

**ISO/IEC JTC 1/SC 2/WG 2
PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS
FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646**

Please fill Sections A, B and C below. Section D will be filled by SC 2/WG 2.

For instructions and guidance for filling in the form please see the document “Principles and Procedures for Allocation of New Characters and Scripts” (<http://www.dkuug.dk/JTC1/SC2/WG2/prot>)

A. Administrative

1. Title: **Computer Scientist, Type Core Technology, Adobe Systems**

2. Requester’s name: **Sairus Patel <sppatel@adobe.com>**

3. Requester type (Member body/Liaison/Individual contribution): **Associate member (Adobe Systems)**

4. Submission date: **21 November 2000**

5. Requester’s reference (if applicable): **N.A.**

6. (Choose one of the following:)

This is a complete proposal: **Yes**

or, More information will be provided later:

B. Technical - General

1. (Choose one of the following:)

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

Proposed name of script:

b. The proposal is for addition of character(s) to an existing block: **Yes**

Name of the existing block: **Dingbats**

2. Number of characters in proposal: **14**

3. Proposed category (see section II, Character Categories):

Ps = Punctuation, Open

Pe = Punctuation, Close

4. Proposed Level of Implementation (see clause 15, ISO/IEC 10646-1): **(Same as that for the current Dingbats characters.)**

Is a rationale provided for the choice? **No**

If Yes, reference:

5. Is a repertoire including character names provided?: **Yes (Please see appended “Additional Notes” section)**

a. If YES, are the names in accordance with the ‘character naming guidelines’ in Annex K of ISO/IEC 10646-1? **Yes**

b. Are the character shapes attached in a reviewable form? **Yes**

6. Who will provide the appropriate computerized font (ordered preference: True Type, PostScript or 96x96 bit-mapped format) for publishing the standard? **Adobe Systems will provide a PostScript Type 1 version of the commercially available ZapfDingbats font.**

If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: **Sairus Patel <sppatel@adobe.com>. Adobe font tools used.**

7. References:

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

b. Are published examples (such as samples from newspapers, magazines, or other sources) of use of proposed characters attached? **No; any user of the PostScript Type 1 font ZapfDingbats can produce a document with these characters.**

8. Special encoding issues:

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. (Please see the appended “Additional Notes” section for all Unicode character properties for the proposed characers.)

C. Technical - Justification

1. Has this proposal for addition of character(s) been submitted before? **No. (Please see appended “Additional Notes” section for possible reasons why the Unicode Consortium did not assign these 14 characters in the Dingbats block.)**

If YES explain

2. Has contact been made to members of the user community (for example: National Body, user groups of the script or characters, other experts, etc.)? **N.A. (Please see appended “Additional Notes” section – any user of Zapf Dingbats can use the proposed characters.)**

If YES, with whom?

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? **Yes**

Reference: **(Please see appended “Additional Notes” section – any user of Zapf Dingbats can use the proposed characters.)**

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

Reference: **(Please see appended “Additional Notes” section.)**

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

If YES, where? **In any document created with the Zapf Dingbats font, if those characters are selected.**

Reference: **(Please see appended “Additional Notes” section.)**

6. After giving due considerations to the principles in N 1352 must the proposed characters be entirely in the BMP? **Yes**

If YES, is a rationale provided? **It makes most sense for them to be with the other Dingbats in the Dingbats block; there is adequate space immediately following the last defined Dingbat.**

If YES, reference: **(Proposed Unicode values are in appended “Additional Notes” section.)**

7. Should the proposed characters be kept together in a contiguous range (rather than being scattered)? **Yes, since the order will match the PostScript encoding in the font. The current Dingbats block has the same ordering as the PostScript encoding in the font.**

8. Can any of the proposed characters be considered a presentation form of an existing character or character sequence? **No**

If YES, is a rationale for its inclusion provided?

If YES, reference:

9. Can any of the proposed character(s) be considered to be similar (in appearance or function) to an existing character? **No**

If YES, is a rationale for its inclusion provided?

If YES, reference:

10. Does the proposal include use of combining characters and/or use of composite sequences (see clause 4.11 and 4.13 in ISO/IEC 10646-1)? **No**

If YES, is a rationale for such use provided?

If YES, reference:

Is a list of composite sequences and their corresponding glyph images (graphic symbols) provided? **N.A.**

If YES, reference:

11. Does the proposal contain characters with any special properties such as control function or similar semantics? **Yes**

If YES, describe in detail (include attachment if necessary) **All Unicode character properties for the proposed characers have been enclosed. (Please see appended “Additional Notes” section.)**

D. SC 2/WG 2 Administrative (To be completed by SC 2/WG 2)

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:

Additional Notes

Rationale for inclusion of proposed 14 characters into Dingbats block:

1. The Zapf Dingbats Type 1 font has always included these 14 glyphs. They have always been encoded in the Macintosh Type 1 version and therefore have been accessible to Macintosh users. (MacOS TrueType Zapf Dingbats also encodes these glyphs.)
2. The Windows versions of Zapf Dingbats previous to 002.000 included these glyphs, but they were not accessible to most users since they were unencoded in the PostScript and therefore Windows encoding due to an oversight on Adobe's part. This is probably what resulted in Unicode originally not including these 14 glyphs when it first defined the Dingbats block around 1990.
3. Adobe has fixed this in version 002.000, which shipped in June/July 1997. The revised font ships with all devices which include PostScript 3, which includes devices from both Apple (Laserwriter 8500) and Hewlett-Packard (a wide-format colour printer). Other products that have already bundled or will bundle the revised version include Adobe Acrobat, Adobe Type Manager, Type on Call, and Font Folio. (Appended is a visual representation of the revised PostScript encoding of Zapf Dingbats.)

Apple has defined the 14 characters in the Corporate Use subarea; Adobe also currently uses these assignments in its documents, but would greatly prefer if they were assigned alongside their compatriots in the Dingbats block. Given that Unicode makes an exception for encoding glyphs from the font Zapf Dingbats, it should do so for the entire font.

Adobe has recently decided that it is going to be releasing an OpenType version of Zapf Dingbats for the first time around February 2001. We want the Unicode 'cmap' (character map) present in this font to contain only standard Unicode characters, not any Corporate Use subarea assignments; hence this proposal.

This issue was discussed on the Unicode list <unicode@unicode.org> 27 Jan '98, thread "Zapf Dingbats block missing 14 glyphs". No objections were expressed by anyone on that list at that time.

Glyph information of proposed characters:

1. Proposed Unicode value (follows PostScript encoding order, as do current Dingbats block assignments).
2. PostScript encoding (hexdecimal) in ZapfDingbats.
3. PostScript glyph name in ZapfDingbats.
4. Corporate Use subarea Unicode value used by Adobe and Apple.

```
27C0;80;a89;F8D7
27C1;81;a90;F8D8
27C2;82;a93;F8D9
27C3;83;a94;F8DA
27C4;84;a91;F8DB
27C5;85;a92;F8DC
27C6;86;a205;F8DD
27C7;87;a85;F8DE
27C8;88;a206;F8DF
27C9;89;a86;F8E0
27CA;8A;a87;F8E1
27CB;8B;a88;F8E2
27CC;8C;a95;F8E3
27CD;8D;a96;F8E4
```

Proposed character properties for Unicode database:

Note: Fields 2-14 modelled on those for U+FD3E, ORNATE LEFT PARENTHESIS and U+FD3F, ORNATE RIGHT PARENTHESIS).

```
27C0;MEDIUM LEFT PARENTHESIS ORNAMENT;Ps;0;ON;;;;N;;;;
27C1;MEDIUM RIGHT PARENTHESIS ORNAMENT;Pe;0;ON;;;;N;;;;
27C2;MEDIUM FLATTENED LEFT PARENTHESIS ORNAMENT;Ps;0;ON;;;;N;;;;
27C3;MEDIUM FLATTENED RIGHT PARENTHESIS ORNAMENT;Pe;0;ON;;;;N;;;;
27C4;MEDIUM LEFT-POINTING ANGLE BRACKET ORNAMENT;Ps;0;ON;;;;N;;;;
27C5;MEDIUM RIGHT-POINTING ANGLE BRACKET ORNAMENT;Pe;0;ON;;;;N;;;;
27C6;HEAVY LEFT-POINTING ANGLE QUOTATION MARK ORNAMENT;Ps;0;ON;;;;N;;;;
27C7;HEAVY RIGHT-POINTING ANGLE QUOTATION MARK ORNAMENT;Pe;0;ON;;;;N;;;;
27C8;HEAVY LEFT-POINTING ANGLE BRACKET ORNAMENT;Ps;0;ON;;;;N;;;;
27C9;HEAVY RIGHT-POINTING ANGLE BRACKET ORNAMENT;Pe;0;ON;;;;N;;;;
27CA;LIGHT LEFT TORTOISE SHELL BRACKET ORNAMENT;Ps;0;ON;;;;N;;;;
27CB;LIGHT RIGHT TORTOISE SHELL BRACKET ORNAMENT;Pe;0;ON;;;;N;;;;
27CC;MEDIUM LEFT CURLY BRACKET ORNAMENT;Ps;0;ON;;;;N;;;;
27CD;MEDIUM RIGHT CURLY BRACKET ORNAMENT;Pe;0;ON;;;;N;;;;
```

Character shapes for proposed characters on next page

>> NOTE: 14 proposed Unicode characters are at code points 0x80-0x8D <<

0x20	278	0x21	974	0x22	961	0x23	974	0x24	980	0x25	719	0x26	789	0x27	790	0x28	791	0x29	690	0x2A	960	0x2B	939	0x2C	549	0x2D	855	0x2E	911	0x2F	933	
space	a1	a2	a202	a3	a4	a5	a119	a118	a117	a11	a12	a13	a14	a15	a16																	
0x30	911	0x31	945	0x32	974	0x33	755	0x34	846	0x35	762	0x36	761	0x37	571	0x38	677	0x39	763	0x3A	760	0x3B	759	0x3C	754	0x3D	494	0x3E	552	0x3F	537	
a105	a17	a18	a19	a20	a21	a22	a23	a24	a25	a26	a27	a28	a6	a7	a8																	
0x40	577	0x41	692	0x42	786	0x43	788	0x44	788	0x45	790	0x46	793	0x47	794	0x48	816	0x49	823	0x4A	789	0x4B	841	0x4C	823	0x4D	833	0x4E	816	0x4F	831	
a9	a10	a29	a30	a31	a32	a33	a34	a35	a36	a37	a38	a39	a40	a41	a42																	
0x50	923	0x51	744	0x52	723	0x53	749	0x54	790	0x55	792	0x56	695	0x57	776	0x58	768	0x59	792	0x5A	759	0x5B	707	0x5C	708	0x5D	682	0x5E	701	0x5F	826	
a43	a44	a45	a46	a47	a48	a49	a50	a51	a52	a53	a54	a55	a56	a57	a58																	
0x60	815	0x61	789	0x62	789	0x63	707	0x64	687	0x65	696	0x66	689	0x67	786	0x68	787	0x69	713	0x6A	791	0x6B	785	0x6C	791	0x6D	873	0x6E	761	0x6F	762	
a59	a60	a61	a62	a63	a64	a65	a66	a67	a68	a69	a70	a71	a72	a73	a74																	
0x70	762	0x71	759	0x72	759	0x73	892	0x74	892	0x75	788	0x76	784	0x77	438	0x78	138	0x79	277	0x7A	415	0x7B	392	0x7C	392	0x7D	668	0x7E	668			
a203	a75	a204	a76	a77	a78	a79	a81	a82	a83	a84	a97	a98	a99	a100																		
0x80	390	0x81	390	0x82	317	0x83	317	0x84	276	0x85	276	0x86	509	0x87	509	0x88	410	0x89	410	0x8A	234	0x8B	234	0x8C	334	0x8D	334					
a89	a90	a93	a94	a91	a92	a205	a85	a206	a86	a87	a88	a95	a96																			
	0xA1	732	0xA2	544	0xA3	544	0xA4	910	0xA5	667	0xA6	760	0xA7	760	0xA8	776	0xA9	595	0xAA	694	0xAB	626	0xAC	788	0xAD	788	0xAE	788	0xAF	788		
	a101	a102	a103	a104	a106	a107	a108	a112	a111	a110	a109	a120	a121	a122	a123																	
0xB0	788	0xB1	788	0xB2	788	0xB3	788	0xB4	788	0xB5	788	0xB6	788	0xB7	788	0xB8	788	0xB9	788	0xBA	788	0xBB	788	0xBC	788	0xBD	788	0xBE	788	0xBF	788	
a124	a125	a126	a127	a128	a129	a130	a131	a132	a133	a134	a135	a136	a137	a138	a139																	
0xC0	788	0xC1	788	0xC2	788	0xC3	788	0xC4	788	0xC5	788	0xC6	788	0xC7	788	0xC8	788	0xC9	788	0xCA	788	0xCB	788	0xCC	788	0xCD	788	0xCE	788	0xCF	788	
a140	a141	a142	a143	a144	a145	a146	a147	a148	a149	a150	a151	a152	a153	a154	a155																	
0xD0	788	0xD1	788	0xD2	788	0xD3	788	0xD4	894	0xD5	838	0xD6	1016	0xD7	458	0xD8	748	0xD9	924	0xDA	748	0xDB	918	0xDC	927	0xDD	928	0xDE	928	0xDF	834	
a156	a157	a158	a159	a160	a161	a163	a164	a196	a165	a192	a166	a167	a168	a169	a170																	
0xE0	873	0xE1	828	0xE2	924	0xE3	924	0xE4	917	0xE5	930	0xE6	931	0xE7	463	0xE8	883	0xE9	836	0xEA	836	0xEB	867	0xEC	867	0xED	696	0xEE	696	0xEF	874	
a171	a172	a173	a162	a174	a175	a176	a177	a178	a179	a193	a180	a199	a181	a200	a182																	
	0xF1	874	0xF2	760	0xF3	946	0xF4	771	0xF5	865	0xF6	771	0xF7	888	0xF8	967	0xF9	888	0xFA	831	0xFB	873	0xFC	927	0xFD	970	0xFE	918				
a201	a183	a184	a197	a185	a194	a198	a186	a195	a187	a188	a189	a190	a191																			