

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	<b>Correction for UL ACK channel code</b>	
Date Submitted	<b>2005-01-24</b>	
Source(s)	Jiho Jang, Jeong-Heon Kim, Seungjoo Maeng, Jaeho Jeon	<a href="mailto:jiho.jang@samsung.com">jiho.jang@samsung.com</a>
	Samsung Electronics Co., Ltd. Dong Suwon P.O.Box 105 416, Maetan-3dong, Yeongtong-gu, Suwon-city, Gyeonggi-do, Korea 442-600	
Re:	IEEE P802.16d-2004	
Abstract	Correction for UL ACK channel code is proposed	
Purpose	Adopting of proposed method into P802.16d-2004	
Notice	This document has been prepared to assist IEEE 802.16. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein.	
Release	The contributor grants a free, irrevocable license to the IEEE to incorporate material contained in this contribution, and any modifications thereof, in the creation of an IEEE Standards publication; to copyright in the IEEE's name any IEEE Standards publication even though it may include portions of this contribution; and at the IEEE's sole discretion to permit others to reproduce in whole or in part the resulting IEEE Standards publication. The contributor also acknowledges and accepts that this contribution may be made public by IEEE 802.16.	
Patent Policy and Procedures	The contributor is familiar with the IEEE 802.16 Patent Policy and Procedures (Version 1.0) < <a href="http://ieee802.org/16/ipr/patents/policy.html">http://ieee802.org/16/ipr/patents/policy.html</a> >, including the statement "IEEE standards may include the known use of patent(s), including patent applications, if there is technical justification in the opinion of the standards-developing committee and provided the IEEE receives assurance from the patent holder that it will license applicants under reasonable terms and conditions for the purpose of implementing the standard."  Early disclosure to the Working Group of patent information that might be relevant to the standard is essential to reduce the possibility for delays in the development process and increase the likelihood that the draft publication will be approved for publication. Please notify the Chair < <a href="mailto:r.b.marks@ieee.org">mailto:r.b.marks@ieee.org</a> > as early as possible, in written or electronic form, of any patents (granted or under application) that may cover technology that is under consideration by or has been approved by IEEE 802.16. The Chair will disclose this notification via the IEEE 802.16 web site < <a href="http://ieee802.org/16/ipr/patents/notices">http://ieee802.org/16/ipr/patents/notices</a> >.	

## Correction for UL ACK channel code

## 1. Introduction

Editorial correction for ACK channel code, which is wrongly reflected in IEEE 802.16d-2004 and 80216maint-04\_10.pdf file, is proposed.

## 2. Suggested Text Changes

### 8.4.5.4.13 UL ACK channel

[Modify table 301 as follows:]

Table 301 – Orthogonal Modulation for ACK channel

$B_n^{ACK}$	$M_{n,k}^{ACK}$
0	1,1,1,1,1,1,1,1,1
1	1, $\exp\left(j \cdot \frac{2\pi}{3}\right)$ , $\exp\left(j \cdot \frac{4\pi}{3}\right)$ , $\exp\left(j \cdot \frac{2\pi}{3}\right)$ , $\exp\left(j \cdot \frac{4\pi}{3}\right)$ , 1, $\exp\left(j \cdot \frac{4\pi}{3}\right)$ , <u>1</u> , $\exp\left(j \cdot \frac{2\pi}{3}\right)$