IEEE P802.11
Wireless LANs

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| Proposed Resolution for CIDs – 4106, 4054, 4055 – subelement, element  |
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Abstract

The document provides resolutions for CIDs 4106, 4054, 4055 and attempts to address the subelement, element issue discussed on 2024-07-16 in TGbh.

r1: Updated to add additional non-clause 9 locations where changes need to be made.

r2: Correcting a typo pointed out during the meeting 18 July 2024 AM2 and changing the naming of the “subelements” to unique element names when they are referenced in the 2nd and 3rd PASN frames, by adding the “Robust” and replacing “subelement” with “element”, note that these are unique element names and will not be confused with other elements as the subelements may have been. Also note some of the “subelements” are currently named as “elements”.

| **CID** | **Clause**  | **p.l** | **Comment** | **Proposed Change** |
| --- | --- | --- | --- | --- |
| 4106 | 9.4.2.319 | 32.45 | The subelements that are included in the PASN Encrypted Data element are called inconsistently either elements or subelements in this subclause. That is particularly confusing when there are actual elements with the exact same name as these subelements. | At P31 L45, replace "Device ID element" with "Device ID subelement".At P32 L18, replace "PASN ID element" with "PASN ID subelement".At P32 L25, replace the title of Figure 9-1074g "PASN ID element format" with "PASN ID subelement format". |
| 4054 | 9.4.2.319 | 18 | "The element format is defined in 9.4.3" well, no, 9.4.3 is about the subelement format | Refer to 9.4.2.1. instead |
| 4055 | 9.4.2.319 | 18 | "subelement" has been changed to "element", but the rest of the para continues to refer to subelements | Revert the change |

**Discussion:**

There are two PASN ID elements, one is defined in 9.4.2.319 PASN Encrypted Data element and the other is defined in 9.4.2.320 PASN ID element. These elements are then referenced in the text at: 22.7 (9.4.2.320), 24.7 (9.4.2.320), 27.31 (9.4.2.320), 32.25 (9.4.2.319), 32.18, 32.54, 33 (9.4.2.319), 37.33 (9.4.2.329sa), 37.52, 38.8, 38, 38.35, 38.61, and 41.12. And 12.13.2 – Discovery of a PASN capable AP, 117# , 44.120.4, and 45.14.

Also, in Annex AF - 51.51 (9.4.2.320), 55.58, 56.15, 57,14, 57.10, 57.24. 57.30.

**Resolution for all three CIDs: Revised encorporate the changes provide in 11-24-1316r3**

The resolution changes the names of the subelements as follows:

1. Change “Device ID subelement” to “Robust Device ID element”
2. Change “IRM subelement” to ” Robust IRM element”
3. Change “PASN ID element” to “Robust PASN ID element”

**The detailed changes follow:**

In table 9.417c (31.25):

1. Change the table title from “Subelement IDs for Encrypted Data field of the PASN Encrypted Data element” to “Element IDs for Encrypted Data field of the PASN Encrypted Data element”.
2. Change “Device ID” to “Robust Device ID”
3. Change “IRM” to “Robust IRM”
4. Change “PASN ID” to “Robust PASN ID”

(31.44) Change: “The format of the Device ID element is shown in Figure 9-1074e (Device ID subelement format).” To be “The format of the Robust Device ID element is shown in Figure 9-1074.:

(31.52) Change: the figure title “Figure 9-1074e—Device ID subelement format” to “Figure 9-1074e—Robust Device ID element format”

(31.55) Change: “The format of the Device ID element is shown in Figure 9-1074e (Device ID subelement format).” To “The format of the Robust Device ID element is shown in Figure 9-1074e (Robust Device ID subelement format).”

(31.64) Change: “The format of the IRM subelement is shown in Figure 9-1074f (IRM subelement format).” To “The format of the Robust IRM element is shown in Figure 9-1074f (IRM element format).”

(32.6) Change: “Figure 9-1074f—IRM subelement format” to “Figure 9-1074f— Robust IRM element format”

(32.17) Change: “The format of the PASN ID element is shown in Figure 9-1074g (PASN ID element format).[3003, 3015]” to “The format of the Robust PASN ID element is shown in Figure 9-1074g (Robust PASN ID element format).[3003, 3015]”

(32.25) Change: “Figure 9-1074g – PASN ID element format” to “Figure 9-1074b – Robust PASN ID element format”

(37.

(37.52) Change: “device ID in the Device ID element and a PASN ID in the PASN ID element” to “device ID in the Robust Device ID element and a PASN ID in the Robust PASN ID element”

(38.10) Change: “PASN ID element” to “Robust ID element”

(38.35) Change: “PASN ID element” to “Robust ID element” and change “PASN ID Status field of the PASN ID element” to ”PASN ID Status field of the Robust PASN ID element”

(38.40) Change: “PASN ID element” to “Robust PASN ID element”

(38.47) Change: “PASN ID element” to “Robust PASN ID element”

(38.48) Change: “PASN ID element” to “Robust PASN ID element”

(38.54) Change: “PASN ID element” to “Robust PASN ID element”

(38.55) Change: “PASN ID element” to “Robust PASN ID element” and “new PASN ID element” to “Robust PASN ID element”

(38.60) Change: “PASN ID element” to “Robust PASN ID element”

(39.1) Change: “Device ID element” to “Robust Device ID element”

(40.29) Change: “IRM element” to “Robust IRM element”

(40.32) Change: “IRM element” to “Robust IRM element”

(41.8) Change: “IRM element” to “Robust IRM element”

(57.13) Change: "… and sends them to the non-AP STA in the Device ID field in the Device ID element and in the PASN ID field in the PASN ID element in the PASN Encrypted Data element in the second PASN frame. Non-AP STA, AP-1 and AP-2 store devID and pasnID1.”

To: "… and sends them to the non-AP STA in the Device ID field in the Device ID element and in the PASN ID field in the Robust PASN ID element in the PASN Encrypted Data element in the second PASN frame. Non-AP STA, AP-1 and AP-2 store devID and pasnID1.”

(57.26) Change: “Upon receiving the PASN ID (pasnID1) in first PASN frame, AP-2 sends a PASN ID element in the PASN Encrypted Data element in the second PASN frame with the PASN ID status field set to 0, indicating that the PASN ID has been recognized. AP-2 then assigns another PASN ID (pasnID2) and sends it to the non-AP STA in the PASN ID field in the PASN ID element included in the PASN Encrypted Data element in the second PASN frame.”

To: “Upon receiving the PASN ID (pasnID1) in first PASN frame, AP-2 sends a Robust PASN ID element in the PASN Encrypted Data element in the second PASN frame with the PASN ID status field set to 0, indicating that the PASN ID has been recognized. AP-2 then assigns another PASN ID (pasnID2) and sends it to the non-AP STA in the PASN ID field in the Robust PASN ID element included in the PASN Encrypted Data element in the second PASN frame.”

(61.18) Change: “… AP1 in the IRM field in an IRM element in the PASN Encrypted Data element.”

To: “… AP1 in the IRM field in a Robust IRM element in the PASN Encrypted Data element.”

(61.24) Change: “Upon receiving IRM1 in first PASN frame, AP-2 may send an IRM element in the PASN Encrypted Data element in the second PASN frame with the IRM status field set to 0, indicating that the IRM has been recognized. The non-AP STA then provides another IRM (IRM2) to AP-2 in the IRM field in an IRM element in PASN Encrypted Data element in the third PASN frame.”

To: “Upon receiving IRM1 in first PASN frame, AP-2 may send a Robust IRM element in the PASN Encrypted Data element in the second PASN frame with the IRM status field set to 0, indicating that the IRM has been recognized. The non-AP STA then provides another IRM (IRM2) to AP-2 in the IRM field in a Robust IRM element in PASN Encrypted Data element in the third PASN frame.”

**References:**