

RSRTG/RSTTG and RTD allowances

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Purpose:

Review and discuss in support for the adoption of the proposal contained in C80216j-08/112.

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Comments on current text

- **Current text**

3.107 relay receive/transmit transition interval (R-RTI): Receive/transmit transition time interval in units of OFDMA symbols between a receive mode access zone or relay zone at an RS and the time its subsequent transmission must arrive at the target receiver such that it provides for the required RSRTG. It shall be an integer number of OFDMA symbols. [...]

- **Comments:**

- R-RTI is not a receive/transmit transition time between zones.
- Zones are defined according to the MR-BS.
- R-RTI only applies to an RS's transmit/receive windows.
- This definition only applies to UL not DL

- **Current text**

3.108 relay transmit/receive transition interval (R-TTI): Transmit/receive transition time interval in units of OFDMA symbols between a transmit mode access or relay zone and a receive mode access or relay zone in an RS frame that provides for the required RSTTG. It shall be an integer number of OFDMA symbols. [...]

- **Comments**

- R-TTI is not a receive/transmit transition time.
- Zones are defined according to the MR-BS.
- R-TTI only applies to an RS's transmit/receive windows.

Comments on current text

Current text

8.4.4.2 PMP frame structure

In MR systems where relay links and access links are time separated, RS allowances shall be made by an RSRTG and by an RSTTG. The parameters of RSRTG and RSTTG for an RS are capabilities provided by the RS to MR-BS during RS network entry and shall meet the requirements set in 12.4.3.1.5.

All DL transmissions shall be symbol aligned with the corresponding symbols at the MR-BS. All UL transmissions shall be time advanced such that they are symbol aligned at the receiving station with the corresponding symbols at the MR-BS.

An R-RTI that allows for the RSRTG shall be inserted between the zones where RS is required to switch from receive to transmit mode. An RS shall not be required to transmit or receive during the symbols in R-RTI

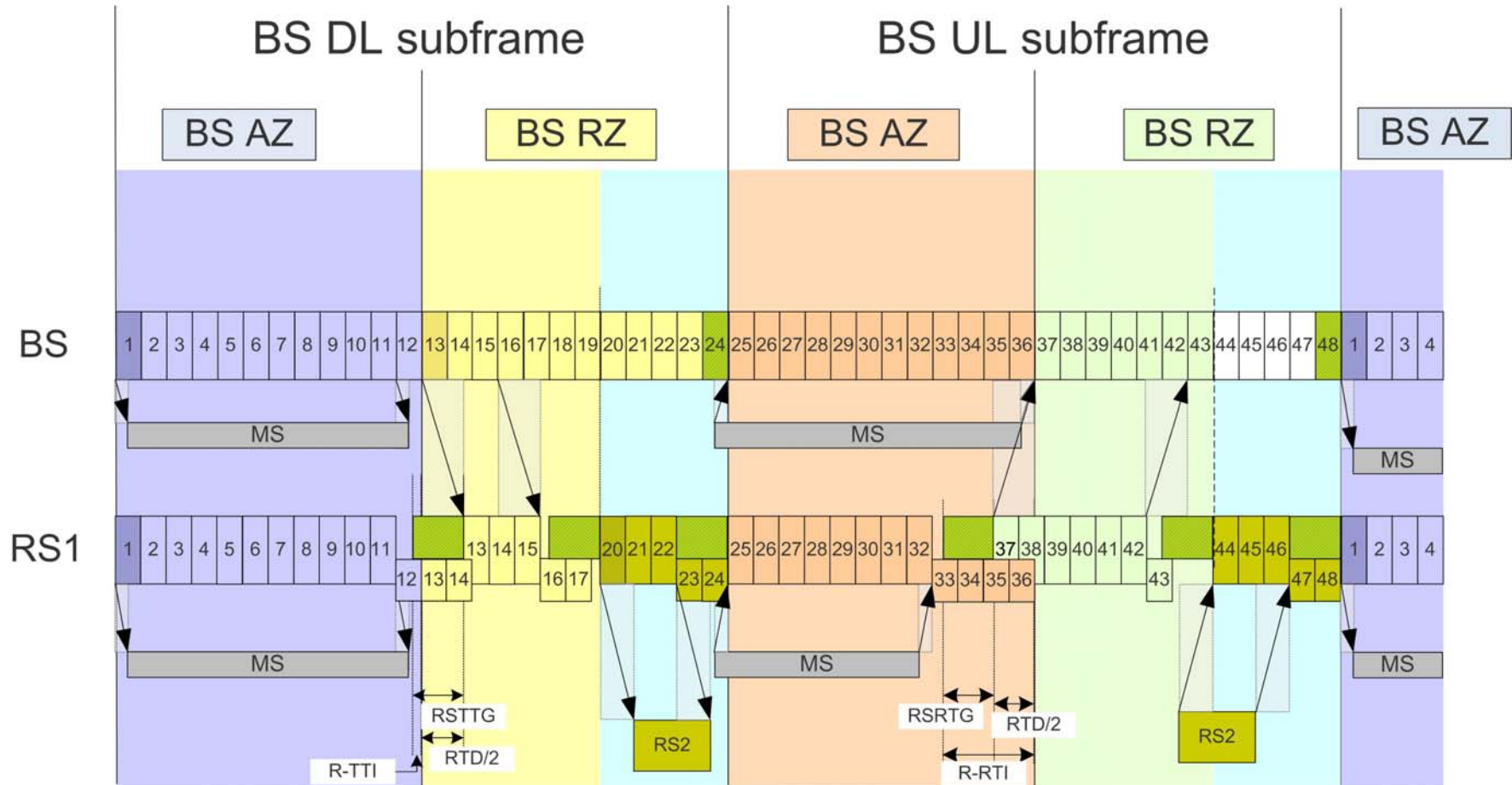
An R-TTI shall be inserted between the zones where RS is required to switch from transmit to receive mode. An RS shall not be required to transmit or receive during the symbols in R-TTI.

[...]

Comments:

- R-RTI/TTI is not inserted between zones. Zones are defined from perspective of MR-BS. R-RTI/TTI are relevant to an RS transmit and receive windows.
- During R-RTI in UL, transmission takes place so its not correct to say that RS shall not be required to transmit during the symbols in R-RTI
- During R-RTI in DL, reception takes place so its not correct to say that RS shall not be required to receive during the symbols in R-RTI

Examples



Proposal

- **Simplify current description**
- **Remove R-RTI and R-TTI**
- **Proposed text**
 - All DL transmissions shall be symbol aligned with the corresponding symbols at the MR-BS.
 - All DL receive times shall be determined according to the time delay from the corresponding symbols at the MR-BS, and shall be based on the RTD between the transmitting and receiving station.
 - All UL receive times shall be symbol aligned with the corresponding symbols at the MR-BS.
 - All UL transmissions shall be time advanced according to the RTD between the transmitting and receiving stations, such that they are symbol aligned at the receiving station with the corresponding symbols at the MR-BS.
 - An RS shall begin a switch from receive to transmit mode at least RSRTG before the beginning of the first transmit time. The RS shall not be required to transmit or receive during the symbols that overlap the receive-to-transmit switching time interval.
 - An RS shall begin a switch from transmit to receive mode at least RSTTG before the beginning of the first receive time. The RS shall not be required to transmit or receive during the symbols that overlap the transmit-to-receive switching time interval.