Project	**IEEE 802.16 Broadband Wireless Access Working Group <http://ieee802.org/16>**
Title	**Chase HARQ editorial changes**
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Source(s)	Mark Cudak, Motorola Inc. Mark.Cudak@motorola.com
Re:	Proposes a resolution for the BRC-recirc comment
Abstract	Contributions IEEE C802.16e-04/136r2 and IEEE C802.16e-04/246r3 in Seoul enabling a generic chase H-ARQ for all coding modes and incremental redundancy for convolutional coding. However, the editing instructions were applied incorrectly and the current specification is inconsistent. This contribution identifies the editorial changes to 802.16e/D5a in order to correct the errors.
Purpose	Adoption
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Introduction

Contributions IEEE C802.16e-04/136r2 and IEEE C802.16e-04/246r3 in Seoul enabling a generic chase H-ARQ for all coding modes and incremental redundancy for convolutional coding. However, the editing instructions were applied incorrectly and the current specification is inconsistent. This contribution identifies the editorial changes to 802.16e/D5a in order to correct the errors.

Editorial Instructions

On page 372, section 8.4.9.5 make the following edits

8.4.9.5 Multiple HARQ (optional) ~~HARQ Mode Selection~~

~~Multiple optional HARQ modes shall be supported~~Multiple HARQ modes may be enabled for any of the existing FEC modes. A change in the H-ARQ mode is signaled using the "H-ARQ Compact_DL-MAP IE format for Switch H-ARQ Mode" (see section 6.3.2.3.43.6.7). The definitions of the H-ARQ modes are defined in Table 332a~~AAA~~.

Table 331a HARQ Modes Definition

H-ARQ Mode	Description
0	CTC Incremental Redundancy
2	Generic Chase
~~1~~2	Convolutional Coding (CC) Incremental Redundancy
~~2~~3…15	Reserved

8.4.9.5.1 Generic Chase HARQ

When Chase Combining HARQ ~~Convolutional Coding (CC) Incremental Redundancy (IR)~~ is enabled for a particular SS, the HARQ_MAP will be used to signal the allocation and the HARQ Control IE will use the "Generic Chase" ~~"CC IR"~~ allocation format. The encoding of the companded sub channel field is defined in Table 332~~BBB~~ below. Concatenation rules for each respective coding mode are applied as defined
for non-HARQ transmissions.

Table 332 Companded Subchannel s

Companded Sub Channels	Assigned Sub Channels		Companded Sub Channels	Assigned Sub Channels
0	1		16	40
1	2		17	48
2	3		18	56

3	4		19	64
4	5		20	80
5	6		21	96
6	7		22	112
7	8		23	128
8	10		24	160
9	12		25	192
10	14		26	224
11	16		27	256
12	20		28	320
13	24		29	384
14	28		30	448
15	32		31	512

8.4.9.5.2 CC Incremental Redundancy HARQ

When Convolutional Coding (CC) Incremental Redundancy (IR) is enabled for a particular SS, the HARQ_MAP will be used to signal the allocation and the HARQ Control IE will use the "CC IR" allocation format. The encoding of the companded sub channel field is identical to Generic Chase HARQ and is defined in Table 332. Concatenation rules for each respective coding mode are applied as defined for non-HARQ transmissions.

On page 373, delete all of Section 8.4.9.6

On page 49, line 15, Table 94, replace "Shortened DIUC" with "Shortened UIUC"

On page 53, line 24, Table 96, replace "Shortened DIUC" with "Shortened UIUC"

On page 61, line 26, Table 100, replace "Shortened DIUC" with "Shortened UIUC"

On page 62, line 26, Table 101, replace "Shortened DIUC" with "Shortened UIUC"

On page 64, line 26, Table 102, replace "Shortened DIUC" with "Shortened UIUC"