

Project	<b>IEEE 802.16 Broadband Wireless Access Working Group</b> < <a href="http://ieee802.org/16">http://ieee802.org/16</a> >	
Title	Concurrent DL Burst Capability in OFDMA	
Date Submitted	<b>2004-05-18</b>	
Source(s)	Yigal Eliaspur , Intel <a href="mailto:yigal.eliaspur@intel.com">yigal.eliaspur@intel.com</a> Voice: +972-547-884877	Vladimir Yanover, Alvarion <a href="mailto:vladimir.yanover@ALVARION.COM">vladimir.yanover@ALVARION.COM</a>
	Assaf Mor, Envara at Intel <a href="mailto:assafm@envara.com">assafm@envara.com</a> Voice: +972-55551067	
Re:	IEEE P802.16e/D2-2004	
Abstract	Concurrent DL Burst Capability in OFDMA	
Purpose	The purpose of this document is to add a capability to the SS to negotiate the number of DL OFDMA concurrent burst it supports.	
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 < <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, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of 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:chair@wirelessman.org">mailto:chair@wirelessman.org</a> > as early as possible, in written or electronic form, if patented technology (or technology under patent application) might be incorporated into a draft standard being developed within the IEEE 802.16 Working Group. 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> >.	

# Concurrent DL Burst Capability in OFDMA

*Yigal Eliaşpur*

## Motivation:

There is no capability negotiation today which allows the MSS to define the maximum number of concurrent bursts supported in the DL allocation. Regulating the number of concurrent bursts is necessary for reducing implementation resources like processing power, memory etc. This also enables architectural and implementation flexibility for target multiple device configurations.

## Details:

During the network entry process, the MSS publishes its 'MaximumDLConcurrentBurstLimit\_IE' parameter in the OFDMA PHY MSS capabilities. This is specified in a new IE in the SBC-REQ message.

This will include:

- Maximum number of concurrent OFDMA Bursts in DL (4-70).

## Changes summary:

### 6.3.2.3.23 SS Basic Capability Request (SBC-REQ) message

*[Insert the following rows at the end of the section]*

OFDMA Burst Concurrency Support (see 11.8.4)

*[Add the following section]*

### 11.8.4 OFDMA Burst Concurrency Support

This field indicates to the BS the maximum number of concurrent OFDMA bursts the MSS can decode per symbol.

Type	Length	Value	Scope
	1	Byte 0: Max DL concurrent OFDMA bursts supported by the MSS per OFDMA symbol. Valid values: 0 : unlimited 4 -70 : max number of concurrent bursts.	SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24)