Low Latency Requirements for SCB.

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Base Contribution:

Purpose:

For Discussion of issues relating to frame structure in 802.16-2012 OFDMA Phy Mode

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Low Latency Requirements for SCB

- OFDMA Phy Mode has numerous frame lengths: 2.5msec to 20msec.
  - 2.5msec:
    - low latency for HARQ signalling
    - Large overheads (3 symbol PUSC zone for IR/PR/HARQ/CQI every frame), every frame contains preamble.
  - 20msec:
    - Large latency for HARQ signalling
    - Smaller overheads

Require Frame Structure that allows low latency HARQ but is still high efficiency

- E.g. In TD-LTE, 10msec frames contain 10 1msec sub-frames, arranged as 2 groups of DL sub-frames, 2 of UL sub-frames.
- Need large frame to minimise overheads, but multiple UL and DL regions per frame to reduce HARQ latency.
- Use smaller TTG/RTG than OFDMA default of 50usec.