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| Project | IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 > |
| Title | Concurrent DL Burst Capability in OFDMA |
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| 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. |
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Concurrent DL Burst Capability in OFDMA

Yigal Eliaspur

Motivation:

There is no capability negotiation today which allowed the MSS to define the maximum number of concurrent burst supported in the DL allocation.

Such capability reduces the architecture complexity of the subscriber device with the cost of performance and thus enables the 802.16 SS vendors higher implementation flexibility based on the target device.

Details:

In the SS connection process, the SS will publish its 'concurrency' level OFDMA capabilities within a new IE in the SBC-REQ message.

This will include:

- Number of concurrency OFDMA Bursts in DL (1-32).

BS will comply with SS capabilities

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 properties of the SS that the BS needs to know for concurrency OFDMA burst allocation propose.

| Type | Length | Value | Scope |
|------|--------|--|--|
| ?? | 1 | Byte 0: Max DL concurrent OFDMA bursts supported by the MSS (valid values 1-32). | SBC-REQ (see 6.3.2.3.23) SBC-RSP (see 6.3.2.3.24) |