 118
7	☐ 007	☐ 023	' 039	7 055	G 071	W 087	g 103	w 119
8	☐ 008	☐ 024	(040	8 056	H 072	X 088	h 104	x 120
9	☐ 009	☐ 025) 041	9 057	I 073	Y 089	i 105	y 121
A	☐ 010	☐ 026	* 042	: 058	J 074	Z 090	j 106	z 122
B	☐ 011	☐ 027	+ 043	; 059	K 075	[091	k 107	{ 123
C	☐ 012	☐ 028	, 044	< 060	L 076	\ 092	l 108	 124
D	☐ 013	☐ 029	- 045	= 061	M 077] 093	m 109	} 125
E	☐ 014	☐ 030	. 046	> 062	N 078	^ 094	n 110	~ 126
F	☐ 015	☐ 031	/ 047	? 063	O 079	_ 095	o 111	☐ 127

G = 00
P = 00

Row 00: LATIN 1

	008	009	00A	00B	00C	00D	00E	00F
0	☐ 128	☐ 144	☐ 160	◦ 176	À 192	Ð 208	à 224	ö 240
1	☐ 129	☐ 145	¡ 161	± 177	Á 193	Ñ 209	á 225	ñ 241
2	☐ 130	☐ 146	¢ 162	² 178	Â 194	Ò 210	â 226	ò 242
3	☐ 131	☐ 147	£ 163	³ 179	Ã 195	Ó 211	ã 227	ó 243
4	☐ 132	☐ 148	¤ 164	´ 180	Ä 196	Ô 212	ä 228	ô 244
5	☐ 133	☐ 149	¥ 165	µ 181	Å 197	Õ 213	å 229	õ 245
6	☐ 134	☐ 150	¦ 166	¶ 182	Æ 198	Ö 214	æ 230	ö 246
7	☐ 135	☐ 151	§ 167	· 183	Ç 199	× 215	ç 231	÷ 247
8	☐ 136	☐ 152	¨ 168	¸ 184	È 200	Ø 216	è 232	ø 248
9	☐ 137	☐ 153	© 169	¹ 185	É 201	Ù 217	é 233	ù 249
A	☐ 138	☐ 154	ª 170	º 186	Ê 202	Ú 218	ê 234	ú 250
B	☐ 139	☐ 155	« 171	» 187	Ë 203	Û 219	ë 235	û 251
C	☐ 140	☐ 156	¬ 172	¼ 188	Ì 204	Ü 220	ì 236	ü 252
D	☐ 141	☐ 157	☐ 173	½ 189	Í 205	Ý 221	í 237	ý 253
E	☐ 142	☐ 158	® 174	¾ 190	Î 206	Þ 222	î 238	þ 254
F	☐ 143	☐ 159	¯ 176	¿ 191	Ï 207	ß 223	ï 239	ÿ 255

G = 00
P = 00

Row 01: LATIN EXTENDED-A

	010	011	012	013	014	015	016	017
0	Ā 000	Đ 016	Ġ 032	İ 048	ı 064	Ŏ 080	Š 096	Ű 112
1	ā 001	đ 017	ġ 033	ı 049	ł 065	ő 081	š 097	ű 113
2	Ǻ 002	Ē 018	Ɔ 034	Ĳ 050	ł 066	Œ 082	Ț 098	Ț 114
3	ǻ 003	ē 019	ǧ 035	ij 051	Ń 067	œ 083	ț 099	Ț 115
4	Ą 004	Ĕ 020	Ĥ 036	Ĵ 052	ń 068	Ŕ 084	Ť 100	Ŵ 116
5	ą 005	ĕ 021	ĥ 037	ĵ 053	Ņ 069	ŕ 085	ť 101	ŵ 117
6	Ć 006	Ė 022	Ħ 038	Ɔ 054	ņ 070	Ŗ 086	Ʀ 102	Ŷ 118
7	ć 007	ė 023	ħ 039	Ʒ 055	Ň 071	ŗ 087	ƣ 103	ŷ 119
8	Ĉ 008	Ę 024	Ĩ 040	κ 056	ň 072	Ř 088	Ũ 104	ÿ 120
9	ĉ 009	ę 025	ĩ 041	ł 057	ň 073	ř 089	ũ 105	Ż 121
A	Ċ 010	Ě 026	Ī 042	Í 058	Ń 074	Ś 090	Ū 106	ż 122
B	ċ 011	ě 027	ī 043	ł 059	Ņ 075	ś 091	ū 107	ż 123
C	Č 012	Ĝ 028	Ĭ 044	ł 060	Ō 076	Ŝ 092	Ŭ 108	ž 124
D	č 013	ĝ 029	ĭ 045	ł 061	ō 077	ŝ 093	ŭ 109	ž 125
E	Ď 014	Ģ 030	ı 046	ł 062	Ŏ 078	Ş 094	Ű 110	ž 126
F	ď 015	ģ 031	ı 047	ł 063	ő 079	ş 095	ű 111	ƒ 127

G = 00
P = 00

Row 01: LATIN EXTENDED-B

	018	019	01A	01B	01C	01D	01E	01F
0	ḃ 128	ε 144	Ό 160	ı 176	ı 192	ı̇ 208	Ā 224	ĵ 240
1	Ḃ 129	ƒ 145	ο 161	Ɔ 177	 193	Ǿ 209	ā 225	DZ 241
2	Ḅ 130	ƒ 146	Ϡ 162	Ɔ 178	‡ 194	ǿ 210	Ā̄ 226	Dz 242
3	ḅ 131	Ɠ 147	Ϡ 163	Ƴ 179	! 195	Ǿ̇ 211	ǣ 227	dz 243
4	Ḇ 132	Ƴ 148	Ɔ 164	Ƴ 180	DŽ 196	ǿ̇ 212	Ɠ 228	Ġ 244
5	ḇ 133	ħ 149	Ḇ 165	Ʒ 181	Dž 197	Ǿ̄ 213	Ɠ 229	ġ 245
6	Ɔ 134	ł 150	Ŕ 166	Ʒ 182	dž 198	Ǿ̄ 214	Ǧ 230	Ĥ 246
7	Ɔ̇ 135	Ɛ 151	Ʒ 167	Ʒ 183	LJ 199	Ǿ̇ 215	ǧ 231	Ɔ̇ 247
8	Ɔ̇ 136	Ƒ 152	Ʒ 168	Ʒ 184	Lj 200	Ǿ̇ 216	Ǧ̇ 232	Ɔ̇ 248
9	Ɔ̇ 137	Ƒ 153	Ʒ 169	Ʒ 185	lj 201	Ǿ̇ 217	ǧ̇ 233	Ɔ̇ 249
A	Ɔ̇ 138	Ƒ 154	Ʒ 170	Ʒ 186	NJ 202	Ǿ̇ 218	Ɔ̇ 234	Á 250
B	Ɔ̇ 139	λ 155	Ƒ 171	Ʒ 187	Nj 203	Ǿ̇ 219	Ɔ̇ 235	á 251
C	Ɔ̇ 140	Ʊ 156	Ƒ 172	Ʒ 188	nj 204	Ǿ̇ 220	Ɔ̇ 236	Æ 252
D	Ɔ̇ 141	Ƒ 157	Ƒ 173	Ʒ 189	Ǻ 205	ə 221	Ɔ̇ 237	æ 253
E	Ɔ̇ 142	η 158	Ƒ 174	Ʒ 190	ǻ 206	Ā 222	Ǻ 238	Ø 254
F	Ɔ̇ 143	Θ 159	Ƒ 176	Ʒ 191	Ǽ 207	ā 223	Ǻ 239	ø 255

G = 00
P = 00

Row 02: LATIN EXTENDED-B

	020	021	022	023	024
0	À 000	Ř 016		Ō 048	
1	à 001	ř 017		ō 049	
2	Â 002	Ŕ 018	8 034	Ȳ 050	
3	â 003	ŕ 019	8 035	ȳ 051	
4	È 004	Û 020	Ƶ 036		
5	è 005	ù 021	ƶ 037		
6	Ê 006	Û 022	À 038		
7	ê 007	û 023	à 039		
8	Ï 008	Ş 024	Ɛ 040		
9	ï 009	ş 025	ɛ 041		
A	Î 010	Ț 026	Ö 042		
B	î 011	ț 027	ö 043		
C	Ò 012	Ʒ 028	Õ 044		
D	ò 013	Ʒ 029	õ 045		
E	Ô 014	Ĥ 030	Ò 046		
F	ô 015	ĥ 031	ò 047		

G = 00
P = 00

Row 02: IPA

	025	026	027	028	029	02A
0	a 080	ɔ̃ 096	ɥ 112	ʀ 128	ʐ 144	ɸ 160
1	ɑ 081	ɡ 097	ɱ 113	ʁ 129	ʑ 145	ʔ 161
2	ɒ 082	ɠ 098	ɲ 114	ʂ 130	ʑ 146	ɸ 162
3	ɓ 083	ɣ 099	ɳ 115	ʃ 131	ʒ 147	ɸ 163
4	ɔ̥ 084	ɥ̥ 100	ɴ 116	ʃ̥ 132	ʑ̥ 148	ɸ̥ 164
5	ɛ̥ 085	ɥ̥ 101	ɵ 117	ʎ 133	ʎ̥ 149	ɸ̥ 165
6	ɖ 086	ɦ 102	æ 118	ʟ 134	ʟ̥ 150	ʟ̥ 166
7	ɗ 087	ħ 103	ɔ̯ 119	ɽ 135	ɽ̥ 151	ɽ̥ 167
8	ɟ 088	ɨ 104	ɸ 120	ɽ̥ 136	ɸ̥ 152	ɸ̥ 168
9	ɘ 089	ɭ 105	ɻ 121	ɥ̥ 137	ɥ̥ 153	ɥ̥ 169
A	ɶ 090	ɮ 106	ɻ̥ 122	ɮ̥ 138	ɮ̥ 154	ɮ̥ 170
B	ɛ̥ 091	ɮ̥ 107	ɻ̥ 123	ɮ̥ 139	ɮ̥ 155	ɮ̥ 171
C	ɶ̥ 092	ɮ̥ 108	ɻ̥ 124	ɮ̥ 140	ɮ̥ 156	ɮ̥ 172
D	ɶ̥ 093	ɮ̥ 109	ɻ̥ 125	ɮ̥ 141	ɮ̥ 157	ɮ̥ 173
E	ɶ̥ 094	ɮ̥ 110	ɻ̥ 126	ɮ̥ 142	ɮ̥ 158	174
F	ɶ̥ 095	ɮ̥ 111	ɻ̥ 127	ɮ̥ 143	ɮ̥ 159	175

G = 00
P = 00

Row 02: SPACING MODIFIER LETTERS

	02B	02C	02D	02E	02F
0	h 176	? 192	▼ ▲ 208	Ÿ 224	240
1	ĥ 177	ʔ 193	▼ 209	l 225	241
2	j 178	< 194	› 210	S 226	242
3	r 179	> 195	Ꞁ 211	X 227	243
4	ŀ 180	^ 196	⊥ 212	ſ 228	244
5	ŵ 181	v 197	⊥ 213	ſ 229	245
6	B 182	^ 198	+ 214	ſ 230	246
7	W 183	v 199	- 215	ſ 231	247
8	y 184	l 200	˘ 216	ſ 232	248
9	/ 185	- 201	• 217	ſ 233	249
A	“ 186	/ 202	o 218	L 234	250
B	‘ 187	\ 203	Ꞁ 219	ſ 235	251
C	’ 188	l 204	~ 220	v 236	252
D	¸ 189	- 205	“ 221	= 237	253
E	› 190	\ 206	˘ 222	” 238	254
F	Ꞁ 191	/ 207	x 223	239	255

G = 00
P = 00

Row 03: COMBINING DIACRITICAL MARKS

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

G = 00
P = 00

Row 1E: LATIN EXTENDED-B

	1E0	1E1	1E2	1E3	1E4	1E5	1E6	1E7
0	À 000	Ā 016	Ā 032	Ā 048	Ā 064	Ò 080	Š 096	Ť 112
1	à 001	ā 017	ā 033	ā 049	ā 065	ò 081	š 097	ť 113
2	Ā 002	Ā 018	Ā 034	Ā 050	Ā 066	Ó 082	Ş 098	Ů 114
3	ā 003	ā 019	ā 035	ā 051	ā 067	ó 083	ş 099	ů 115
4	Ḃ 004	È 020	Ḣ 036	Ḅ 052	Ḇ 068	Ḑ 084	Š 100	Ṱ 116
5	ḃ 005	è 021	ḣ 037	ḅ 053	ḇ 069	ḑ 085	š 101	ṱ 117
6	Ḅ 006	É 022	Ḥ 038	Ḍ 054	Ḧ 070	Ḩ 086	Š 102	Ṳ 118
7	ḅ 007	é 023	ḥ 039	ḍ 055	ḧ 071	ḩ 087	š 103	ṳ 119
8	Ç 008	Ē 024	Ḣ 040	Ļ 056	Ḇ 072	Ṛ 088	Ş 104	Ů 120
9	ç 009	ē 025	ḣ 041	ļ 057	ḇ 073	ṛ 089	ş 105	ů 121
A	Ḍ 010	Ē 026	Ḣ 042	Ḍ 058	Ḧ 074	Ṛ 090	Ṭ 106	Ů 122
B	ḍ 011	ē 027	ḣ 043	ļ 059	ḇ 075	ṛ 091	ṭ 107	ů 123
C	Ḍ 012	Ē 028	Ḣ 044	Ḍ 060	Ḧ 076	Ṛ 092	Ṭ 108	Ṳ 124
D	ḍ 013	ē 029	ḣ 045	ļ 061	ḇ 077	ṛ 093	ṭ 109	ṳ 125
E	Ḍ 014	Ē 030	Ḣ 046	Ḍ 062	Ḧ 078	Ṛ 094	Ṭ 110	Ṳ 126
F	ḍ 015	ē 031	ḣ 047	ļ 063	ḇ 079	ṛ 095	ṭ 111	ṳ 127

G = 00
P = 00

Row 1E: LATIN EXTENDED-B

	1E8	1E9	1EA	1EB	1EC	1ED	1EE	1EF
0	Ẁ 128	Ẃ 144	Ą 160	Ǻ 176	È 192	Õ 208	Ǿ 224	Ư 240
1	ẁ 129	ẃ 145	ą 161	ǻ 177	è 193	ó 209	ǿ 225	ư 241
2	Ẃ 130	Ẅ 146	Ā 162	Ǻ 178	Ê 194	Ò 210	Ợ 226	Ỳ 242
3	ẃ 131	ẅ 147	ą 163	ǻ 179	ê 195	ò 211	ợ 227	ỳ 243
4	Ẅ 132	Ẇ 148	Ǻ 164	Ǻ 180	Ë 196	Ỏ 212	Ụ 228	Ỵ 244
5	ẅ 133	ẇ 149	ǻ 165	ǻ 181	ë 197	ỏ 213	ụ 229	ỵ 245
6	Ẇ 134	Ẉ 150	Ā 166	Ǻ 182	Ë 198	Ỗ 214	Ủ 230	Ỷ 246
7	ẇ 135	ẉ 151	â 167	ǻ 183	ë 199	ỗ 215	ủ 231	ỷ 247
8	Ẉ 136	Ẋ 152	Ǻ 168	Ē 184	Ï 200	Ộ 216	Ứ 232	Ỹ 248
9	ẉ 137	Ẏ 153	ǻ 169	ē 185	ï 201	ộ 217	ứ 233	ỹ 249
A	Ẋ 138	Ằ 154	Ǻ 170	Ê 186	Ị 202	Ớ 218	Ừ 234	250
B	ẏ 139	Ẳ 155	ǻ 171	ê 187	ị 203	ớ 219	ừ 235	251
C	Ằ 140	256	Ā 172	Ë 188	Ọ 204	Ờ 220	Ử 236	252
D	Ẳ 141	257	â 173	ë 189	ọ 205	ờ 221	ử 237	253
E	Ỳ 142	258	Ǻ 174	Ë 190	Ỏ 206	Ở 222	Ữ 238	254
F	ỳ 143	259	ǻ 176	ế 191	ỏ 207	ở 223	ữ 239	255

G = 00
P = 00