Two TX wait timers in RS for 10GBASE-T operation

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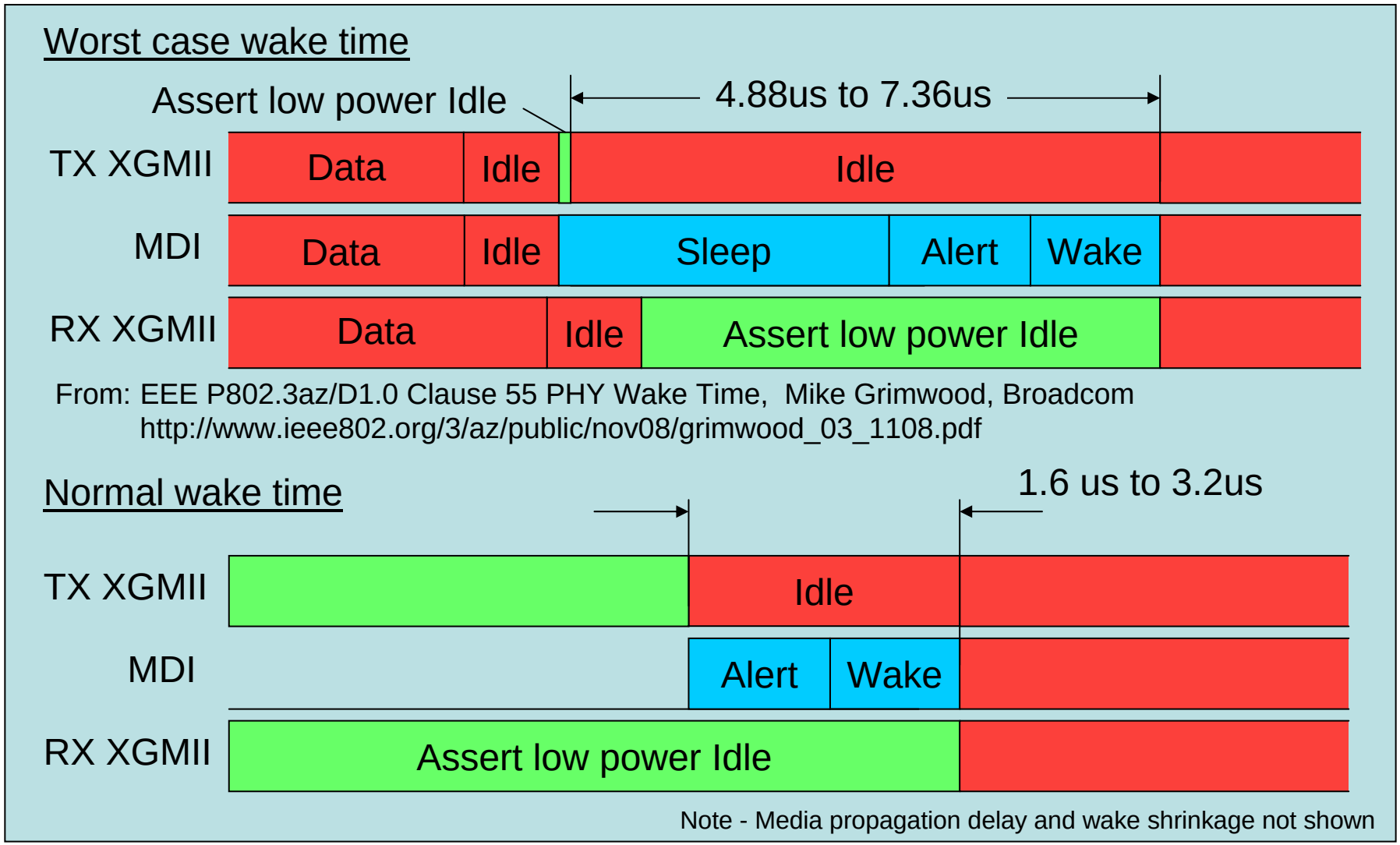
Worst case and ‘normal’ wake times



Observations and proposal

- Worst case TX wake time about double normal
  - Only occurs after very short LPI request from system
- The RS has to enforces the worst case wake time
  - If not data transmission might start before the PHY is ready
- Only required after short LPI
  - Unnecessary to always impose it
- Two TX wait timers in RS in baselin
  - First starts on entry to LPI to enforce worse case wake time
    - Cover the case of a very short LPI
  - Only enabled when PHY type is 10GBASE-T
    - No impact on other 10Gb/s PHYs
  - Second stars on exit from LPI to enforce normal wake time
    - Covers the case of longer LPI
  - Both times have to expire before TX time considered compete

Operation of TX wait timers in RS