ATTACHMENT 1 1 OF 1

14.6.8 Hop sequences

The hopping sequence of an individual PMD entity is used to create a pseudorandom hopping pattern utilizing uniformly the designated frequency band. Sets of hopping sequences are used to co-locate multiple PMD entities in similar networks in the same geographic area and to enhance the overall efficiency and throughput capacity of each individual network.

An FH pattern, F_x, consists of a permutation of all frequency channels defined in Table 38 and Table 39. For a given pattern number, x, the hopping sequence can be written as follows:

$$F_x = \{f_x(1), f_x(2), \ldots f_x(p)\}$$

where

$f_x(i)$ is the channel number (as defined in 14.6.4) for i^{th} frequency in x^{th} hopping pattern;
p is the number of frequency channels in hopping pattern (79 for North America and most of Europe, 23 for Japan, 27 for France, 35 for Spain)

Given the hopping pattern number, x, and the index for the next frequency, i (in the range 1 to p), the channel number shall be defined to be as follows:

$f_x(i)$ $= [b(i) + x] \bmod (79) + 2$ in North America and most of Europe, with $b(i)$ defined in Table 42.
$= [(i-1) \times x] \bmod (23) + 73$ in Japan.
$= [b(i) + x] \bmod (27) + 47$ in Spain with $b(i)$ defined in Table 43.
$= [b(i) + x] \bmod (35) + 48$ in France with $b(i)$ defined in Table 44.

Table 42—Base-Hopping sequence b(i) for North America and most of Europe

i	$b(i)$	i	$b(i)$	i	$b(i)$	i	$b(i)$	i	$b(i)$	i	$b(i)$	i	$b(i)$	i	$b(i)$
1	0	11	76	21	18	31	34	41	14	51	20	61	48	71	55
2	23	12	29	22	11	32	66	42	57	52	73	62	15	72	35
3	62	13	59	23	36	33	7	43	41	53	64	63	5	73	53
4	8	14	22	24	72	34	68	44	74	54	39	64	17	74	24
5	43	15	52	25	54	35	75	45	32	55	13	65	6	75	44
6	16	16	63	26	69	36	4	46	70	56	33	66	67	76	51
7	71	17	26	27	21	37	60	47	9	57	65	67	49	77	38
8	47	18	77	28	3	38	27	48	58	58	50	68	40	78	30
9	19	19	31	29	37	39	12	49	78	59	56	69	1	79	46
10	61	20	2	30	10	40	25	50	45	60	42	70	28	—	—