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Re:	Call for Technical Comments regarding IEEE Project P802.16j (IEEE 802.16j-07/013r2)
Abstract	Following the definition in the 802.16j r3 of the relay ambles (synchronization and monitoring), the present contribution defines the related messaging associated with the related amble CINR measurements supposed to be executed using the UL relay interval
Purpose	To incorporate the proposed change into the P802.16j Baseline Document (IEEE 802.16j-06/026r3)
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RS CQICH Allocation IE definition

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1. Statement of the Problem

In Section 6.3.2.3.66 in [1], RS configuration request message has specified for a MR-BS (or parent RS) to send a configurable sequence of ambles to its sub-ordinated RSs. These new amble sequences have been defined in order to support the RS synchronization and the neighborhood scanning processes. Considering the fact an RS that successfully gets connected to the network will be no longer capable of monitoring or measuring the access preamble, it appears that amble CINR measurements need to be defined as an extension to the previous DL preamble CINR measurements. Accordingly, the messaging vehicle for these measurements is also required.

2. Proposed Remedy

During the network entry procedure, the RS will act as an MS and accordingly will execute and report CINR measurements, concerning the access preamble, using the CQICH Allocation IE defined for the UL Access interval. The related measurement report to be transmitted over the UL Access Interval CQICH target the access preamble.

In order to support CINR measurements concerning the amble sequences , a new CQICH, replicating the CQICH as it has been defined in [2] #8.4.5.4.12 it is defined. If the RS CINR measurements will target the RS zones, then related relay zone measurements will over-ride any other CINR measurements executed over the same DL relay and reported through the regular CQICH channel (transmitted during the UL access interval)

The RS CQICH is defined to be transmitted only during the UL Relay intervals transporting CINR measurement information related to the relay ambles, either used for synchronization or for monitoring.

In order to support these requirements, a new RS CQICH Allocation IE is defined.
The RS CQICH Allocation IE is defined identically with the CQICH Allocation IE as defined in [2] Table 300, with the following change:

Update the Report Type specification as follows:

Table 300a: RS CQICH alloc IE format

Report type	2 bits	0b00: reserved 0b01: report for a specific DL Relay zone 0b10: report for SYNC amble 0b11: report for SCAN amble

All the rest of the original Table 300a shall be kept as they were specified in the original Table 300 [2].

3. Proposed text change

++++++++++++++ Start Text ++

(Insert new sub-clause #8.4.5.4.12.1)

8.4.5.4.12.1 RS CQICH Allocation IE Format

RS CQICH_Alloc_IE(), is introduced to dynamically allocate or de-allocate a RS CQICH to an RS. Once allocated, the RS transmits channel quality information on the assigned RS CQICH on every subsequent frames, until the RS receives a RS CQICH_Alloc_IE() to de-allocate the assigned RS CQICH.

Table 300A RS CQICH Allocation IE format

(copy Table 300A and update only the Report type field as follows)

Report type	2 bits	0b00: reserved 0b01: report for a specific DL Relay zone 0b10: report for SYNC amble 0b11: report for SCAN amble

Any zone CINR measurement specified as a result of a RS CQICH Allocation IE format and targeting specific Relay zones will supersede other Relay zone measurements reported through the regular CQICH Allocation IE

4. References

[1] IEEE P802.16j-06/026r3
[2] IEEE 802.16e-2005