Document C802.16d-04/55 - Bob Nelson

Resolution of Comments 167-170:

Change chapter 10, OFDMA Minimum Allocation Start Time to be 10 OFDMA symbols instead of the current 1 FEC block duration.

In Table 269 add SS UL-MAP processing time (Tproc) for OFDMA to be 10 OFDMA symbols.

Replace the contents of the current section with the following

6.4.7.5 Map relevance and synchronization

Timing information in the DL-MAP and UL-MAP is relative. The following time instants are used as a reference for timing information:

- DL-MAP: the start of the first symbol (including the preamble if present) of the burst in which the message was transmitted.
- UL-MAP: the start of the first symbol (including the preamble if present) of the burst in which the message was transmitted plus the value of the Allocation Start Time.

Information int the DL-MAP pertains to the current frame (the frame in which the message was received). Information carried in the UL-MAP pertains to a time interval starting at the Allocation Start Time measured from the beginning of the current frame and ending after the last specified allocation. This timing holds for both the TDD and FDD variants of operation. The TDD variant is shown in Figure 1 and Figure 2. The FDD variant is shown in Figure 3 and Figure 4.



Figure 1—Maximum time relevance of DL-MAP and UL-MAP(TDD)



Figure 2—Minimum time relevance of DL-MAP and UL-MAP (TDD)



Figure 3—Maximum time relevance of DL-MAP and UL-MAP (FDD)



Figure 4—Minimum time relevance of DL-MAP and UL-MAP (FDD)

6.4.7.5.1 WirelessMAN-SC PHY

Allocation Start Time shall be be subject to the following limitations: For FDD, the minimum Allocation Start Time value shall be the roundTrip delay + T_{proc} , and the maximum Allocation Start Time value is Tf (i.e., the beginning of the next frame). For TDD, the Allocation Start Time value shall be either the ATDD split, or the ATDD split+Tf; and the allocation shall be within a single frame.

6.4.7.5.2 WirelessMAN-SCa PHY

The first burst appearing in the downlink portion of a frame shall be the frame control header. The FCH shall contain one DL-MAP message, one UL-MAP message for each associated uplink channel, and optionally, a DCD message and a UCD message for each associated uplink channel. The order of appearance of the messages in an FCH burst shall be DL-MAP, UL-MAP, DCD, and UCD. The messages shall not be encrypted.

The first burst description appearing in a DL-MAP shall specify the start of the burst immediately following the FCH.

The DL-MAP shall describe the contents of the frame in which it was carried.

Each UL-MAP shall describe the content of the uplink portion of a single frame.

Allocation Start Time shall be be subject to the following limitations:

- Minimum value: Allocation Start Time $\geq T_f$
- Maximum value: Allocation Start Time < 2 * T_f

6.4.7.5.3 WirelessMAN-OFDM

Allocation Start Time shall be be subject to the following limitations: For FDD, the minimum Allocation Start Time value shall be the roundTrip delay + T_{proc} , and the maximum Allocation Start Time value is Tf (i.e., the beginning of the next frame). For TDD, the Allocation Start Time value shall be either the ATDD split, or the ATDD split+Tf; and the allocation shall be within a single frame.

6.4.7.5.4 WirelessMAN-OFDMA PHY

Allocation Start Time shall be be subject to the following limitations:

- Minimum value: Allocation Start Time $\geq T_{proc}$
- Maximum value: Allocation Start Time < 2 * T_f