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Title	Concurrent UL Burst Capability in OFDMA	
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Re:	IEEE P802.16e/D2-2004	
Abstract	Concurrent UL Burst Capability in OFDMA	
Purpose	The purpose of this document is to add a capability to the SS to negotiate the number of UL OFDMA concurrent burst it supports.	
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# Concurrent UL 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 UL 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 'MaximumULConcurrentBurstLimit\_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 UL (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 UL 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)