**IEEE P802.11  
Wireless LANs**

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| CC50 CRs for CIDs related to definitions in MAPC scheme | | | | |
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**Abstract**

This submission proposes resolutions for following 15 CIDs received for TGbn CC50:

743, 744, 745, 1425, 1696, 1989, 1990, 1991, 2570, 2656, 2842, 2843, 2844, 3815, 3900.

**Revisions:**

Rev 0: Initial version of the document.

***TGbn editor: The baseline for this document is P802.11bn D0.2 and P802.11REVmeD7.0***

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGbn Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGbn Draft (i.e., they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGbn Editor: Editing instructions preceded by “TGbn Editor” are instructions to the TGbn editor to modify existing material in the TGbn draft. As a result of adopting the changes, the TGbn editor will execute the instructions rather than copy them to the TGbn Draft.***

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| **CID** | **Clause** | **Pg/Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 743 | 3.2 | 22/21 | The definition of "sharing AP" (P22L21) is limited to Co-TDMA. But this term is also used by other MAPC schemes such as Co-SR. | modified the definition of "sharing AP" as follows: "An AP that intends to initiate a MAPC procedure with a set of APs." | Revised.  Agree in principle.  TGbn editor, please make the changes tagged by CID #743 in 25/0638r0. |
| 1989 | 3.2 | 21/4 | Need to clarify the definitions of "the sharing AP", "the shared AP", "coordinated AP". Whether to add "the coordinating AP" ? | As in comment. | Revised.  Agree in principle.  The change has been implemented as the similar comment, CID #743.  TGbn editor, please make the changes tagged by CID #743 in 25/0638r0 and replace “sharing AP” by “coordinating AP” throughout Draft0.2. |
| 745 | 3.2 | 22/17 | The terms for responder are named differently for different MAPC scheme, which leads to chaos on the definition.  For example, It is "polled AP" for generalized MAPC responder (P22L17), but "Co-RTWT coordinated AP" for Co-RTWT (P21L37), and "shared AP" for Co-SR (P21L64). | Unify the definitions as follows: "coordinated AP" for generalized MAPC responder /"Co-TDMA coordinated AP" / "Co-RTWT coordinated AP" / "Co-SR coordinated AP" etc. | Revised.  Agree in principle.  TGbn editor, please make the changes tagged by CID #745 in 25/0638r0. |
| 2842 | 3.2 | 22/20 | There is a definition of "sharing AP" but not of "shared AP" | As it says in the comment | Revised.  Agree in principle. The term “coordinated AP” is introduced to provide a more generalized representation in CID #745.  TGbn editor, please make the changes tagged by CID #745 in 25/0638r0. |
| 744 | 3.2 | 21/14 | The term "coordinated AP" (P21L14) seems to be a term for generalized MAPC framework (similar to the term "polled AP" in D0.1 to some degree), but the definition here is limited to Co-TDMA.  Acutally, the term "Co-TDMA coordinated AP" is used in 37.8.2.3.3 (TXOP allocation phase). | change the term "coordinated AP" to "Co-TDMA coordinated AP" to keep align with the term "Co-TDMA sharing AP". | Revised.  Agree in principle.  The change has been implemented as the similar comment, CID #745.  TGbn editor, please make the changes tagged by CID #745 in 25/0638r0. |
| 1425 | 3.2 | 22/21 | There is no definition for "Shared AP." | The definition of "Shared AP" should be clarified because the term shared AP is often used, including subclause 3.2. | Revised.  Agree in principle. The term “coordinated AP” is introduced to provide a more generalized representation in CID #745.  TGbn editor, please make the changes tagged by CID #745 in 25/0638r0 and and replace “shared AP” by “coordinated AP” throughout Draft0.2. |
| 1990 | 3.2 | 21/4 | the definition of "coordinated AP" is unclear, and is inappropriate for co-TWT. The "coordinated AP should be an AP that has been assigned an AP ID. | As in comment. | Revised.  Agree in principle.  The change has been implemented as the similar comment, CID #745.  TGbn editor, please make the changes tagged by CID #745 in 25/0638r0. |
| 3815 | 3.2 | 21/65 | Definition of 'shared AP' is missing | Add a definition for 'shared AP'. | Revised.  Agree in principle. The term “coordinated AP” is introduced to provide a more generalized representation in CID #745.  TGbn editor, please make the changes tagged by CID #745 in 25/0638r0. |
| 3900 | 3.2 | 22/21 | Shared AP is not defined. | Add a definition for shared access point | Revised.  Agree in principle. The term “coordinated AP” is introduced to provide a more generalized representation in CID #745.  TGbn editor, please make the changes tagged by CID #745 in 25/0638r0. |
| 2656 | 3.2 | 21/64 | The term "shared AP" is not a good term and should be changed. | change "shared AP" to "coordinated AP" | Revised.  Agree in principle.  The change has been implemented as the similar comment, CID #745  TGbn editor, please make the changes tagged by CID #745 in 25/0638r0. |
| 1696 | 3.22 | 22/21 | The definition of sharing AP does not consider all usages. (also for coordinated AP) | Suggest each scheme defines its own version of roles (e.g., Co-TDMA sharing AP, Co-TDMA coordinated AP, Co-RTWT responding AP, etc.). Alternatively provide a very general high level description for each term in the context of MAPC negotiation and not for specific schemes. | Revised.  Agree in principle.  TGbn editor, please make the changes tagged by CID #1696 in 25/0638r0. |
| 1991 | 3.2 | 22/22 | the definition of "sharing AP" is unlear.The set of APs should be coordinated APs that have been assigned AP IDs respectively | suggest to modify "...with a set of APs" as "..with a set of coordinated APs". | Revised.  Agree in principle.  TGbn editor, please make the changes tagged by CID #1991 in 25/0638r0. |
| 2570 | 3.2 | 21/65 | There is no definition of a "shared AP" used in "Coordinated spatial reuse: [Co-SR] A multi-AP technique where multiple APs perform concurrent transmissions through transmit power control of the shared AP by the sharing AP." | Change "a shared AP" to "a coordinated AP" since "coordinated AP" was just defined on the same page (P21) and is a more appropriate name. | Revised.  Agree in principle.  TGbn editor, please make the changes tagged by CID #2570 in 25/0638r0. |
| 2843 | 3.2 | 22/20 | An AP either shares or it doesn't. Ditto at line 5 | Change "intends to share" to "shares" | Rejected.  In MAPC scheme, the coordination initiated by the coordinating AP may not necessarily result in a successful agreement. Therefore, the use of the term “intends to share” provides a more precise and appropriate characterization. |
| 2844 | 3.2 | 22/17 | It is not clear what the difference between a "shared AP" and a "polled AP" is | As it says in the comment | Revised.  Agree in principle. The polled AP is only used in the initial polling phase of a MAPC scheme.  TGbn editor, please make the changes tagged by CID #2844 in 25/0638r0. |

**Proposed Texts:**

**3.2 Definitions specific to IEEE 802.11**

***TGbn editor, please insert the following changes and apply the revised definitions throughout the whole draft:***

**Access point identifier**: [AP ID] A value used for identifying an AP during a Multi-AP Coordination (MAPC) transmission.

**coordinated access point (AP)**: [coordinated AP] An AP with which a coordinating AP shares a portion of its obtained transmission opportunity (TXOP) by either allocating time portions to it or permitting concurrent transmissions as part of a MAPC procedure.(#745).

**Coordinated beamforming**: [Co-BF] A Multi-AP technique where multiple APs coordinate to acquire CSI from OBSS STA(s) and apply beamforming vectors to perform concurrent transmissions to each AP’s associated STA(s) while minimizing interference to the recipient STA(s) in the OBSS(s).

**Coordinated restricted target wake time (Co-RTWT) service period (SP) start time**: [Co-RTWT SP start time] The value of the timing synchronization function (TSF) at the beginning of a Co-RTWT SP.

**Coordinated spatial reuse**: [Co-SR] A multi-access point (AP) coordination (MAPC) technique where multiple APs perform concurrent transmissions through transmit power control of the coordinated AP by the coordinating AP.(#2570)

**Coordinated time division multiple access (TDMA)**: [Co-TDMA] A procedure that enables an AP that has obtained a TXOP to share a time portion of the obtained TXOP with a set of coordinated APs.(#1991)

**Coordinated time division multiple access (Co-TDMA) sharing access point (AP):** [Co-TDMA sharing AP] A sharing AP that intends to share a time portion of its obtained TXOP with a set of APs as part of CoTDMA operation.

**coordinating access point (AP)**: [coordinating AP] An AP that has obtained a TXOP and intends to share its obtained transmission opportunity (TXOP) with a set of coordinated APs by either allocating time portions to them or permitting concurrent transmissions.(#743)

**Initial control frame (ICF)**: [ICF] A Control frame that is sent to poll one or more STAs to determine their availability and/or willingness to participate during the TXOP. A STA’s participation might require transitioning to a different mode of operation.

multi-access point (AP) coordination (MAPC) requesting access point: [MAPC requesting AP] An AP that initiates a proceduce for MAPC discovery, or for negotiation of MAPC agreements.(#1696)

multi-access point (AP) coordination (MAPC) responding access point: [MAPC responding AP] An AP that responds to a request from a MAPC requesting AP.(#1696)

**Multi-AP coordination**: [MAPC] a framework that includes a set of coordination schemes (such as Co-BF, Co-SR, Co-TDMA, Co-RTWT) and procedures for OBSS APs to coordinate their transmissions and improve communications reliability.

**polled access point (AP)**: [polled AP] An AP that receives a polling request from a polling AP during the polling phase of a multi-AP Coordination (MAPC).(#2844)