Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Updates to Block Turbo Coding for OFDMA**
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Re:	
Abstract	This submission addresses additional changes required to the Turbo Coding section of OFDMA to accommodate the changes proposed in contribution C802.16d-04/40
Purpose	Submitted for review by 802.16 members, in the context of C802.16d-04/40
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Modifications to Block Turbo Coding for OFDMA

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Introduction

Contribution C802.16d-04/40 increases the number of block sizes available in OFDMA. The below change keeps the optional BTC FEC mode in compliance with the proposed changes.

[Replace Table 255 in Section 8.4.9.2.2 (page 541) with the following.:]

Table nn – Useful data payload for a subchannel

	QPSK		16QAM		64QAM		Coded
Encoding Rate	R=1/2	R=3/4	R=1/2	R=3/4	R=1/2	R=3/4	Bytes
Allowed Data (bytes)	6	9					12
	16	20	16	20			24
	16	25			16	25	36
	23	35	23	35			48
	31						60
	40		40		40		72

Table mm – Optional channel coding per data and coded bytes

Data Bytes	Coded Bytes	Constituent	Code Parameters			
			Ix	Iy	B	Q
6	12	(8,7)(32,26)	4	8	0	6
9	12	(16,15)(16,15)	6	6	4	5
16	24	(8,7)(32,26)	2	0	0	2
20	24	(16,15)(16,15)	2	2	4	5
16	36	(32,26)(16,11)	11	2	6	7
25	36	(8,7)(64,57)	2	16	0	5
23	48	(32,26)(16,11)	4	2	8	6
35	48	(32,26)(16,15)	0	4	0	6
31	60	(32,26)(32,26)	10	10	4	4
40	72	(32,26)(32,26)	8	8	0	4

Change accompanying text from:

Table 255 gives the block sizes, code rates, channel efficiency, and code parameters for the optional modulation and coding schemes using BTC.

To:

Table nn gives the block sizes for the optional modulation and coding schemes using BTC. Table mm gives the code parameters for each of the possible data and coded block sizes.