Subcarrier Based Polling for 2-11 GHz OFDM PHY

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Purpose:

This document is to be presented to 802.16 TG3, TG4 and MAC groups to be considered as a change in **IEEE 802.16ab-01/01** Notice:

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Subcarrier Based Polling



Performance

- Simultaneous transmission at N subcarriers
- False alarm probability = 10^{-5}
- Failure probability = 10^{-5}
- N = 4

Allocation of Transmission Opportunities

- To be polled, SS has to belong to certain multicast group (SBP group)
- Certain interval is allocated to the SBP group by the UL-MAP with CID = multicast ID of the group
- Each SS belonging to certain SBP group has to transmit if it has a demand for UL transmission
- Within the given allocation each SS is choosing the slot according to its index within the SBP group

Arrangement of SBP Multicast Groups: Multicast Group Assignment

• New parameters should be added to the table 109, 11.1.4.1 "MCA-REQ and MCA-RSP TLV Encodings" [D3-2001 document]

Arrangement of SBP Multicast Groups

Name	Type	Length	Value
SBP Group	3	2	0 to TBD,
Index			index
Assignment			value
SBP Group	4	2	0 to TBD,
Start Index			start index
Assignment			value
SBP Group	5	2	0 to TBD,
End Index			end index
Assignment			value