IEEE P802.11
Wireless LANs

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| --- |
| Secure protection of Link Measurement frames |
| Date: 2018-11-12 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Solomon Trainin | Qualcomm |  | 972547885738 | strainin@qti.qualcomm.com |
| Assaf Kasher | Qualcomm |  |  | akasher@qti.qualcomm.com  |
| Alecsander Eitan | Qualcomm |  |  | eitana@qti.qualcomm.com  |
| Carlos Cordeiro  | Intel |  |  | carlos.cordeiro@intel.com |
| Christopher Hansen  | Peraso |  |  | chris@covariantcorp.com |

Resolution of CID 3266 to protect the Link Measurement frames is presented

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| **CID** | **Page** | **Line** | **Clause** | **Comment** | **Proposed Change** | **Resolution** |
| 3266 | 304.00 |  | 10.44.5 | Link measurement reports used for TDD Link maintenance which contain DMG Link Margin elements may contain senstive information on PHY performance. This information should not be accessible to 3rd parties | Add text here that Link Measurement Reports shall only be transmitted as robust Management frames (i.e. encrypted) | **Revised**Proposal how to protect the Link Measurement frames is presented  |

 CID3266

Discussion:

*Apply the Link Measurement frames to the new categoru of Protected Dual of Unprotected DMG Action*

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**9.6.yy Protected Dual of Unprotected DMG Action**

The Protected Dual of Unprotected DMG Action frame is defined to allow robust STA-STA communications of the same information that is conveyed in Unprotected DMG Action frames that are not robust (see 9.6.21.1 Unprotected DMG Action field)). The defined Protected Dual of Unprotected DMG Action frames are listed in Table xy2 (Action field values for Protected Dual of Unprotected DMG Action frames).

The Protected Dual of Unprotected DMG Action frames have the same format as the corresponding Unprotected DMG Action and Radio Measurement action frames.

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**Table xy2—Action field values for Protected Dual of Unprotected DMG Action frames**

|  |  |  |
| --- | --- | --- |
|  **Action field value** | **Description** | **Defined in** |
| 0 | Protected Announce | 9.6.21.2 |
| 1 | Reserved |  |
| 2  | Protected Link Measurement Request | 9.6.6.4 |
| 3  | Protected Link Measurement Report | 9.6.6.5 |
| 4 | Reserved |  |
| 5 | Reserved |  |
| 6 | Protected BRP | 9.6.21.3 |
| 7 | Protected MIMO BF Setup | 9.6.21.4 |
| 8 | Protected MIMO BF Poll | 9.6.21.5 |
| 9 | Protected MIMO BF Feedback | 9.6.21.6 |
| A | Protected MIMO BF Selection  | 9.6.21.7 |

**9.6.21.3 BRP frame format**

***TGay editor change Table 9-459 as follows***

|  |  |
| --- | --- |
| Order | Information  |
| 1 | Category |
| 2 | Unprotected DMG Action | Protected Dual of Unprotected DMG Action |
| 3 | Dialog Token |

***TGay insert after definition of Unprotected DMG Action***

The Protected Dual of Unprotected DMG Action is defined in 9.6.yy Protected Dual of Unprotected DMG Action

***TGay editor change Table 31 the same as Table 9-459 and the text below***

**9.6.21.4 MIMO BF Setup frame format**

***TGay editor change Table 32 the same as Table 9-459 and the text below***

**9.6.21.5 MIMO BF Poll frame format**

***TGay editor change Table 33 the same as Table 9-459 and the text below***

**9.6.21.6 MIMO BF Feedback frame format**

***TGay editor change Table 34 the same as Table 9-459 and the text below***

**9.6.21.7 MIMO BF Selection frame format**

***TGay editor change Table 35 the same as Table 9-459 and the text below***

**12.6.20 Robust management frame selection procedure**

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When Link Measurement and Unprotected DMG action for witch a Protected Dual of Unprotected DMG Action category is defined (see 9.4.1.11 Action field) to allow robust STA-STA communications of the same information that is conveyed in Action frames that are not robust, the protected variant is used when management frame protection has been negotiated between DMG STA. The defined Protected Dual of Unprotected DMG Action frames are listed in 9.6.yy Protected Dual of Unprotected DMG Action.

**References:**

1. IEEE P802.11ay/D2.1, October 2018
2. IEEE P802.11-REVmd/D1.6, October 20183.
3. 11-18-1801-00-00ay LB234 Comment resolution for CID 3358 and others