

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >
Title	Updates to Block Turbo Coding for OFDM
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Source(s)	Brian Banister, Comtech AHA bbaniste@aha.com
Re:	
Abstract	This submission addresses additional changes required to the Turbo Coding section of OFDM to accommodate shorter blocks found in subchannel mode.
Purpose	Submitted for review by 802.16 members
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Modifications to Block Turbo Coding for OFDM

Brian Banister, Comtech AHA

Introduction

Subchannels in OFDM result in smaller block sizes, and the descriptions for block Turbo Codes (BTC) were modified during Session 29 to accommodate the smaller block sizes. The included text provides updates for the BTC mode.

[Apply the following changes to Table 192 in Section 8.3.3.2.2:]

Coded Bits	Approximate Rate	Constituent Code	Code Parameters			
			lx	ly	B	Q
96	1/2	(8,7)(32,26)	4	8	0	6
	3/4	(16,15)(16,15)	6	6	4	5
144	3/5	(16,15)(16,11)	7	0	0	0
	5/6	(16,15)(16,15)	4	4	0	1
192	3/8	(16,11)(16,11)	2	2	4	5
	2/3	(8,7)(32,26)	2	0	0	2
	5/6	(16,15)(16,15)	2	2	4	5
288	1/2	(16,11)(32,26)	0	14	0	4
	3/4	(16,15)(32,26)	7	0	0	0
384	1/2	(16,11)(32,26)	0	8	0	6
	3/4	(16,15)(32,26)	4	0	0	6
576	1/2	(32,26)(32,26)	8	8	0	4
	3/4	(16,15)(64,57)	7	0	0	0
768	3/5	(32,26)(32,26)	4	4	16	4
	4/5	(64,57)(16,15)	6	2	44	3
1152	2/3	(64,57)(32,26)	28	0	0	2
	5/6	(32,31)(64,57)	13	3	7	5

[Additionally, Add the following row back into to the bottom of Table 188 in Section 8.3.3.2.2]

(8,7) Parity check code