IEEE P802.11
Wireless LANs

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| LB266: CR for Clause 35.3 |
| Date: July 26, 2022 |
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 Abstract

This submission proposes resolutions for following 27 CIDs received for TGbe LB266:

11404, 10595, 13686, 11710, 12323, 11390, 11323, 13351, 12934, 10417, 10244, 12635, 12636, 10006, 10085, 10418, 12362, 13691, 13692, 13791, 11440, 13375, 10871, 10420, 11441, 13792, 10419

**Revisions:**

* Rev 0: Initial version of the document.

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 TGbe Draft. This introduction is not part of the adopted material.

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

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

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| **CID** | **Commenter** | **Section** | **Pg.Ln** | **Comment** | **Proposed Change** | **Resolution** |
| 11404 | Gaurang Naik | 35.3.1 | 405.11 | Remove NSTR mobile AP MLD from this statement. An NSTR mobile AP MLD has the same TSF for all affiliated APs as specified in 35.3.19. | Remove 'or an NSTR mobile AP MLD' from the statement, and add the following note. 'NOTE - All APs affiliated with an NSTR mobile AP MLD have the same TSF (see 35.3.19 (NSTR mobile AP MLD operation)).' | **Revised**Agree with the commenter. The statement is revised and a Note is added to clarify that for an NSTR mobile AP MLD, all affiliated APs have the same TSF timers.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 11404** |
| 10595 | Abhishek Patil | 35.3.1 | 405.11 | As per P468L49, the TSF timer of all APs of an NSTR mobile AP MLD are the same. Therefore this statement doesn't apply to an nSTR AP MLD | Delete "or an NSTR mobile AP MLD" from the sentence. | **Revised**Agree with the commenter. The statement is revised and a Note is added to clarify that for an NSTR mobile AP MLD, all affiliated APs have the same TSF timers.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 11404** |
| 13686 | Yunbo Li | 35.3.1 | 405.11 | an NSTR mobile AP MLD is an AP MLD. Please change "An AP MLD or an NSTR mobile AP MLD shall ..." to "An AP MLD, include NSTR mobile AP MLD, shall ..." | as in comment. | **Revised**Agree with the commenter. The statement is revised and a Note is added to clarify that for an NSTR mobile AP MLD, all affiliated APs have the same TSF timers.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 11404** |
| 11710 | Gaurav Patwardhan | 35.3.1 | 405.12 | Add 'respectively' at the end of that sentence. | as in comment | **Revised**The statement is revised and a Note is added to clarify that for an NSTR mobile AP MLD, all affiliated APs have the same TSF timers.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 11404** |
| 12323 | Guogang Huang | 35.3.1 | 405.12 | TSF timers of all APs affiliated with an NSTR mobile AP MLD is the same, a non-AP MLD that is associated with an NSTR mobile AP MLD only needs to maintain one TSF timer for all the links. So this sentence is not true for NSTR mobile AP MLD. Because an NSTR AP MLD has only one TSF timer. | Please revise this sentence. | **Revised**Agree with the commenter. The statement is revised and a Note is added to clarify that for an NSTR mobile AP MLD, all affiliated APs have the same TSF timers.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 11404** |
| 11390 | Gaurang Naik | 9.4.2.312.2.2 | 217.19 | There needs to be normative text for this. Add the normative text in 35.3.17 and 35.3.18. | Add the following statement in 35.3.17 - 'A non-AP MLD with dot11EHTMLSROptionImplemented equal to true shall have dot11EHTEMLMROptionImplemented equal to false.' and add the following statement in 35.3.18 - 'A non-AP MLD with dot11EHTEMLMROptionImplemented equal to true shall have dot11EHTEMLSROptionImplemented equal to false.' | **Accepted** |
| 11323 | Robert Stacey | 35.3.4.3 | 417.03 | Each bullet begins with "a STA affiliated with a non-AP MLD receives" so we can suck that into the intro sentence. Also, we want the definite article in all cases (one case has the indefinite article). | Change intro sentence to "A non-AP MLD discovers AP MLDs and their affiliated APs [or keep the singular] when a STA affiliated with the non-AP MLD receives one or more of the following:" and delete "a STA affiliated with {the,a} non-AP MLD receives" from each item. | **Revised**Agree with the commenter. The cited paragraph is revised as suggested.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 11323** |
| 13351 | Liwen Chu | 33.3.4.3 | 417.17 | "The frame" is one of a Beacon, Probe Response and FILS Discovery frame. However the text of "...a Beacon, Probe Response or FILS Discovery frame and the frame carries..." can't show this relationship. | change to " one of the Beacon, Probe Response and FILS Discovery frame transmitted by an AP (reporting AP) that carry ..." | **Revised**Agree with the commenter. The cited paragraph is revised as suggested.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 13351** |
| 12934 | Payam Torab Jahromi |   | 0.00 | Change instances of "Multi-link element" to "Multi-Link element" (at least 12 as of Draft 1.5) |   | **Accepted** |
| 10417 | yan li | 35.3.11 | 438.31 | As the value of the Beacon Interval for AP2 is greater than the value of beacon interval for AP1, the Quiet Count field of the Quiet element is decremented at a faster rate (i.e., 2 in this example) in every subsequent beacon transmitted by AP1.'As shown in the Figure 35-12,quiet count field of AP2 is decremented faster than that of AP1,so the Quiet Count field of the Quiet element is decremented at a faster rate (i.e., 2 in this example) in every subsequent beacon transmitted by 'AP2'. | the quiet count field of AP2,not AP1, is decremented faster | **Revised**Agree with the commenter. The error is fixed.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10417** |
| 10244 | John Wullert | 35.3.11 | 438.41 | The last sentence in the paragraph above Figure 35-12 says the Quiet Count is set to 129, but in the figure it shows the Quiet count set at 128. | Revise one or the other to make them align. | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 12635 | Arik Klein | 35.3.11 | 438.41 | There is a contradiction between the value in the following sentence:" The value of the Quiet Count field of the Quiet element carried in the (Re )Association Response frame is set to 129 to indicate that the quiet interval on Link 1 started in the beacon interval that occurred 2 TBTTs in the past on Link 1" and the value denoted in Figure 35-12 (Quiet Count = 128). Please resolve. | As in comment | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 12636 | Arik Klein | 35.3.11 | 438.41 | It is not clear what is the connection between the value of 129 (in the Quiet counter subfield) and the indication that the "quiet interval on Link 1 started in the beacon interval that occurred 2 TBTTs in the past on Link 1"? (a) according to REVme D1.0 section 9.4.2.22, the Quiet Count field can include only a "positive" values, thus the value of 129 (10000001) should not be interpreted as a negative value (in 2's complement) (b) The main point is not where the Quiet period starts on Link 1, but rather where it ends on Link 1. Thus, why not using the Quiet Duration field instead the Quiet Count field? | In case of the example shown in Figure 35-12, need to change the Quiet Duration value in the quiet Element included in the Link Info field of the Reported AP operating on Link 1 (and contained in the Beacon frame transmitted on Link 2). The value should reflect the remaining duration till the end of the quiet Period while Quiet Count field equal to 1. | **Revised**An EHT AP does not advertise values in the Quiet Count field greater than 127. This rule has been added in Clause 9.4.2.22. Quiet Count values of greater than 127 can be included when the Quiet element is included in Per-STA Profile corresponding to another AP affiliated with the AP MLD. In this case, it indicates that the Quiet interval has started in the past at the TBTT (of the reported AP) given by the value carried in Quiet Count field minus 127. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 12636** |
| 10006 | Lisa Ward | 35.3.11 | 438.42 | In the description of Figure 35-12 for the example of an AP carrying a quiet element, it says that the quiet count field is set to 129.However, the figure shows that the quiet count = 128. I wonder if the text and the figure should match | Check if the quiet count value in the text in this sentence (129) should be changed to 128 to match the value in figure 35-12:"carried in the (Re)Association Response frame is set to 129 to indicate that the quiet interval on Link1 " If so, consider changing text to read 128 since that is easier than modifying the figure and as i understood it a value >127 will work in this case. | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 10085 | Xiangxin Gu | 35.3.11 | 438.42 | The text "The value of the Quiet Count field of the Quiet element carried in the (Re)Association Response frame is set to 129", does not align with the Figure 35-12, in which the value is 128. | Make the two values consistent. | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 10418 | yan li | 35.3.11 | 438.42 | The quiet count field in the association repsonse is set to 129,while the figure 35-12 shows that is set to 128;Similarly,the text indicates 2 TBTTs on link 1 before association repsonse on link 2,while the figure shows 1 TBTTs before association response | keep the text consistent with the figure | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 12362 | Massinissa Lalam | 35.3.11 | 438.42 | There is no STA sending (Re)Association Request in Figure 35-12 ... Maybe update the figure to add it? Also Quiet Count is set to 128 in the figure while the text states 129 ... figure seems to be coherent with 128 so update the text accordingly | As in comment | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. Since the condition for inclusion of Quiet element in the (Re)Association Response frame depend on the time at which the (Re)Association Response frame is transmitted, and not when the (Re)Association Request frame is transmitted, the (Re)Association Request frame is not shown in the figure. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 12362** |
| 13691 | Yunbo Li | 35.3.11 | 438.42 | the value of the Quiet Count field is 129 in the text, while the value is 128 in Figure 35-12. Please adjust them to match each other. Besides, from the figure, the (Re)Association Response frame seems only half TBTT after Quiet period on link1 start. it is better to move the (Re)Association Response frame a little bit far place from last Beacon in link 1. | please redraw the figure. | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 13692 | Yunbo Li | 35.3.11 | 438.42 | please add a note say that when value of Quiet Count in link 1 is larger than 127, AP2 will not carry a Quiet element corresponding to AP1 in Beacon or Association Response frame | as in comment. | **Revised**An EHT AP does not advertise values in the Quiet Count field greater than 127. This rule has been added in Clause 9.4.2.22. Quiet Count values of greater than 127 can be included when the Quiet element is included in Per-STA Profile corresponding to another AP affiliated with the AP MLD. In this case, it indicates that the Quiet interval has started in the past at the TBTT (of the reported AP) given by the value carried in Quiet Count field minus 127. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 12636** |
| 13791 | Yuchen Guo | 35.3.11 | 438.42 | 128 or 129? | Please correct it | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 11440 | Gaurang Naik | 35.3.11 | 438.49 | The Quiet Count field is set to the number of TBTTs until the beacon interval during which the quiet interval starts. Quiet Count value of 0 is reserved. In Fig 35-12, the Quiet Count value must be 1 in the last shown Beacon on Link 1. Please revise the figure. | As in comment | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 13375 | Liwen Chu | 35.3.11 | 438.52 | Change to "Quiet Count = 129" | Update the figure per the comment | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 10871 | Yousi Lin | 35.3.11 | 438.63 | The text says "value of the Quiet Count field of the Quiet element carried in the (Re)Association Response frame is set to 129", but in figure 35-12 the Quiet Count in (Re)Association Response frame is 128. | Please make the figure aligned with the text. | **Revised**Agree with the commenter. The correct value in the figure shown in D2.0 is 129 since the Quiet interval starts two Beacon frames in the past on Link 1. However, a Quiet element is never advertised with Quiet Count = 0. As a result, the figure is revised to start the Quiet Count from value 5 on Link 1. The correct value of Quiet Count field carried in the (Re)Association Response frame is 128. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10244** |
| 10420 | yan li | 35.3.11 | 439.10 | the Change Sequence subfield in the TBTT Information field corresponding to AP1 in the Reduced Neighbor Report element carried in AP2's Beacon frames is incremented by 1'.What is the Change Sequence subfield? Does it refer to BSS Parameter Change Count subfield of MLD Parameters? Please clarify it with same issue in the figure 35-12/35-13 | as the comment | **Revised**Agree with the commenter. ‘Change Sequence’ subfield has been renamed to ‘BSS Parameters Change Count’ subfield. The name has been changed at the cited location. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10420** |
| 11441 | Gaurang Naik | 35.3.11 | 439.10 | Change Sequence' subfield has been renamed to 'BSS Parameters Change Count'. Please update the description throughout this paragraph. Same changes in figure 35-13. | As in comment | **Revised**Agree with the commenter. ‘Change Sequence’ subfield has been renamed to ‘BSS Parameters Change Count’ subfield. The name has been changed at the cited location. **TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10420** |
| 13792 | Yuchen Guo | 35.3.11 | 439.17 | The first occurence of AP1 should be AP2 because the field is decreamented by 2 in AP2's beacon | As in the comment | **Revised**Agree with the commenter. The error is fixed.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 13792** |
| 10419 | yan li | 35.3.11 | 439.30 | ...before the first beacon on the initial operating class/channel is transmitted' It should be 'before the first beacon on the new operating class/channel is transmitted' | as the comment | **Revised**Agree with the commenter. The error has been fixed.**TGbe editor: Please implement the changes shown in document** [<https://mentor.ieee.org/802.11/dcn/22/11-22-1159-00-00be-lb266-cr-for-clause-35-3.docx>] **tagged as 10419**  |

***TGbe editor: Please note Baseline is 11be D1.4 and REVme D1.3***

**35.3 Multi-link operation**

**35.3.1 General**

***TGbe editor: Please revise the following statement and add a NOTE as shown below [CID 11404]***

An AP MLD shall correct the clock drift to be within ±30 μs between TSF timers of any two APs affiliated with the AP MLD. (#11404)

NOTE – All APs affiliated with an NSTR mobile AP MLD have the same TSF timer (see 35.3.19 (NSTR mobile AP MLD operation)) (#11404).

**35.3.4.3 Non-AP MLD behavior**

***TGbe editor: Please revise the following statements as shown below [CID 11323, 13351]***

A non-AP MLD discovers an AP MLD and its affiliated APs when a STA affiliated with the non-AP MLD receives (#11323) one or more of the following:

* (#11323) a Basic Multi-Link element carried in a Beacon frame or Probe Response frame, that is not a Multi-Link probe response, transmitted by an AP affiliated with the AP MLD or by the AP corresponding to the transmitted BSSID in the same multiple BSSID set as at least one of the APs affiliated with the AP MLD.
* (#11323) a Multi-Link probe response from an AP affiliated with the AP MLD or the AP corresponding to the transmitted BSSID in the same multiple BSSID set as at least one of the APs affiliated with the AP MLD carrying a Basic Multi-Link element with a complete profile of the reported AP.
* (#11323) either (#13351) a Beacon, Probe Response, or FILS Discovery frame transmitted by an AP (reporting AP) and the frame carries a Reduced Neighbor Report element that includes the MLD Parameters subfield in the TBTT Information field corresponding to the reported AP. A non-AP MLD infers the relationship between the reported AP and the reporting AP by decoding the MLD ID subfield of the MLD Parameters subfield in the Reduced Neighbor Report element and following the rules described in 35.3.4.1 (AP behavior).
* (#11323) a Management frame and the frame carries a Neighbor Report element. A non-AP MLD determines that two or more APs reported in different Neighbor Report elements that include the Basic Multi-Link subelement are affiliated with the same AP MLD. The reported APs are affiliated with the same AP MLD if the values carried in MLD MAC Address field of the Common Info field of the Basic Multi-Link element of the reported APs are the same.

**35.3.11 Multi-link procedures for channel switching, extended channel switching, and channel quieting**

***TGbe editor: Please revise the following paragraphs and figures as shown below [CID 10420, 10417, 12362, 10244, 12636, 13792, 10419]***

For the example shown in Figure 35-12 (Example of an AP carrying a Quiet element to signal channel quieting on another link), AP 1 and AP 2 are two APs affiliated with an AP MLD that operate on Link 1 and Link 2, respectively. The Beacon frame transmitted by AP 1 (the affected AP) includes a Quiet element to indicate a scheduled quiet interval on Link 1. From this point onward and until the quiet interval begins on Link 1, AP 2 (the reporting AP) includes a Quiet element in the Per-STA Profile subelement corresponding to AP 1 in the Basic Multi-Link element carried in its Beacon frames. Although not shown in the figure, Quiet element will also be included in the Per-STA Profile subelement of the Basic Multi-Link element corresponding to AP 1 carried in the Probe Response frames transmitted by AP 2. The values of the Quiet Count field, Quiet Offset field, and the Quiet Duration field of the Quiet element carried on Link 2 are set by AP 2 with reference to Link 1. As the value of the Beacon Interval for AP 2 is greater than the value of beacon interval for AP 1, the Quiet Count field of the Quiet element carried in the Per-STA Profile subelement corresponding to AP1 is decremented at a faster rate (i.e., 2 in this example) in every subsequent beacon transmitted by AP2 (#10417). A STA affiliated with a non-AP MLD, which is capable of operating on Link 2, transmits a (Re)Association Request frame to AP 2 (not shown in the figure) (#12362), in order to perform multi-link setup. The multi-link setup includes Link 1 as one of the links. Since the (Re)Association Response frame is transmitted by AP 2 after the quiet interval has started on Link 1, AP 2 includes the Quiet element in the per-STA profile corresponding to AP 1 in the (Re)Association Response frame it transmits. The Quiet Count field of the Quiet element carried in the (Re)Association Response frame is set to 128 (#10244) to indicate that the quiet interval on Link 1 started in the beacon interval that occurred one TBTT (#10244) in the past on Link 1 (see 9.4.2.22 (Quiet element)) (#12636).



**Figure 35-12 – Example of an AP carrying a Quiet element to signal channel quieting on another link (#10244, #10420)**

For the example shown in Figure 35-13 (Example of an AP carrying a Channel Switch Announcement element to signal channel switching on another link), AP 1 and AP 2 are two APs affiliated with an AP MLD that operate on Link 1 and Link 2, respectively. The Beacon frame transmitted by AP 1 (the affected AP) includes a Channel Switch Announcement element to indicate that the channel on Link 1 will be switched. From this point onward and until the channel on Link 1 switches, AP 2 (the reporting AP) includes a Channel Switch Announcement element in the per-STA profile corresponding to AP 1 in the Basic Multi-Link element carried in the Beacon frame it transmits. When AP 1 begins to include the Channel Switch Announcement element in its Beacon frames, the BSS Parameters Change Count (BPCC) (#10420) subfield in the TBTT Information field corresponding to AP 1 in the Reduced Neighbor Report element carried in AP 2’s Beacon frames is incremented by 1. The values of the Channel Switch Count field of the Channel Switch Announcement element carried on Link 2 are set by AP 2 with reference to Link 1. As the value of the beacon interval for AP 2 is twice the value of beacon interval for AP 1, the Channel Switch Count field of the Channel Switch Announcement element is decremented by 2 in every subsequent beacon transmitted by AP 2 (#13792). If AP 1 carries the Extended Channel Switch Announcement element and the Max Channel Switch Time element in the Beacon frame it transmits, AP 2 also includes the Extended Channel Switch Announcement element and the Max Channel Switch Time element in the per-STA profile corresponding to AP 1 in the Basic Multi-Link element in the Beacon frames it transmits. Although not shown in the figure, the Channel Switch Announcement element, Extended Channel Switch Announcement element (if included by AP 1), and Max Channel Switch Time element (if included by AP 1) will also be included in the Per-STA Profile subelement of the Basic Multi-Link element corresponding to AP 1 carried in the Probe Response frames transmitted by AP 2. A STA affiliated with a non-AP MLD, that operates on Link 2, transmits a (Re)Association Request frame to AP 2 (not shown in the figure) (#12362) requesting Link 1 as one of the links for multi-link setup. Since the (Re)Association Response frame is transmitted by AP 2 after the last Beacon frame on the initial operating class/channel on Link 1 and before the first beacon on the new (#10419) operating class/channel is transmitted, AP 2 includes the Max Channel Switch Time element in the per-STA profile corresponding to AP 1 in the (Re)Association Response frame it transmits. The value carried in Max Channel Switch Time element provides an estimate of time until the first TBTT on the new channel on Link 1. The STA affiliated with the non-AP MLD operating on Link 1 does not transmit a frame until it hears the first Beacon frame from AP 1 on Link 1.



**Example 35-13 – Example of an AP carrying a Channel Switch Announcement element to signal channel switching on another link (# 10420)**