IEEE P802.11
Wireless LANs

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| Proposed Draft Text: SBP frames |
| Date: 2022-01-27 |
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Abstract

This submission contains the draft text for sensing by proxy frames to help the creation of TGbf draft D0.1.

Revisions:

* Rev 0: Initial version of the document.

# Introduction

SBP request/response frames’ fomat are proposed.

SBP request/response frames are defind in the **SFD** as follows:

(Motion 38, 21/1692r4) A Sensing by Proxy Request frame, which allows a non-AP STA to invoke a sensing by proxy procedure, is defined.

* The format and contents of the Sensing by Proxy Request frame are TBD.

(Motion 38, 21/1692r4) A Sensing by Proxy Response frame, which allows an AP STA to accept or reject a request for a sensing by proxy procedure, is defined.

* The format and contents of the Sensing by Proxy Response frame are TBD.

# Discussion

As proposed and discussed, we need both Public Action frames and protected sensing frames.

21/1828r4 SP3 (23Y/0N/8A):

* + 11bf shall define both public and protected action frames, which include sensing measurement setup request/response, sensing measurement report, sensing measurement setup termination, and SBP request/response frames.
	+ Note: Other public and protected action frames for sensing are TBD.

***Editing instructions formatted like this are intended to be copied into the TGbf D0.1 Draft (i.e. they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

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

# Text proposal – Editor instructions

9.4.1.11 Action Field

***TGbf editor: Insert a new action category for protected sensing frames to Table 9-51 while maintaining***

***the numerical order and updating the reserved range:***

**Table 9-51—Category values**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code**  | **Meaning**  | **See subclause**  | **Robust**  | **Group Addressed Privacy**  |
| …  |
| <ANA>  | Protected Sensing Frame  | 9.6.X  | Yes  | No  |

9.6 Action frame format details

9.6.7 Public Action details

9.6.7.1 Public Action frames

***TGbf editor: Insertnew entries in Table 9-364 as shown below except blue tag:***

**Table 9-364—Public Action field values**

|  |  |
| --- | --- |
| **Public Action field value**  | **Description**  |
| <ANA> | SBP request  |
| <ANA> | SBP response |
| <ANA> | Reserved  |

9.6.7.X Sensing by Proxy (SBP) Request frame format

The Sensing by Proxy Request frame allows a non-AP STA to invoke a sensing by proxy procedure. The format of the SBP Request frame Action field is defined in Table 9-xxxa.

**Table 9-xxxa Sensing by Proxy Request frame Action field format**

|  |  |
| --- | --- |
| **Order** | **Information** |
| 1 | Category |
| 2 | Public Action |
| 3 | TBD |

The Category field is defined in 9.4.1.11 [802.11].

The Public Action field is defined in 9.6.7.1 [802.11].

Other fields are TBD.

9.6.7.Y Sensing by Proxy (SBP) Response frame format

The Sensing by Proxy Response frame allows an AP STA to accept or reject a request for a sensing by proxy procedure. The format of the SBP Response frame Action field is defined in Table 9-xxxb.

**Table 9-xxxb Sensing by Proxy Response frame Action field format**

|  |  |
| --- | --- |
| **Order** | **Information** |
| 1 | Category |
| 2 | Public Action |
| 3 | TBD |

The Category field is defined in 9.4.1.11 [802.11].

The Public Action field is defined in 9.6.7.1 [802.11].

Other fields are TBD.

9.6.Z Protected Sensing frame format details

9.6.Z.1 Protected Sensing Frame Action field

The Protected Sensing Frame Action field, in the one octet immediately after the category field, differentiates between various Protected Sensing frames as shown in the Table 9-xxxc (Protected Sensing Frame Action Field values).

**Table 9-xxxc—Protected Sensing Frame Action field values**

|  |  |
| --- | --- |
| **Value**  | **Meaning**  |
| <ANA>  | Reserved  |
| <ANA> | A protected SBP request frame. The format of frame after the action field is identical to the format of SBP public action (9.6.7.X Sensing by Proxy (SBP) Request frame format). It is carried in a Management Action frame.  |
| <ANA> | A protected SBP response frame. The format of frame after the action field is identical to the format of SBP public action (9.6.7.Y Sensing by Proxy (SBP) Response frame format). It is carried in a Management Action frame.  |
| <ANA> | Reserved  |