### Irish comments on CD ISO/IEC 10646-1/FPDAM 14 (Yi)

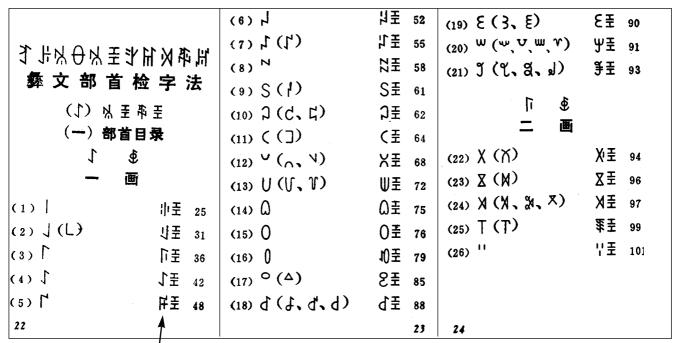
Reference: SC2 N3215 Closes: 1999-03-05 Date: 1999-01-19

**Q1:** Ireland disapproves the FPDAM draft with the technical comments given below. Acceptance of these comments and appropriate changes in the text will change our vote to approval.

#### Technical:

- **1. General.** Irish negative comments regarding the Yi radicals in the PDAM for Yi were not able to be taken into account because no Chinese expert representing the Yi nationality was present at the London meeting of WG2. We give here a full account of the situation regarding the Yi radicals which has given rise to our continued No vote.
- **2. Sources.** We have now *two* sources for Yi radicals: Bburx 1984 and Bburx 1990. The first of these is an introduction to the Yi writing system; the second a Yi-Chinese dictionary. When Yi radicals were introduced to WG2 in 1995 in N1187 and we point out that it was *Ireland*, not any other national body, which came to WG2 with a requirement for Yi radicals only Bburx 1984 was available to us. Figure 1 below shows the radical repertoire of Bburx 1984: 26 main radicals (used as an index for classification) and an additional 29 radical variants totalling 55 characters. Figure 2 below shows the repertoire found in Bburx 1990: only the 26 main radicals are given.
- **3. Missing characters.** The FPDAM contains 7 additional radicals proposed by China, but omits 5 of the radical variants found in Bburx 1984. No substantive rationale has been given for their omission, except in N1611 that some Yi experts do not think that they are needed. This does not satisfy the Irish requirement that all of the radicals in Bburx 1984 be included in the UCS. This requirement is lexicographical in nature the absence of these characters in the UCS, would, for instance, make it impossible to completely represent Bburx 1984, and any derivative works dealing with Yi radicals and their variants, in UCS encoding.
- **4. Ordering.** The order of the Yi radicals and variants in the FPDAM does not follow the ordering used by Bburx 1984. We consider this to be inconsistent with the agreement of WG2 that Bburx be used to order all Yi characters, which was reflected in the reordering of all of the Yi syllables between the PDAM and the FPDAM. Why should radicals HXUO, VE, HXOT, JJIE, OP, and JJUT not be found in their natural positions in the radical order? Our *minimum* requirement for correcting the FPDAM would be to order the table according to Bburx and to leave empty positions for the 5 missing radical variants if they cannot be added at this time.
- **5.** Additional characters. Of the 7 additional radicals proposed by China, we believe that only 3 are mature candidates for encoding in the UCS. As radical variants, YI RADICAL VU ) can be seen in YI SYLLABLE VU (though it is clearer in YI SYLLABLE RRUR (), which name we prefer for the radical); YI RADICAL JY (can be seen in YI SYLLABLE JY (); YI RADICAL X is the tone mark found in 345 of the Yi syllables. The remaining 4 radicals do not appear to be found as variants of any other primary radical. Of these YI RADICAL CY X would seem to be a candidate primary form for two of them, but none of the syllables contain these to the exclusion of the primary form X. We believe the inclusion of these 4 radicals in the UCS at this time to be a mistake, and we strongly urge WG2 to withdraw them from the FPDAM pending stronger substantiation indeed substantiation of any kind of their existence. It appears to us that these are *strokes*, not *radicals*, and WG2 has not encoded Yi strokes in the UCS. Further, the 4 radicals have names which are inconsistent with the names of the other radicals. LAVT –, YRRT / , and VRRT \ are not permitted syllables in Yi (which is a warning in itself); CI SSEP \ appears to translate to *shí mó guǐ* in Chinese, meaning 'ten sharp devils'. These radicals should not be encoded at the present time.

- **6. Character names.** With regard to the names of the radicals, the 26 basic forms are given names in Bburx 1984 in the column preceding the page number (see Figure 1). Note that in general the radical is named for the syllable which contain it with the least additional "graphic interference" of other elements. In the FPDAM the names for radicals WO  $\Im$  (<  $\Re$ ) and DU  $\Re$  (<  $\Re$ ) have been reversed. We further propose a number of other radical name changes: ZIP  $\Re$  for YO  $\Re$  ( $\Im$ ); TAT  $\Im$  for HXOT  $\Re$  ( $\Im$ ); BE  $\Re$  for JJIE  $\Re$  ( $\Re$ ).
- **6. Characters not in Bburx 1990.** Fourteen syllables (EX, WU, MUOX, HLOX, GURX, ZE, CUOX, ZZIEP, CHUOT, NRYRX, SHYRX, NJURX, XYRX, and YYX) do not appear in Bburx 1990 but we have verified that they appear in GB 13134-91, *Yi coded character set for information interchange*, so this is not problematic.



Names of primary Yi radicals

Figure 1: Radicals from Bburx 1984

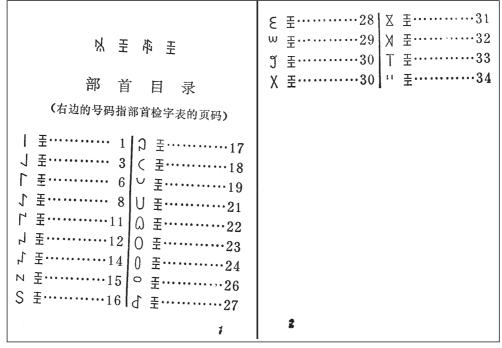


Figure 2: Radicals from Bburx 1990

**7. Recommendations.** We recommend that the table attached be adopted by WG2 for the FDAM. To assist the reader, we have used two conventions: a double line around a cell indicates one of the 5 characters from Bburx 1984 omitted in the PDAM; a bold dotted line around a cell indicates one of the 3 characters proposed by China which we agree should be added to the repertoire; the double line and grey background in the last 4 cells indicates that we propose them to be withdrawn from the FPDAM. For the convenience of the reader, we have added an asterisk next to the name of the primary radicals from Bburx 1984.

### 8. References

- Bburx Ddie Su. 1984. *Nuo-su bbur-ma shep jie zzit: Syp-chuo se nuo bbur-ma syt mu curx su niep sha zho ddop ma bbur-ma syt mu wo yuop hop, Bburx Ddie da Su.* [Chengdu]: Syp-chuo co cux tep yy ddurx dde. = Biān Xiězhě. 1984. *Yí wén jiǎn zì běn: Yí Hàn wén duìzháo bǎn.* Chéngdū: Sìchuān mínzú chūbǎnshè.
- Bburx Ddie Su. 1990. *Nip Huo bbur-ma ssix jie: Nip Huo bbur-ma ssi jie Bburx Ddie curx Su.* [Chengdu]: Syp-chuo co cux tep yy ddurx dde. = Biān Xiězhě. 1984. *Yí Hàn zìdiăn.* Chéngdū: Sìchuān mínzú chūbǎnshè. ISBN 7-5409-0128-4

# YI RADICALS as proposed

	A48	A49	A4A	A4B	A4C		
0	128	144	160	176	192		
1	<del>2</del> 29	145	161	<b>4</b>	193		
2	27 129 130	146	162	178	194		
3	131	147	163	179	195		
4	132	148	164	3	196		
5	133	149	165	181	197		
6	_N.	150	166	182	198		
7	<del>1</del> 7+ → 134 → 135	<b>1</b> 51	167	U) 183	199		
8	136	<b>7</b> 152	168	<b>U</b>	700		
9	137	153	169	185	<b>l l</b> 201		
Α	138	<u></u>	170	186	202		
В	138 )(C )(C )139 )(C )(C )140	155	171	9	203		
С	) C ) C 140	156	172	187	204		
D	141	157	173	O 189	205		
E	142	7	174	<b>Q</b>	206		
F	143	159	176	191	207		

G = 00 P = 00

# YI RADICALS as proposed

dec	hex	Name	dec	hex	Name
144 145 146 147 148 149 150 151 152 153 154 155 166 167 168 169 171 172 173 174 175 177 178 180 181 182 183 184 185 189 190 191 192 193 194 195 196 197 198 199 199 199 199 199 199 199 199 199	9912334567899ABCDEF0123456789ABCDEF0123456789ABCDEF0123456789ABCDCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	YI RADICAL LI* YI RADICAL LI* YI RADICAL KIT YI RADICAL KIT YI RADICAL KIT YI RADICAL SI* YI RADICAL SSI* YI RADICAL GOP* YI RADICAL GOP* YI RADICAL MI YI RADICAL MI YI RADICAL HXIT* YI RADICAL HXIT* YI RADICAL LYR* YI RADICAL LYR* YI RADICAL LYR* YI RADICAL AUT YI RADICAL PUT YI RADICAL RUR YI RADICAL RUR YI RADICAL HXOT YI RADICAL CYT YI RADICAL CYT YI RADICAL CYT YI RADICAL LYP YI RADICAL LODUR* YI RADICAL BUR YI RADICAL TU* YI RADICAL TU* YI RADICAL TU* YI RADICAL JUT* YI RADICAL JUT* YI RADICAL JUT* YI RADICAL HMO YI RADICAL WIP YI RADICAL SHY YI RADICAL SHY YI RADICAL SHY YI RADICAL SHY YI RADICAL LYDP YI RADICAL JUP YI RADICAL SHY YI RADICAL SHY YI RADICAL SHY YI RADICAL SHY YI RADICAL LYDP YI RADICAL SHY YI RADICAL LYDP YI RADICAL SHY YI			