Title: Clarification on the mandatory / optional status for CMI/CSI procedures

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Purpose:

Clarification on the mandatory / optional status for CMI/CSI procedures

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Alvarion

Mandatory

- Both CMI/CSI transmission should be mandatory
  - CMI can be used for interference assessment of both DL and UL users of the spectrum
  - Both CMI and CSI allow system identification (BSID,IP_Proxy) by using the same PHY profile or by using the time or frequency domain energy keying.
- A receiver should detect in a mandatory mode the messages sent using the same PHY profile

Optional

- A Receiver may implement only one of the time or frequency domain energy keying.

MAC Level support

- BS Transmission for CMI
  - Needs a preamble for detection of the PHY mode and frequency synchronization
  - One single PHY mode possible?
  - Establish the DIUC a-priory
  - MAP for UL scheduling
    - Intra-system MAP relevance – to be establish as a permanent MAP for CMI

UL transmission

- Preamble needed?
  - Frequency synchronization?
- Should be defined a MAC header for packets intended to other BS?
  - 802.16 systems, but not 802.16h systems can still operate in parallel

DL Reception

- BS ->SS
- The SS should be instructed to receive the BSD messages
  - By the attribute of the CXZ
    - Different attributes to different control channel slots
- Should be defined a MAC header for packets intended to other BS?
  - 802.16 systems, which are not 802.16h systems can still operate in parallel

UL Reception

- SS -> BS
- Connection ID
  - A special one should be defined
    - For the existing standard, UL broadcast Connection-ID is valid?

CXZ Attributes

- MAC level support of CMI/CSI should be defined by giving attributes to the CXZone. By including the specific attribute in a MAP, a foreign system will be able to detect the messages transmitted during the CMI/CSI interval. Different codes should be attributed for CSI use of frequency or time keying. A BS will be able to schedule these intervals if they have absolute timing.