IEEE P802.11
Wireless LANs

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| Proposed Comment Resolutions for NSEP Priority Access (CC36) |
| Date: 2021-10-21 |
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Abstract

This document proposes comment resolutions for the following 15 CIDs on NSEP Priority Access from the IEEE 802.11be D1.0 comment collection 36 (CC36): 7522, 7527, 4170, 5616, 4171, 5617, 5854, 5855, 7523, 7092, 7524, 4491, 4492, 4493, 5618,

The proposed resolutions shown below use Draft 1.2 as a basis.

Revisions:

- Rev 0: Initial version of the document.

- Rev 1 : Minor updates.

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** | **Com-menter** | **Clause Number** | **Page/****Line** | **Comment** | **Proposed Change** | **Resolution** |
| 7522 | Tomoko Adachi | 35.11 | 0.00 | The NSEP priority access here in 35.11 is described with an AP being always affiliated with an AP MLD. I would support how it is described in 4.5.11a, where it is not limited to an AP MLD. You can first make an excuse at the beginning of 35.11 that the NSEP priority access can be applied between MLDs and in such case, the STAs and APs in the following description are read in terms of non-AP MLDs and AP MLDs, and then describe using just STAs and APs. | As in comment. | Rejected NSEP priority access negotiation occurs at the MLD level and clause 4.5.11a was updated accordingly in D1.2 ( Ref: 510/r5) |
| 7527 | Tomoko Adachi | 35.11 | 0.00 | The NSEP priority access cannot be used by unassociated STAs. The initial intent I remember was to allow such STAs, too. No mind? | As in comment. | **Rejected**The scope of NSEP priority access is limited to associated devices. |
| 4170 | Alfred Asterjadhi | 35.11.1 | 304.58 | System resources or the wireless medium? I guess the WM. Please replace. | As in comment. | **Revised**Agree in principle. Addressed in conjunction with CID #5616Editor: Please reflect the changes in Clause 35.14.1 labelled #4170 |
| 5616 | John Wullert | 35.11 | 304.58 | Reword sentence for clarity | "NSEP priority access is a mechanism that provides prioritized access to system resources for authorized users to increase their probability of successful communication during periods of network congestion. | **Revised**Agree in principle. Addressed in conjunction with CID #4170Editor: Please reflect the changes in Clause 35.14.1 labelled #4170 |
| 4171 | Alfred Asterjadhi | 35.11.1 | 304.63 | I think the MIB and Caps are at STA level. So please replace "an MLD or non-AP EHT STA" with "An EHT STA affiliated with an MLD". Please apply throughout. | As in comment. | **Revised**Addressed in conjunction with CIDs #5617, and #5854Editor: Please reflect the changes in Clause 35.14.1 labelled #4171 |
| 5617 | John Wullert | 35.11 | 304.63 | Text includes references to ML and EHT STA. This should be corrected based on consensus decision on this topic | As in comment (throughout section) | **Revised**Addressed in conjunction with CIDs #4171, #5854As defined, NSEP priority access negotiation occurs at the MLD level, so support for it must be reflected at MLD level as well. Revised description, capabilities and MIB variables to reflect that.Editor: Please reflect the changes in Clause 35.14.1 labelled #4171 |
| 5854 | Lei Wang | 35.11.1 | 304.63 | The text "MLD and non-AP EHT STA" seems including AP MLD, non-AP MLD, and non-AP EHT STA, which implicitly excludes EHT AP. Does this mean EHT AP does not support NSEP? Without EHT AP, then whom a non-AP EHT STA connect to? In EHT, it is possible to require all EHT APs to support MLD, however, supporting MLD does not mean "operating in MLD mode", as there could be multiple valid reasons/scenarios for an EHT AP to operate in a single link mode, e.g., channel/band availability due to congestion or regulatory requirement or any other reasons, power saving, etc. | Please clarify if NSEP applies to EHT AP.If yes, then add EHT AP in the description.If not, then clarify whom a non-AP EHT STA connect to. | **Revised** Addressed in conjunction with CIDs #4171, #5617As defined, NSEP priority access negotiation occurs at the MLD level, so support for it must be reflected at MLD level as well. Revised description, capabilities and MIB variables to reflect that.Editor: Please reflect the changes in Clause 35.14.1 labelled #4171 |

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| 5855 | Lei Wang | 35.11.1 | 304.63 | For MLDs, is the parameter dot11EHTNSEPPriorityAccessActivated at per STA level or at per MLD level?The current MIB definition indicates it is at per STA level, but the spec text in NSEP related sections it is at per MLD level for MLDs.Then, what does it mean by an MLD with a value of true for dot11EHTNSEPPriorityAccessActivated? Does it mean all its affiliated STAs have a vaule of true or at least one affiliated STA has a value of true? | Please clarify the parameter for an MLD, dot11EHTNSEPPriorityAccessActivated, is per MLD level or per STA level.If per MLD, then add clarification text in the MIB definition.If per STA, then clarify what it means by an MLD with a value of true for this parametre. | **Revised** As defined, NSEP priority access negotiation occurs at the MLD level, so support for it must be reflected at MLD level as well. Revised MIB variables to reflect that.Editor: Please reflect the changes in Clause 35.14.1 labelled #5855 |
| 7523 | Tomoko Adachi | 35.11.1 | 304.63 | "An MLD or non-AP EHT STA that is capable of invoking NSEP priority access shall have a value of true for dot11EHTNSEPPriorityAccessActivated and ...." The same content is repeated in pp.ll 310.6-11. | Change it to read "An NSEP STA is an EHT STA which has a value of true for dot11EHTNSEPPriorityAccessActivated. An NSEP STA shall set the NSEP Priority Access Supported subfield of the EHT Capabilities element that it transmits to 1."Delete the descriptions in pp.ll 310.6-11. | **Revised** Agree in principle. Resolved in conjunction with CID #7092Editor: Please reflect the changes in Clause 35.14.1 labelled #7523 |
| 7092 | Sigurd Schelstraete | 35.11.1 | 304.63 | Change "shall have a value of true for dot11EHTNSEPPriorityAccessActivated" to "has a value of true for dot11EHTNSEPPriorityAccessActivated". MIB parameters are given. | See comment | **Revised** Agree in principle. Resolved in conjunction with CID #7523Editor: Please reflect the changes in Clause 35.14.1 labelled #7523 |
| 7524 | Tomoko Adachi | 35.11.1 | 305.01 | "An AP MLD or non-AP EHT STA that is not capable of invoking NSEP priority access shall have a value of false for dot11EHTNSEPPriorityAccessActivated and shall set to 0 the NSEP Priority Access Supported subfield of the EHT Capabilities element that it transmits." Is an EHT STA allowed not to hold dot11EHTNSEPPriorityAccessActivated? If it is allowed, the subfield is still set to 0. | Change it to read "An EHT STA other than an NSEP STA shall set the NSEP Priority Access Supported subfield of the EHT Capabilities element that it transmits to 0." | **Revised** Agree in principle. Editor: Please reflect the changes in Clause 35.14.1 labelled #7524 |
| 4491 | Arik Klein | 35.11.1 | 305.09 | Add "s" after the word "equal" in the following sentence:" An AP MLD that has dot11SSPNInterfaceActivated \*equal\* to true..." | As in comment | **Rejected**“Equal” is the correct form and is used in this same manner in numerous locations in current spec. |
| 4492 | Arik Klein | 35.11.1 | 305.13 | Add "s" after the word "equal" in the following sentence:" To support this exchange, a non-AP MLD or non-AP EHT STA with dot11EHTNSEPPriorityAccessActivated \*equal\* to true ..." | As in comment | **Rejected**“Equal” is the correct form and is used in this same manner in numerous locations in current spec. |
| 4493 | Arik Klein | 35.11.1 | 305.16 | Add "s" after the word "equal" in the following sentence:" An AP MLD with dot11SSPNInterfaceActivated \*equal\* to true ..." | As in comment | **Rejected**“Equal” is the correct form and is used in this same manner in numerous locations in current spec. |
| 5618 | John Wullert | 35.11.1 | 305.24 | Final sentence in the paragraph is out of place, leading to potential confusion | Move the sentence "Other methods of obtaining this authorization information are beyond the scope of this standard" earlier in the paragraph, to the point right between "...(Interworking procedures: interactions with SSPN)." and "An AP MLD with dot11SSPNInterfaceActivated equal to true..." | **Revised**Agree in principle. Editor: Please reflect the changes in Clause 35.14.1 labelled #5618 |

**\*\*\*\* Editor: Please update the following Clauses as shown below: \*\*\*\***

**Source text is document 1.2**

**35.14 NSEP priority access**

**35.14.1 General**

(#1467)NSEP priority access is a mechanism that provides prioritized access to the wireless medium for authorized users to increase their probability of successful communication during periods of network congestion.[#4170]

(#1504)(#3038) An NSEP AP MLD or an NSEP non-AP MLD is an MLD that has a value of true for dot11EHTNSEPPriorityAccessActivated. A STA affiliated with an NSEP MLD shall set to 1 the NSEP Priority Access Supported subfield of the EHT Capabilities element that it transmits. [#4171, #5854,#7092, #7523] A STA affiliated with an MLD that is not an NSEP AP MLD or an NSEP non-AP MLD[#4170, #7524] shall set to 0 the NSEP Priority Access Supported subfield of the EHT Capabilities element that it transmits.

(#2305)During the (re)association process, the AP MLD obtains information required to verify the authority of the non-AP MLD [#4171] to use NSEP priority access. An AP MLD that has dot11SSPNInterfaceActivated equal to true may use the interworking procedures described in 11.22.5 (Interworking procedures: interactions with SSPN) to retrieve permission for a non-AP MLD[#4171] to use the NSEP priority access from an NSEP service provider via the SSPN interface during association by the non-AP MLD[#4171]. To support this exchange, a non-AP MLD [#4171]with dot11EHTNSEPPriorityAccessActivated equal to true shall provide the home realm information of the NSEP provider and necessary authentication parameters as described in 11.22.5 (Interworking procedures: interactions with SSPN). Other methods of obtaining this authorization information are outside the scope of this standard. [#5618]

An AP MLD that successfully obtains permission for a non-AP MLD [#4171]to use NSEP priority access shall update the dot11NonAPStationAuthNSEPPriorityAccesstype for the non-AP MLD[#4171] in the dot11InterworkingEntry. The authorization information included in the dot11InterworkingEntry is passed from the prior AP MLD [#4171] to the new AP MLD [#4171] in the same ESS during reassociation as described in 11.22.5.3 (Reporting and session control with SSPN). [#5618]

**35.11.3 NSEP priority access procedure**

**35.11.3.1 General (#1709)**

(#1470)(#2306)(#1709)(#2171)If the negotiation to enable NSEP priority access between an AP MLD and a non-AP MLD is successful, then both the AP MLD and the non-AP MLD or non-AP EHT STA shall apply NSEP priority access to their respective NSEP traffic using the procedure described below. If an AP MLD or non-AP MLD successfully enabled NSEP priority access, then the AP MLD or non-AP MLD shall perform the procedure described below with each of its affiliated STAs.

The AP MLD shall ensure that only authorized non-AP MLDs can invoke NSEP priority access. An AP MLD may apply NSEP priority access to NSEP traffic using the procedure described below prior to completion of the negotiation to enable NSEP priority access.

[#7523]

**C.3 MIB Detail**

**Editor: Please update the sections of this clause describing the dot11StationConfig and dotEHTStationConfig tables as shown below:**

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-- \* dot11StationConfig TABLE

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Dot11StationConfigEntry ::= SEQUENCE

{

dot11StationIDMacAddress,

…

dot11BSSMaxIdlePeriodIndicationByNonAPSTA, TruthValue,

(#1004)(#2246)dot11EHTOptionImplemented, TruthValue,

(#3173)dot11EHTBaseLineFeaturesImplementedOnly, TruthValue,

 [#4171]

(#4183)dot11EHTTXOPSharingTFOptionImplemented TruthValue

}

[#5855]

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-- \* dot11EHTStationConfig TABLE

-- \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

…

Dot11EHTStationConfigEntry ::=

SEQUENCE {

dot11EHTPPEThresholdsRequired TruthValue,

dot11TIDtoLinkMappingActivated TruthValue

dot11EHTNSEPPriorityAccessActivated TruthValue} [#5855]

…

[#5855]dot11EHTNSEPPriorityAccessActivated OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This is a control variable.

It is written by an external management entity or the SME. Changes take effect as soon as practical in the implementation.

This attribute, when true, indicates the ability of the MLD to support the NSEP priority access capability. If the attribute is false, the MLD does not support NSEP priority access capability."

DEFVAL { false }

::= { dot11EHTStationConfigEntry 3 }

NOTE to the EDITOR: Create a sequence Dot11EHTStationConfigEntry

Straw Poll:

Do you support incorporating the proposed draft text in this document (11-21/1907r2) into the next revision of TGbe to address the following CIDs: 7522, 7527, 4170, 5616, 4171, 5617, 5854, 5855, 7523, 7092, 7524, 4491, 4492, 4493, 5618?

Result: Yes/No/Abstain