IEEE P802.11
Wireless LANs

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| Resolution for CIDs 8083, 8251, 8127, 8269, 8270 |
| Date: 2016-07-08 |
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Abstract

This submission proposes resolution for CID 8083, 8251, 8127, 8269, 8270

Green indicates material agreed to in the group,

yellow material to be discussed, red material rejected by the group and

cyan material not to be overlooked.

The “Final” view should be selected in Word.

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| Identifiers | Comment | Proposed change |
| CID 8083Mark Rison20.4.3.2.12451.10 | "Possiblevalues are 0 or 1." -- that's a lucky coincidence, because the field is only 1 bit in size | Delete the cited text |

Discussion:

Well the statement is true, there are only two values for 1 bit.

Only use of this phrase in the Standard.

**Proposed Resolution**

ACCEPT

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| Identifiers | Comment | Proposed change |
| CID 8251Mark Rison10.23.3.41377.61 | It says "may experience" | Change to "might experience" |

Discussion:

“The TX-RX periods, the broadcast periods, and the interference periods of a mesh STA shall not be used for a new MCCAOP reservation with the mesh STA as transmissions in these periods **may experience** interference from the transmissions in the new MCCAOPs or **may** cause interference to them.”

I am always bewildered by the facination that this TG has with ‘may’ and ‘might’ and so I thought I would sort it out for myself.

“May’ and “might” both express the idea of possibility.

“I may go to the pub tonight.” - correct

“I might go to the pub tonight” - correct

Some say, but this is not modern interpretation, that “may” expresses a more likelihood that “might”.

“May” can also be used for permission:

“I may go to the pub tonight.” Could be that I am allowed to go to the pub tonight.

Hence in this situation ‘might’ is a better choice.

So back to the cited text

“…transmissions in these periods **may** experience interference.. .”

Clearly expresses idea of possibility and does not express any idea of permission. Hence, either “may’ or ‘might’ can be used.

What about the second use of may?

“…or **may** cause interference to them.” Again, expresses idea of possibility, and not of permission, hence “may” is correct.

**Proposed Resolution**

REJECT

 “may” in the cited text is used to express the idea of possibility and hence is correct. “May” and “might” are interchangeable in this usage so no real need to change from the original text.

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| Identifiers | Comment | Proposed change |
| CID 8127Mark Rison9.3.3.2623.25 | "Gaps might exist in the ordering of fields and elements within frames. The order that remains is ascending." is not very clear (the order of what?) but assuming it is referring to the order of elements by element ID, the second statement is wrong (e.g. | Delete the cited text |

Discussion:

The frame body consists of the fields followed by the elements defined for each management frame subtype. All fields and elements are mandatory unless stated otherwise **and appear in the specified, relative order**. STAs that encounter an element ID they do not recognize in the frame body of a received Management frame ignore that element and continue to parse the remainder of the management frame body (if any) for additional elements with recognizable element IDs. See 10.27.7 (Vendor specific element parsing). Unused element ID codes are reserved.

**Gaps might exist in the ordering of fields and elements within frames. The order that remains is ascending**.

In D5 I had a comment that noted that the “Order” of fields in, for example, the Beacon frame body is not adhered to and that “order’ does not, in practice, represent the order in which the IEs are transmitted. It seems to represent the order in which they were added to the Standard.

Hence, the cited statement if correct, is not adhered to. It seems to be trying to say that not all IEs need be present but the ones that are included should be in order. As I have determined by observation of many beacons and probes, this is not true.

Hence in addition to the proposed change we do need to sort this out.

**Proposed Resolution**

REVISED

At 623.18 delete “and appear in the specified, relative order”

At 623.25 delete “Gaps might exist in the ordering of fields and elements within frames. The order that remains is ascending.”

The frame body consists of the fields followed by the elements defined for each management frame subtype. All fields and elements are mandatory unless stated otherwise. STAs that encounter an element ID they do not recognize in the frame body of a received Management frame ignore that element and continue to parse the remainder of the management frame body (if any) for additional elements with recognizable element IDs. See 10.27.7 (Vendor specific element parsing). Unused element ID codes are reserved.

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| Identifiers | Comment | Proposed change |
| CID 8269Mark Rison9.4.2.1741076.48 | "The Estimated Air Time Fraction subfield is 8 bits in length and contains an unsigned integer that represents the predicted percentage of time, linearly scaled with 255 representing 100%, that a new STA joining the BSS will be allocated for PPDUs carryin | After the cited text add a "NOTE---This time is purely for the PPDUs and does not include overheads such as contention, IFS and protection frames." |

Discussion:

Full text is in **9.4.2.174 Estimated service parameters element**

“The Estimated Service Parameters element is used by a STA to provide information to another STA which can then use the information as input to an algorithm to generate an estimate of throughput between the two STAs.”

There are four Estimated Air Time Fraction fields, one for each AC.

“The Estimated Air Time Fraction subfield is 8 bits in length and contains an unsigned integer that represents the predicted percentage of time, linearly scaled with 255 representing 100%, that a new STA joining the BSS will be allocated for PPDUs carrying Data of the corresponding AC for that STA.”

Personally I am amazed that anyone thinks this is either useful or practical. As I have stated ad infinitum all these traffic indicators are useless as the situation changes all the time. Also this is useless Admission Control is in use and even then it is momentary plus why do it for all 4 ACs – QoS maybe but BK??? The only useful traffic predictor is QLoad which uses the ‘predicted traffic’ which is learnt over a week and is used to negaotiate sharing. Now with GB of throughput, why bother?

Rant over.

Is the comment right? Possibly but do we really need to point out that overhead is not included in the “calculation” and “indication” of available bandwidth which in practice will be useless anyway? If we add this note I am afraid that someone may think that this would be a careful calculation that actually means anything.

**Proposed Resolution**

REJECT

Although the proposed change is correct, its inclusion would convey a degree of accuracy that is not in fact present. The value is an estimate and how it is calculated a mystery.

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| Identifiers | Comment | Proposed change |
| CID 8269Mark Rison9.4.2.1741076.50 | "PPDUs carrying Data" is too vague (and the Data has bogus capitalisation) | Change the cited text to "PPDUs that contain at least one MPDU with the Type subfield equal to Data" (but see other comment about whether it's really just "at least one MPDU" and not "only MPDUs") |

Discussion:

“The Estimated Air Time Fraction subfield is 8 bits in length and contains an unsigned integer that represents the predicted percentage of time, linearly scaled with 255 representing 100%, that a new STA joining the BSS will be allocated for **PPDUs carrying Data** of the corresponding AC for that STA.”

Please see my previous rant on why it is not a good idea to pretend that this value is accurate or has precise calculations behind it.

But “PPDUs carrying data” does not trip off the tongue and is the only plcae used in the Standard.

“data frames” is used throughout (343) so why not keep it simple?

**Proposed Resolution**

REVISED

At 1076.51 replace “PPDUs carrying Data” with “data frames”