

IEEE P802.15
Wireless Personal Area Networks

Project	IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs)	
Title	Sponsor Ballot CID 356, 357 Comments Resolution	
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Re:	Submission for resolution of TVWS-NB-OFDM comment in IEEE 802.15.4m Sponsor Ballot	
Abstract	Proposed comment resolution for TG4m TVWS-NB-OFDM Sponsor Ballot comments	
Purpose	To address sponsor ballot comments for TG4m TVWS-NB-OFDM	
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A recursive and systematic convolutional encoder of coding rate $R = 1/2, 3/4, 7/8$ encodes the RS encoded data bits, 6 tail bits, and pad bits. The convolutional encoder shall use the generator polynomials $g_0 = 171$ and $g_1 = 133$, of rate $R = 1/2$, with feedback connection of g_0 as shown in Figure 186.

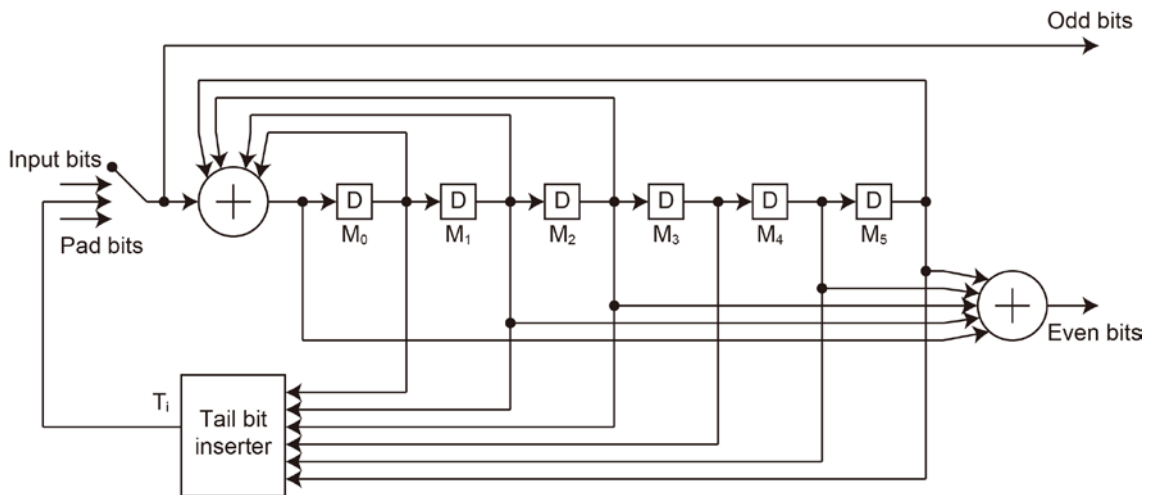


Figure 186—Recursive and systematic convolution encoder for TVWS-NB-OFDM

The value of the tail bits are dependent on the memory state shown in Figure 186 and shall be set as shown in Table 215.

Table 215—Tail bit pattern for the recursive and systematic encoder for TVWS-NB-OFDM

Memory State (M0-M5)	Tail bits (T0-T5)	Memory State (M0-M5)	Tail bits (T0-T5)
000000	000000	100000	111001
000001	100000	100001	011001
000010	010000	100010	101001
000011	110000	100011	001001
000100	001000	100100	110001
000101	101000	100101	010001
000110	011000	100110	100001
000111	111000	100111	000001
001000	100100	101000	011101
001001	000100	101001	111101
001010	110100	101010	001101
001011	010100	101011	101101
001100	101100	101100	010101

001101	001100	101101	110101
001110	111100	101110	000101
001111	011100	101111	100101
010000	110010	110000	001011
010001	010010	110001	101011
010010	100010	110010	011011
010011	000010	110011	111011
010100	111010	110100	000011
010101	011010	110101	100011
010110	101010	110110	010011
010111	001010	110111	110011
011000	010110	111000	101111
011001	110110	111001	001111
011010	000110	111010	111111
011011	100110	111011	011111
011100	011110	111100	100111
011101	111110	111101	000111
011110	001110	111110	110111
011111	101110	111111	010111