IEEE P802.15 Wireless Personal Area Networks

| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
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| Title | CP usage | |
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| Re: | | |
| Abstract | [Suggested comment resolutions from LB43.] | |
| Purpose | [To assist in comment resolution.] | |
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Note: The term near-omni MCS is a place holder, we need a better term.

The CPs in a piconet shall all be conducted using the same mmWave PHY mode, one of SC, HSI or AV, as the beacon. Only an omni MCS that is supported by both the source and destination and which is the same PHY mode as the beacon may be used in a CP. Omni MCSs include:

- For SC PHY, the CMS, as defined in 12.1.x, with omni antenna pattern
- For HSI PHY, MCS 0 and MCS 1, as defined in 12.3.x, with omni antenna pattern
- For AV PHY, any LRP mode index

A Directional CP (DCP) is a CP in which the DEVs are allowed to use directional antennas, as described in 8.6.6. In a DCP, any MCS that is supported by both the source and destination and which is in the same PHY mode as the beacon may be used. This includes MCSs that are not near-omni. In a DCP, either the source or the destination is the PNC.