

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

Cl 00 SC 0 P8 L5 # 172
 Gunther, Craig Craig Gunther Consulti
 Comment Type TR Comment Status X
 References "personal identifiable information".
 SuggestedRemedy
 Use "personally" instead of "personal" to match the abbreviation defined in clause 4.
 Proposed Response Response Status O

Cl 1 SC 1 P18 L5 # 213
 Seaman, Mick Mick Seaman
 Comment Type ER Comment Status X
 We can remove the italicized "IMPORTANT NOTICE" text from this page. It appears from recent published documents that its inclusion in the boilerplate after the Title Page is sufficient.
 SuggestedRemedy
 Remove italicized text (lines 5 to 13).
 Proposed Response Response Status O

Cl 1 SC 1 P18 L18 # 215
 Seaman, Mick Mick Seaman
 Comment Type E Comment Status X
 Since we have not come up with anything additional for the Scope and Purpose text the editor's notes should be removed.
 SuggestedRemedy
 Remove the notes at line 18 and 23.
 Proposed Response Response Status O

Cl 1 SC 1 P18 L23 # 214
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 Based on conversations with people in the IEEE hierarchy around the time that this activity is started I believe there is significant risk that the existence of this Recommended Practice might form part of an attempt to position the IEEE as providing input to legislators on technical matters relating to privacy. This could easily result in the mistaken impression that following the recommendations could provide realistic privacy defenses against well resourced adversaries, and thus diminish regulatory efforts to safeguard privacy. Something needs to be said right at the front of the document to guard against such an eventuality - we can't expect those who would like a seat at the big tables to dig through the detail and come up with the right technical conclusions.

SuggestedRemedy
 Add text to clause 1 to expose the limits of what can be achieve. I suggest a clause 1.3 (possible titles include "Applicability" or "Technical limitations to privacy protection" with the following text:
 The practices described in this recommended practice cannot be expected to protect privacy against determined efforts by adversaries who have pervasive access to the communication media that a person might use, or who can control or operate devices that allocate resources for network communication based on authentication or authorization of a person or a personal device. Such adversaries can include organizations that a person could reasonably expect to be trustworthy. This technical recommendation is therefore not a substitute for privacy regulation, nor should its existence be taken as reducing any independently determined need for regulation. There are potential adversaries whose span of control and ability to carry out correlation and fingerprinting as described in this recommended practice is more restricted. Helping to protect personal information against such less powerful adversaries remains an important goal.

Proposed Response Response Status O

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Cl 3 SC 3 P20 L4 # 216
Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

The definition of 'Attack' is not consistent with the definition of 'Passive adversary' as the latter clearly envisions attacks where the adversary is passive. The definition of 'Active adversary' also qualifies the attack behavior. The text is also missing a word or two. The qualification 'in the context ... this document' is not necessary and should be omitted: the current IEEE Style rules call for definitions that are as widely applicable as possible and that can be abstracted from their defining standard without modification for inclusion in the standards dictionary. Definitions should therefore be succinct. In addition definitions should not include normative provisions for the standard/recommended practice in which they appear. This means that some of the other definitions in this clause should be shortened and the remainder of the document checked (and potentially updated) to see that it contains the further sentiments or envisaged consequences of the shortened definition. As a minor issue it is unclear whether the several mediums referred are several types of medium or several instances of possibly the same type: it is not necessary to spell out the 'one or more' at this level of detail (the potential ramifications are not explored in this recommended practice). We also need to distinguish an attack from an intended recipient of the PII.

SuggestedRemedy

Replace the definition of 'Attack' with:
"the actions taken by an adversary who accesses transmission media or network devices to obtain personally identifiable information that its owner does not wish to be known by that adversary".

Proposed Response Response Status O

Cl 3 SC 3 P20 L4 # 93
Congdon, Paul Huawei

Comment Type ER Comment Status D

The sentence does not make sense. Perhaps there is an additional 'or' in the sentence?

SuggestedRemedy

Change "acting on or several" to "acting on several"

Proposed Response Response Status W

PROPOSED ACCEPT.
Change to "acting on one or several mediums"

Cl 3 SC 3 P20 L6 # 173
Gunther, Craig Craig Gunther Consulti

Comment Type E Comment Status X

This comment is about consistency and ease of searching the document. You are using PII here, but spell it out in all other definitions that refer to PII. Lines 5, 13 & 14 use the phrase "personally indentifiable information". Page 21 uses PII in all places. Note that PII is listed as an abbreviation in clause 4.

SuggestedRemedy

Use PII throughout clause 3.

Proposed Response Response Status O

Cl 3 SC 3 P20 L6 # 217
Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

Definition should and can be briefer. Also the attack may aim at causing a respondent to disclose the target's PII, so the qualification after 'the attack' is unnecessary.

SuggestedRemedy

Replace the definition of 'Active adversary' with:
"an adversary who transmits frames as part of an attack."

Proposed Response Response Status O

Cl 3 SC 3 P20 L6 # 94
Congdon, Paul Huawei

Comment Type ER Comment Status D

We shouldn't use abbreviations such as PII here (at least not yet) Note that we aren't doing this for Eavesdropping for example. The abbreviation is used in Target, Threat an Threat Action as well. Be consistent, but prefer to not use the abbreviation.

SuggestedRemedy

Spell out PII

Proposed Response Response Status W

PROPOSED ACCEPT.

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

Cl 3 SC 3 P20 L7 # 218
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 Definition should and can be briefer. Text after the period is not part of the definition and should be moved to the main text: the introductory sentences of clause 7 would be an appropriate place (see later comment).
 SuggestedRemedy
 Replace the definition of 'Adversary' with:
 "a threat agent who is attempting to fingerprint one or more targets."
 Proposed Response Response Status O

Cl 3 SC 3 P20 L11 # 219
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 The definition of correlation given should be one that is generally applicable (making it consistent with current IEEE style objectives). Expressing its particular relevance to this recommended practice can be done as a note. For discussion of the background to the proposed definition see Wikipedia "Correlation and dependence".
 The suggested NOTE only provides a simple example. The correlations used may be more sophisticated, e.g. an application running on a device may transmit frames at characteristic intervals or in a characteristic pattern allowing the autocorrelation (for example) of transmission timing to be correlated with a pattern associated with that device, and the resulting correlation is then taken as one of a number to be correlated with a number of personal devices to find the best or an acceptable statistical match. Of course the actual computation carried out does not have to match (or even be aware of) this step by step description.
 SuggestedRemedy
 Replace the definition of 'correlation' with:
 "a statistical relationship between two variables."
 After the definition add a note as follows:
 "NOTE-In the context of this recommended practice an adversary can use correlations between frame fields and a particular personal device to identify the user of that device."
 Proposed Response Response Status O

Cl 3 SC 3 P20 L13 # 220
 Seaman, Mick Mick Seaman
 Comment Type T Comment Status X
 The definition of eavesdropping could be improved, making the definition itself more general (see other comments) but adding a note to explain what an adversary might learn in an 802 context. I believe, but not strongly, that we should define eavesdropping purely in relation to the transmission media (i.e. exclude observation of what occurs within a device). If we want to include the latter the proposed definition will need to be modified. In the proposed note I am trying to cover observation of such MAC operational details as scrambler seed use as well as what is just in the frames.
 SuggestedRemedy

Replace the definition of 'Eavesdropping' with:
 listening to communication without the consent of the communicating parties.
 After the definition add a note as follows:
 "NOTE-In the context of this recommended practice eavesdropping involves observing communications supported by IEEE 802 MAC procedures and can include observation of the details of MAC operation as well as those of addresses, protocol identifiers, data, and timing of transmitted frames."
 Proposed Response Response Status O

Cl 3 SC 3 P20 L15 # 221
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 The definition of fingerprinting should include the identification of activities [application usage]. It is also unclear to me whether we are really concerned with fingerprinting a person rather than just a personal device, though it could be argued that the combination of device and activity fingerprinting can identify the device's user and not just the device itself.
 SuggestedRemedy
 In the definition of 'Fingerprinting' replace "a device or a person" with "a person, a device, or an activity".
 Proposed Response Response Status O

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Cl 3 SC 3 P20 L17 # 222
Seaman, Mick Mick Seaman

Comment Type E Comment Status X

Unclear what is meant here by "or a structure .." and indeed what the 'structure' is, and what is meant by 'the medium' here. Is it particular LAN (MAC service instance), attachment to a LAN (a port). Chasing down these vague ideas into something that has concrete meaning in IEEE Std 802, IEEE Std 802.1AC, or more than one MAC specification is likely to be difficult. The definition should be reduced as what is important in the fingerprinting context is that an identifier field with a possible variation in value is or can be present. It is also unclear that is meant by "the specification". Although I am suggesting a change rather than deletion of this definition it is unclear to me why we have to define both 'Identifier' and 'Information element' or alternatively why an 'Information element' refers to 'protocol information' rather than 'one or more identifiers'.

SuggestedRemedy

Replace the definition of 'Identifier' with:
'a name, address, label, or distinguishing index, specified by an IEEE 802 standard'.

Proposed Response Response Status O

Cl 3 SC 3 P20 L19 # 223
Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

Unclear why the information element has to be 'self-contained' or what 'self-contained' means in this definition.

SuggestedRemedy

Delete "and is self-contained".

Proposed Response Response Status O

Cl 3 SC 3 P20 L22 # 224
Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

Description of assumptions about passive adversary behavior should not be part of the definitions clause but should be stated elsewhere in the text. Also reference should be made to a possible attack, not to a particular (not defined) attack.

SuggestedRemedy

Replace "the attack" with "an attack". Delete the sentence beginning "A passive adversary is assumed"

Proposed Response Response Status O

Cl 3 SC 3 P20 L24 # 225
Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

A set of elements does not have to repeat in order to be a pattern, except in the tedious sense that pattern matching presumes the prior creation of a template that includes the pattern as at least one possibility.

SuggestedRemedy

Delete 'repeating'.

Proposed Response Response Status O

Cl 3 SC 3 P20 L25 # 203
Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

Definition could and should be briefer: "at some point after the time where it was first used" adds nothing to repeated; the first use might be understood to refer to a subset of possible items, so subsequent use does not have to be limited to "the same structure etc.". It is hard to be precise and brief when distinguishing clear reuse and accidental use of the same identifier when the scope of possible reuse is as open ended as "the same structure ..". What we are concerned about here is reuse by a device (possibly a personal device). Reuse by a person falls under reuse by a device associated with that person, etc. The present definition does not complement the current definition of 'Temporary identifier', since reuse once would match the definition for persistence.

SuggestedRemedy

Replace the definition of 'Persistent identifier' with:
"an identifier that is reused by a device or by another device associated with the same person or group of persons for a indefinite period".

Proposed Response Response Status O

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Cl 3 SC 3 P20 L27 # 204
Seaman, Mick Mick Seaman

Comment Type E Comment Status X

The word "person" is used ~55 times in this draft, and the word "individual" ~40 times. I believe they are used with identical meaning, and the change from one to another is purely 'elegant variation' in the text. Such variation is unhelpful, particularly when trying to be precise and when encountered by non-native speakers of English as more may be read into the difference than intended. The definition is unnecessarily long, the text after the comma is easily inferred from what has already been said or can be included in a later clause.

SuggestedRemedy

Use 'person' throughout the draft, also replacing 'group of individuals' with 'group of people', and 'physical individual' with 'person'. Delete the text after the comma in this definition.

Proposed Response Response Status O

Cl 3 SC 3 P20 L27 # 112
Weis, Brian Cisco Systems

Comment Type E Comment Status X

Unless there is a strict grammatical difference between the usage of the P word in PII and PCI, they should be consistent (i.e., the same word). There does not seem to be a consensus in literature whether the P word should be "Personally" or "Personal". My opinion is that Personal is better in both cases.

SuggestedRemedy

Either change "Personally Identifiable Information" to "Personal Identifiable Information" (my preference), or change P word in PCI to "Personally". (Note: If PII is changed, then its abbreviation in Clause 4 should also be changed.)

Proposed Response Response Status O

Cl 3 SC 3 P20 L30 # 205
Seaman, Mick Mick Seaman

Comment Type ER Comment Status X

Definition is unnecessarily long.

SuggestedRemedy

Delete the second sentence.

Proposed Response Response Status O

Cl 3 SC 3 P20 L30 # 107
Andersdotter, Amelia amelia@article19.org

Comment Type T Comment Status X

The term "Personal Correlated Information (PCI)" is defined here, but is only used three times in Clause 6 in places where it doesn't make a lot of sense to distinguish it from PII. I suggest it is removed (and that follow-on mentions are also removed).

SuggestedRemedy

As in comment.

Proposed Response Response Status O

Cl 3 SC 3 P20 L33 # 206
Seaman, Mick Mick Seaman

Comment Type ER Comment Status X

Definition is unnecessarily long.

SuggestedRemedy

Delete the second sentence. If the information is really needed it should be in main text (i.e. not in the definitions clause).

Proposed Response Response Status O

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CI 3 SC 3 P20 L33 # 128
 Cummings, Rodney National Instruments

Comment Type TR Comment Status X

This definition of personal device seems slightly incorrect. If I understand correctly, this document is concerned with the PII that is exchanged in network frames. Some devices do not exchange PII, even if a single person uses the device. For example, a PLC (factory-floor controller) can be used by a single person, but that device does not store PII (e.g. no Google or Apple accounts), and therefore it does not exchange PII in network frames. I would not consider a PLC to be a "personal device" per this document. For similar reasons, I would not consider an automotive engine controller to be a "personal device", because the user (driver) has zero private information on that device.

SuggestedRemedy

Replace
 "a device used by a single individual or a small group of individuals, such that identification of the device also allows identification of its user or group of users."
 with
 "a device that exchanges PII in network frames, such that identification of the device also allows identification of its user or group of users."
 On page 21 line 7 (shared service device), replace
 "a device used by a group of individuals large enough that identification of the device does not easily allow identification of its user or group of user."
 with
 "a device that does not exchange PII in network frames, such that the device does not easily allow identification of its user or group of users."

Proposed Response Response Status O

CI 3 SC 3 P21 L3 # 207
 Seaman, Mick Mick Seaman

Comment Type T Comment Status X

Definition is unnecessarily long. The second sentence is not properly part of the definition, and should be moved to main text if really needed. The third sentence is a note and should be shown as such. It would be helpful to clarify what is meant by "responds to the target".

SuggestedRemedy

Delete the second and third sentences of the definition. Add a note after the definition as follows:
 "NOTE- Use of the term respondent is not conditional on its transmitting a frame to the target.

Proposed Response Response Status O

CI 3 SC 3 P21 L7 # 211
 Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

The definition of 'Temporary identifier' does not strictly complement that for "persistent identifier". There are also problems with the notion of "period shorter than that over which the service is provided" as it depends on a particular view of service (we are not talking about the MAC service here) and when it is provided (following association and authentication) that is wireless centric. I don't think a truly service detail independent definition of 'temporary' is possible, the real point being that the use period is short enough to mitigate some risks (e.g. location tracking) and this is achieved by changing the identifier whenever the operation of MAC and higher layer protocols permit.

SuggestedRemedy

Replace the definition of "Temporary identifier" with:
 "an identifier that take on a fresh value, unrelated to previously used values, whenever the operation of media access control (MAC) and higher layer protocols permit."

Proposed Response Response Status O

CI 3 SC 3 P21 L7 # 209
 Seaman, Mick Mick Seaman

Comment Type E Comment Status X

There is no definition of "Risk". The term is used in this draft and needs to be define because (as discussed in the task group) there are two different conventions for relating "Risk" to "Threat" and we need to state which is being used to facilitate development of the draft as well being clear in the end product.

SuggestedRemedy

Add the following definition and following note:
 "Risk: the potential for loss or damage arising from a threat.
 NOTE-The assessment of risk takes into account the probability of threat exploitation, including costs that might deter an adversary, and the possible impact of exploitation."

Proposed Response Response Status O

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Cl 3 SC 3 P21 L7 # 210
 Seaman, Mick Mick Seaman
 Comment Type E Comment Status X
 SuggestedRemedy
 Replace "individuals" with "people" as per prior comment and "user." with "users."
 Proposed Response Response Status O

Cl 3 SC 3 P21 L8 # 113
 Weis, Brian Cisco Systems
 Comment Type ER Comment Status X
 Grammatical error.
 SuggestedRemedy
 Change "group of user" to "group of users".
 Proposed Response Response Status O

Cl 3 SC 3 P21 L9 # 208
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 The frames are not the target and it is always a personal device (at least in the 802 context) from which PII is to be obtained, since the adversary can only interact with a person through the latters use of a personal device.
 SuggestedRemedy
 Replace "the person (or ...)" with "the personal device".
 Proposed Response Response Status O

Cl 3 SC 3 P21 L9 # 114
 Weis, Brian Cisco Systems
 Comment Type ER Comment Status X
 The parenthetical clause suggests that the frames themselves can be the Target. I believe it is more correct to say that the frames are used to obtain PII about the Target. The proposed change is also in line with the usage of "target devices" in Clause 5.2.
 SuggestedRemedy
 Change the definition to be something like "the person (or machine associated with a person) from which the adversary wishes to obtain PII. The PII may be obtained from frames emitted from the mahine associated with the Target."
 Proposed Response Response Status O

Cl 3 SC 3 P21 L14 # 212
 Seaman, Mick Mick Seaman
 Comment Type E Comment Status X
 The definition of Tracking does not match the idea of tracking a person. It also leaves out the possibility of tracking by using 802 MAC information other than contained iEn identifiers or information elements in frames (unless we redefine information element), e.g. scrambler seed observation.
 SuggestedRemedy
 Replace the definition of 'Tracking' with:
 "the process of fingerprinting the operation of a personal device to determine its location and changes in location".
 And add the following note:
 "NOTE-Passive and active adversaries can track personal devices by fingerprinting their use of identifiers and information elements their use of MAC procedures."
 Proposed Response Response Status O

Cl 4 SC 4 P22 L7 # 195
 Farkas, János Ericsson
 Comment Type E Comment Status X
 PCI is missing from the Abbreviations.
 SuggestedRemedy
 Add PCI
 Proposed Response Response Status O

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Cl 4 SC 4 P22 L 8 # 121
 Weis, Brian Cisco Systems
 Comment Type ER Comment Status X
 PCI is referred to in the document, but is missing from this list
 SuggestedRemedy
 Add PCI.
 Proposed Response Response Status O

Cl 5 SC 5.2 P23 L 18 # 129
 Cummings, Rodney National Instruments
 Comment Type T Comment Status X
 This sentence is phrased differently than 5.3, but that doesn't seem to be needed.
 SuggestedRemedy
 Replace sentence in 5.2 with "IEEE 802 standards that define a service or services that can be used by target devices should take into account the general privacy principles described in Clause 8."
 Proposed Response Response Status O

Cl 5 SC 5.1 P23 L 16 # 155
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 "Not all indicated possibilities are desirable."
 SuggestedRemedy
 Most to all are not (at least for the target). Did you really mean "desirable"?
 Proposed Response Response Status O

Cl 5 SC 5.2 P23 L 18 # 196
 Farkas, János Ericsson
 Comment Type TR Comment Status X
 It does not seem feasible to IEEE 802. It is not clear how to add privacy subclause or annex for example to an amendment to an IEEE 802 base standard like 802.1Q, 802.3, or 802.11.
 SuggestedRemedy
 Delete subclause 5.2.
 Proposed Response Response Status O

Cl 5 SC 5.1 P23 L 23 # 226
 Seaman, Mick Mick Seaman
 Comment Type E Comment Status X
 Trivial editorial. Space needed above paragraph 'a'). Add 6 points in paragraph designer.
 SuggestedRemedy
 As per comment.
 Proposed Response Response Status O

Cl 5 SC 5.2 P23 L 18 # 156
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 "provide"
 SuggestedRemedy
 Change to "provides".
 Proposed Response Response Status O

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

CI 5 SC 5.2 P23 L18 # 130
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 The phrase "target device" is unclear, because "target" is defined as a person (or a frame), which is not a device. The term "personal device" is more precise.
 SuggestedRemedy
 Replace "target device" with "personal device" in the following locations:
 - page 23 line 18
 - page 23 line 21
 Proposed Response Response Status O

CI 5 SC 5.3 P23 L23 # 131
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 Item a) implies that the standard will publish an interrogation. That is not appropriate for publication, because the questions are intended to help with standard development, and that is a different goal than helping readers of the standard.
 SuggestedRemedy
 Replace item a) with
 "During development of the standard, answers to the questions posed in 9.1 should be created. For answers that are applicable to readers of the standard, descriptive text should be provided in the published clause/annex."
 Proposed Response Response Status O

CI 5 SC 5.2 P23 L19 # 175
 Gunther, Craig Craig Gunther Consulti
 Comment Type TR Comment Status X
 The reference to Clause 8 is not a "clickable" link. I've noticed the same thing in other places in the document where other clauses are referenced. Is the text "Clause 8" manually entered and not a link to the actual clause? If so, this will make this document hard to maintain if a new clause is inserted in the future. This is also found on page 37 line
 SuggestedRemedy
 Create clause references (clause # and description) as internal cross references and generate associated PDF so links are clickable.
 Proposed Response Response Status O

CI 5 SC 5.3 P23 L24 # 198
 Farkas, János Ericsson
 Comment Type TR Comment Status X
 An IEEE 802 standard does not provide implementation details, that is left for the implementer.
 SuggestedRemedy
 Delete item b) from subclause 5.3
 Proposed Response Response Status O

CI 5 SC 5.3 P23 L7 # 197
 Farkas, János Ericsson
 Comment Type TR Comment Status X
 It does not seem feasible to IEEE 802 standards to have such clauses. It is very problematic for instance for 802.1Q, 802.3, and 802.11. Who, which project would develop such clauses for the base standards? It seems to be tremendous work. What would happen with the amendments? An amendment cannot extend non-existent privacy clause.
 SuggestedRemedy
 Delete subclause 5.3. Actually, with the deletion of both 5.2 and 5.3, Clause 5 should be deleted; which would really make the document a pure recommendation. P802.1CF is another recommended practice document; P802.1CF does not have conformance Clause, typically Clause 5. 802.1E should not either have Clause 5.
 Proposed Response Response Status O

CI 5 SC 5.3 P23 L25 # 199
 Farkas, János Ericsson
 Comment Type TR Comment Status X
 An IEEE 802 standard does not provide network design; that is left for the operator of the network as it depends on deployment cases and many other factors.
 SuggestedRemedy
 Delete item c) from subclause 5.3
 Proposed Response Response Status O

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Cl 6 SC 6 P24 L1 # 227
 Seaman, Mick Mick Seaman
 Comment Type E Comment Status X
 No need to repeat "rationale" in the first sentence, just say what the recommended practice does. Sentence can and should be briefer.
 SuggestedRemedy
 Replace the text prior to "in the context of IEEE 802" with:
 "This recommended practice provides a framework to assist the implementation of privacy by design". Replace "This Recommended Practice document" with "It" at the beginning of the following sentence.
 Proposed Response Response Status O

Cl 6 SC 6 P24 L3 # 176
 Gunther, Craig Craig Gunther Consulti
 Comment Type E Comment Status X
 Typo?
 SuggestedRemedy
 Replace "can be more easily be implemented" by "can be more easily implemented"
 Proposed Response Response Status O

Cl 6 SC 6 P24 L2 # 228
 Seaman, Mick Mick Seaman
 Comment Type E Comment Status X
 Trivial editorial. As per usage in the IEEE Style guide in references to standards in general and self-referential reference, the word standard is not capitalized, e.g. "this standard", similarly we should not capitalize "recommended practice" (except in references, where as with references to standards the full capitalized name is used.
 SuggestedRemedy
 Replace "Recommended Practice" with "recommended practice" throughout the draft.
 Proposed Response Response Status O

Cl 6 SC 6 P24 L5 # 177
 Gunther, Craig Craig Gunther Consulti
 Comment Type E Comment Status X
 This sentence is a little hard to parse. It starts out by saying what the standard does do and then it uses "and" to say what the standard does not do. I'm not sure if the word "not" is a typo, or should the "and" be replaced by "however it" or something similar.
 SuggestedRemedy
 Adjust as appropriate.
 Proposed Response Response Status O

Cl 6 SC 6 P24 L3 # 95
 Congdon, Paul Huawei
 Comment Type ER Comment Status D
 extra 'be' in the sentence
 SuggestedRemedy
 remove the extra 'be'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl 6 SC 6 P24 L7 # 96
 Congdon, Paul Huawei
 Comment Type ER Comment Status D
 extra 'can' in the sentence
 SuggestedRemedy
 remove the extra 'can'
 Proposed Response Response Status W
 PROPOSED ACCEPT.

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Cl 6 SC 6 P24 L7 # 178
 Gunther, Craig Craig Gunther Consulti
 Comment Type E Comment Status X
 The word "can" after the common does not seem to be correct. Or perhaps the sentence just needs to be cleaned up a bit to make it more readable.
 SuggestedRemedy
 I have no recommendation because I'm not sure what is meant to be said here.
 Proposed Response Response Status O

Cl 6 SC 6 P24 L7 # 119
 Weis, Brian Cisco Systems
 Comment Type ER Comment Status X
 Grammatical error.
 SuggestedRemedy
 Change "can conduct" to "conduct". (The "can" conflicts with "may" ealier in the sentence.)
 Proposed Response Response Status O

Cl 6 SC 6 P24 L7 # 200
 Farkas, János Ericsson
 Comment Type E Comment Status X
 PII is not resolved at first occurrence in the body text.
 SuggestedRemedy
 Resolve PII at frst occurrence
 Proposed Response Response Status O

Cl 6 SC 6 P24 L15 # 229
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 The very general disclaimer in the paragraph beginning pg. 24 line 6 is really Overview material. It should be move to Clause 1. I suggest a new clause 1.3 "Privacy definitions and the need for privacy". Further in TG discussions we have returned from time to time to the basic case for privacy. It appears that general understanding of basic privacy needs is till weak, and the general literature (even in supposedly authoritative sources) appears (at least to me) to make a very weak case. It is worth capturing some of the rationale here. It is also noteworthy that the very general disclaimer

SuggestedRemedy
 Move the third paragraph of the introductory material to clause 6 (the paragraph currently ending pg. 24 line 18) to a new clause 1.3 or 1.4 "Privacy definitions and the need for privacy" and add the following text:
 "Historically it has been argued that individuals who are law-abiding have no need for privacy protection: 'nothing to hide, nothing to fear'. Experience has shown this judgment to be naive in a number of ways, including the following:
 - social disapproval, even by a small minority, of purely legal activity or opinions, can be exploited to an attacker's financial or other advantage while inflicting considerable distress on individuals whose privacy has been compromised.
 - individuals are often required to use personal information as a last resort or supplementary proof of identity when communicating with an organization, while possession of that information is often taken as authenticating organizational representatives: privacy breaches thus facilitate both 'identity theft' and 'phishing'.
 - data on personal preferences and associations can be used to manipulate the opinions and behavior of individuals who are unaware that the information delivered to them differs from that available to others."

Proposed Response Response Status O

Cl 6 SC 6 P24 L19 # 230
 Seaman, Mick Mick Seaman
 Comment Type ER Comment Status X
 Remove "Additionally," as the text of the paragraph is not a logical addition to the preceding paragraph. Remove ", or traffic analysis might not be inferred" as that is an unnecessary and weak addition to the clear "confidentiality so that data is not exposed".
 SuggestedRemedy
 As per comment.
 Proposed Response Response Status O

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Cl 6 SC 6 P24 L19 # 231
Seaman, Mick Mick Seaman

Comment Type T Comment Status X

The three sentences beginning "Privacy is not limited to .." are not satisfactory. What needs to be said is:

- this recommendation should be used in conjunction with others that specify design and implementation measures to protect communication and reduce disclosure of PII and PCI by network protocols and applications that make use of IEEE 802 LANs.
- an adversary cannot be expected to confine an attack to threats exposed by any one specification or set of specifications and can combine information acquired with that discovered by other methods, e.g. by video surveillance. This would be better stated in Clause 1, in the (proposed in another comment) Applicability clause.

SuggestedRemedy

Add the following text following the previously proposed 1.3 'Applicability' text:
 "An adversary cannot be expected to confine attacks to the threats exposed by any one specification, set of specification, or layers in a network reference model. Measures developed in accordance with this recommended practice should be used in conjunction with others that specify design and implementation measures to protect communication and reduce disclosure of PII and PCI by the network protocols and applications that make use of IEEE 802 LANs. Risk analysis should also take into account the ability of adversaries to combine network information with that discovered by other methods, e.g. the use of video surveillance to reduce the number of potential targets to be fingerprinted."
 Reduce the text in the Clause 6 paragraph at pg. 24 line 19 to the following, and append it to the first paragraph (i.e. prior to the paragraph beginning "In particular"):
 "This recommended practice does not address security specifically and does not consider PII that transits as data payload through IEEE 802 technologies (except for identifying the need to support security with confidentiality so that data is not exposed). It is understood that data communication can be protected and secured, and that such data payload can be protected and encrypted. A security violation (weak key or comprised key, for example) is likely to result in both security and privacy violations."

Proposed Response Response Status O

Cl 6 SC 6 P24 L43 # 201
Farkas, János Ericsson

Comment Type E Comment Status X

PCI is not resolved at first occurrence in the body text.

SuggestedRemedy

Resolve PCI at frst occurrence

Proposed Response Response Status O

Cl 6 SC 6.1 P24 L29 # 232
Seaman, Mick Mick Seaman

Comment Type ER Comment Status X

This clause (6.1) focuses on establishing that privacy in this recommended practice concerns PII and PCI, the title of the clause should be changed to reflect that.

SuggestedRemedy

Change the clause title to 6.1 Personal information.

Proposed Response Response Status O

Cl 6 SC 6.1 P24 L30 # 97
Congdon, Paul Huawei

Comment Type E Comment Status X

Elsewhere we use 'physical individual'. Is this what we mean? This is the only place were 'natural person' is used

SuggestedRemedy

change to 'physical individual'

Proposed Response Response Status O

Cl 6 SC 6.1 P24 L31 # 233
Seaman, Mick Mick Seaman

Comment Type E Comment Status X

This clause introduces information that can identify a person and information about that person. The acronyms PII and PCI should be mentioned.
 [I note that in some privacy discussions the term "PII" is used to exhaustion without much attention to whether it is information used to identify a person or information about a person who may or may not have been identified (yet). The distinction is important in the context of this standard.]

SuggestedRemedy

After "directly or indirectly identifies an individual" insert "(PII)" and after "activity" at the end of the paragraph insert "(PCI)".

Proposed Response Response Status O

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

Cl 6 SC 6.1 P24 L37 # 120
 Weis, Brian Cisco Systems
 Comment Type ER Comment Status X
 Nit
 SuggestedRemedy
 Change "802 protocol" to "IEEE 802 protocol".
 Proposed Response Response Status O

Cl 6 SC 6.1 P25 L4 # 234
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 The single sentence paragraph "Additionally, device identification ... By following .." is nowhere justified, and not credible except in cases of design stupidity.
 SuggestedRemedy
 Delete the paragraph.
 Proposed Response Response Status O

Cl 6 SC 6.1 P24 L43 # 108
 Andersdotter, Amelia amelia@article19.org
 Comment Type E Comment Status X
 The use of PCI in this sentence probably doesn't add to the clarity of the statement. Remove.
 SuggestedRemedy
 As in comment.
 Proposed Response Response Status O

Cl 6 SC 6.1 P25 L5 # 109
 Andersdotter, Amelia amelia@article19.org
 Comment Type E Comment Status X
 The use of PCI in this sentence probably doesn't add to the clarity of the statement. Remove.
 SuggestedRemedy
 As in comment.
 Proposed Response Response Status O

Cl 6 SC 6.1 P24 L43 # 235
 Seaman, Mick Mick Seaman
 Comment Type ER Comment Status X
 PII and PCI are both naturally plural and are therefore not as a whole associated with a subset of identifiers.
 SuggestedRemedy
 Replace "and their potentially associated PIIs or PCIs" with "and any associated PII and PCI". Also replace "empowered with the ability to" with "authorized to", and replace "Such ability" with "This" in the following sentence.
 Proposed Response Response Status O

Cl 6 SC 6.1 P25 L6 # 236
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 The paragraph applies to the collection of both PII and PCI.
 SuggestedRemedy
 Replace the first instance of PII with PII and PCI, and the following instances in this paragraph and the next paragraph with "information". Also replace "might" with "can" in the following paragraph.
 Proposed Response Response Status O

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Cl 6 SC 6.2 P25 L16 # 240
 Seaman, Mick Mick Seaman

Comment Type ER Comment Status X

Patterns are not mentioned in the text of 6.2. Change the title of 6.2 (see other comment proposing to renumber as 6.3) to "Correlation and fingerprinting" or (better) simply to "Fingerprinting".

SuggestedRemedy
 As per comment.

Proposed Response Response Status O

Cl 6 SC 6.2 P25 L16 # 238
 Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

The order of clauses 6.2 and 6.3 needs to be reversed. Currently 6.2 talks as if 802 elements can be directly associated with a person. This is not true: devices operate 802 and higher layer protocols. Moreover much of what is said (or the consequences thereof) in clauses 7, 8, and 9 is only applicable to personal devices and much of that only applicable to mobile personal devices. It is therefore important to introduce the concept of personal device before talking about 802 elements identifying a person.

SuggestedRemedy
 Swap the order of 6.2 and 6.3.

Proposed Response Response Status O

Cl 6 SC 6.2 P25 L17 # 241
 Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

The possibility is of identifying a personal device. The two steps involved i.e. (a) observed data to device, (b) device to person, have to spelled out to make it clear what is happening and what the properties of what is being determined are. The relationship is confusingly split between the first and third paragraphs of 6.2. The suggested remedy attempts to combine existing text while making the steps clear. I have also tried to be clearer about what is being suggested in the original text by "This identification can be used locally ..". We need to mention "mobile personal device" here since the draft as a whole is in danger of assuming that all personal devices are mobile and making recommendations that are not relevant to fixed location personal devices.

SuggestedRemedy

Replace the first paragraph of 6.2 with:
 "A device can be identified by its use of observable IEEE 802 information elements and procedures. The correlation can be direct (the value of a single IEEE 802 element identifying a single device) or indirect (the values of several IEEE 802 elements observed and analyzed together implying the use of a particular device). The correlation can be strong enough to for subsequent recognition based on a subset of its elements. PII can be exposed even if the correlation is imperfect, if the probability of correct identification is sufficient to be useful to an adversary.

The correlation between information elements and an individual device is called a device fingerprint, and its determination is called device fingerprinting. If the device is a personal device, successful device fingerprinting effectively labels a person or a small group of people. The fingerprint can be based on information that is ephemeral, e.g. use of successive values of a sequence number in a protocol, or can be persistent, using identifiers that remain the same each time the device is used. A persistent fingerprint can be used to track the location of a mobile personal device and hence the location of a person over a long prior of time, and can help an adversary establish the relationship between the fingerprint and a person's identity."

Proposed Response Response Status O

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Cl 6 SC 6.2 P25 L17 # 237
 Seaman, Mick Mick Seaman
 Comment Type ER Comment Status X
 Wording of this sentence is a little strange. It appears to be redefining the word "correlation" giving it a special meaning in this document. That is confusing and unnecessary.
 SuggestedRemedy
 Replace "represents the possibility to identify" with "offers the possibility of identifying" or "presents the possibility of identifying".
 Proposed Response Response Status O

Cl 6 SC 6.2 P25 L23 # 242
 Seaman, Mick Mick Seaman
 Comment Type E Comment Status X
 The beginning of the first sentence of the present second paragraph could be usefully abbreviated to allow further sentences or paragraphs to be added on related topics lessen the effect of repeating preambles of the form "and another thing".
 SuggestedRemedy
 Replace "In addition to identification of a physical individual" with "As well as identifying a person" and "personal attributes of this individual" with "their personal attributes". Replace "protocols elements" with "protocol elements".
 Proposed Response Response Status O

Cl 6 SC 6.2 P25 L25 # 122
 Weis, Brian Cisco Systems
 Comment Type TR Comment Status X
 The statement that a "MAC address ... can reveal the model of 26 the device ..." is probably only true if a Universal Address is used.
 SuggestedRemedy
 Replace "MAC address" with "globally unique MAC address", "Universal MAC Address", or something similar.
 Proposed Response Response Status O

Cl 6 SC 6.2 P25 L26 # 243
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 The possibility of fingerprinting activities should be mentioned.
 SuggestedRemedy
 Add the following sentence at the end of this paragraph:
 "Network applications and activities supported by the device can result in a characteristic usage pattern of IEEE 802 protocol elements, allowing those applications to be fingerprinted with the additional possibility of exposing details of their use. For example, the sizes of successive packets sent by some financial websites can allow individual webpages to be identified and the size of account balances and transactions to be estimated, even if the data in the packets is unknown to an adversary. The repeated use of specific applications can help an adversary fingerprint a device."
 Proposed Response Response Status O

Cl 6 SC 6.2 P25 L27 # 123
 Weis, Brian Cisco Systems
 Comment Type TR Comment Status X
 The text should be consistent in using the defined terms in Clause 3 whenever possible.
 SuggestedRemedy
 Replace "individual device" with "Personal device".
 Proposed Response Response Status O

Cl 6 SC 6.2 P25 L32 # 157
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 "strict correlation statistical threshold"
 SuggestedRemedy
 Please explain this expression / sentence. Is there an "of " missing?
 Proposed Response Response Status O

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Cl 6 SC 6.2 P25 L 33 # 244
 Seaman, Mick Mick Seaman
 Comment Type ER Comment Status X
 Correlation that identifies a person's attributes or activities should not be omitted.
 SuggestedRemedy
 Replace "can enable an association to a physical individual" with "can facilitate an association with a person, their attributes, or their activities."
 Proposed Response Response Status O

Cl 6 SC 6.3 P25 L 36 # 133
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 The description of personal device seems slightly incorrect. Please refer to the comment on the definition of "personal device" in clause 3.
 SuggestedRemedy
 Make changes to this subclause to reflect the changes to the definitions of "personal device" and "shared service device".
 Proposed Response Response Status O

Cl 6 SC 6.2 P25 L 34 # 245
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 Strictly speaking it is not just the task or working group that develops a standard, the sponsor ballot pool is also significant. We should not dissect the process. Separately demanding a documented case-by-case basis for each possible adversary is simply not realistic. The run in "For this reason," is unnecessary. Forward note: the text in later clauses warning against including options in a standard that result in a easily fingerprinted range of protocol element use and values needs considerable strengthening.
 SuggestedRemedy
 Replace "For this ... adversary." with:
 "Standards developers should assess the risk associated with correlations making use of protocol element values."
 Proposed Response Response Status O

Cl 6 SC 6.3 P25 L 42 # 239
 Seaman, Mick Mick Seaman
 Comment Type ER Comment Status X
 "associated to" should be "associated with"
 SuggestedRemedy
 Correct as per comment in lines 42 and 43.
 Proposed Response Response Status O

Cl 6 SC 6.2 P25 L 34 # 132
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 This sentence provides an action item for a working or task group, with no clear description as to what it means, and how the "statistical threshold" is computed. The document provides no examples of this computation. Without sufficient description and examples, it is inappropriate to place this action item on others.
 SuggestedRemedy
 Remove the last sentence of this paragraph.
 Proposed Response Response Status O

Cl 6 SC 6.3 P25 L 43 # 110
 Andersdotter, Amelia amelia@article19.org
 Comment Type E Comment Status X
 The use of PCI in this sentence probably doesn't add to the clarity of the statement. Remove.
 SuggestedRemedy
 As in comment.
 Proposed Response Response Status O

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<i>Cl</i> 7	<i>SC</i> 7	<i>P27</i>	<i>L1</i>	# 246
Seaman, Mick		Mick Seaman		
<i>Comment Type</i>	ER	<i>Comment Status</i> X		
As the content of this clause (7) has evolved, the clause title is no longer accurate, it should be reduce to simply "Privacy threats".				
<i>SuggestedRemedy</i>				
As per comment.				
<i>Proposed Response</i>	<i>Response Status</i> O			

<i>Cl</i> 7	<i>SC</i> 7	<i>P27</i>	<i>L2</i>	# 247
Seaman, Mick		Mick Seaman		
<i>Comment Type</i>	TR	<i>Comment Status</i> X		
PII exposure is not limited to the content of frames. The operation of the MAC protocols themselves can identify a device - identifying an 802.11 via distinctive scrambler seed behavior is one example. The rather short form of this introductory sentence also suggests that device identifying information is the same as PII which is not exactly true - the difference is important, identifying shared devices does not expose PII not does simply identifying the location of non-mobile devices. A short summary of part of what is (or has to be) said in clause 6 is worth repeating and might address concerns as to the potentially over broad application of these recommendations. It is also worth noting in the introductory material that the location of (or constraints on the location of) an attacker is an important characteristic of each potential exposure.				
<i>SuggestedRemedy</i>				
Replace the introductory paragraph of clause 7 with the following:				
"IEEE 802 LAN standards specify the operation of media access control (MAC) methods and protocols that support frame-based network communication. MAC procedures and various protocol frame formats and fields can be used to identify personal devices, their attributes, and their use to support specific networking applications and activities. As described in Clause 6, an adversary can use this information to obtain PII and PCI. The location of mobile personal devices and thus presumably the location of the person using that device can be tracked. The fact that users of personal devices are communicating with each other can be detected. A person's behavior can be monitored.				
This clause describes (7.1 - 7.nn) some of the protocol elements and MAC characteristics that can be exploited by an adversary. It makes no claim to be an exhaustive list of privacy threats related to current IEEE 802 standards and standards under development.				
An adversary can require access to the medium supporting the MAC for an individual LAN (e.g. near enough to the target for adequate radio reception in the case of a wireless medium) to exploit some of the threats described. To exploit others access to any LAN in part of a bridge network is sufficient, while the information associated with others is potentially available throughout the Internet. Some threats require, or are more effectively exploited, by an active adversary which can discourage an adversary who does not wish to be detected.				
"				
<i>Proposed Response</i>	<i>Response Status</i> O			

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

CI 7 SC 7 P29 L14 # 253
 Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

A large part of the discussion of device identification in this draft relates to tracking the location of a person or persons and the use of mobile personal devices. There is however an important case where the device itself is not mobile and where the fact that it is being used at all (or more or less actively) indicates that a person (or one of a small number of persons) is present at a location: 'at home' or 'in the office' for example.

SuggestedRemedy

Ensure that the 7.n clauses properly identify threats that are particular to mobile personal devices and also mention the location inferences that can be drawn from the simple presence of, or change in the spectrum of, frame traffic where fixed personal devices are concerned. State that, in the interests of retaining the statistical multiplexing gains of frame based communication, that we propose that nothing be done about this threat.

Proposed Response Response Status O

CI 7 SC 7 P29 L14 # 251
 Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

The timing of frames transmitted by devices that support TSN (Time-Sensitive Networking) application is constrained by the various ways in which bandwidth is guaranteed for these devices. The resulting transmission timing can facilitate the association of frames with a particular device and thus support device identification for a period of time. Many of the devices concerned are not personal devices, but 802.11 devices can support 802.1AS time synchronization and there are TSN (and DetNet) applications that personal device may wish to support.

SuggestedRemedy

Add a 7.n clause describing the frame timing/autocorrelation exposure.

Proposed Response Response Status O

CI 7 SC 7 P29 L14 # 250
 Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

The PII exposure resulting from frame size pattern analysis is not described but is a very significant exposure at this layer. Just because we don't plan to do anything about it doesn't mean that we should not make the reader aware of this threat. We should state that avoiding the exposure is the job of application designers.

SuggestedRemedy

Add a 7.n clause describing the frame size exposure.

Proposed Response Response Status O

CI 7 SC 7 P29 L14 # 249
 Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

Clause 7 does not include a description of a privacy threat arising from the details of MAC operation.

SuggestedRemedy

Describe at least one such threat in a 7.n clause. A description of the device identification and tracking facilitated by 802.11 scrambler seed variation will do. Some other examples which do not necessarily involve frame transmission are now of only historic interest.

Proposed Response Response Status O

CI 7 SC 7.1 P27 L5 # 248
 Seaman, Mick Mick Seaman

Comment Type TR Comment Status X

The text of 7.1 does not describe the goals or motivations of potential adversaries - surveillance is not an end goal, and probing and modification are mere techniques. However the relevant information has already be presented in Clause 6 (and in the proposed revised introductory paragraphs to this clause).

SuggestedRemedy

Delete clause 7.1, renumbering following clauses.

Proposed Response Response Status O

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

Cl 7 SC 7.1 P27 L9 # 179
 Gunther, Craig Craig Gunther Consulti
 Comment Type E Comment Status X
 Is "[for example]" meant to be there? I'm not familiar with this use of square brackets. Line 20 on this page does it differently.
 SuggestedRemedy
 Change sentence to "For example, when ..."
 Proposed Response Response Status O

Cl 7 SC 7.3 P27 L31 # 174
 Gunther, Craig Craig Gunther Consulti
 Comment Type E Comment Status X
 This comment is about consistency and ease of searching the document. You are using Personal Correlated Information here and several other locations in the document. Clause 3 introduces the PCI acronym.
 SuggestedRemedy
 Define PCI in clause 4 and replace Personal Correlated Information by PCI in 7.3 (line 31) and B.4.1 (lines 21 & 22).
 Proposed Response Response Status O

Cl 7 SC 7.1 P27 L11 # 180
 Gunther, Craig Craig Gunther Consulti
 Comment Type TR Comment Status X
 RFC 7624 should be included in clause 2 or perhaps Annex A.
 SuggestedRemedy
 Add RFC 7624 to clause 2 or Annex A.
 Proposed Response Response Status O

Cl 7 SC 7.3 P27 L31 # 98
 Congdon, Paul Huawei
 Comment Type TR Comment Status X
 This clause has a lot of text about bridges that is out of context with respect to encapsulated MAC addresses. Also, there are some examples of Threats documented in a similar fashion to what is used in Annex B.
 SuggestedRemedy
 Remove the last two sentences of the paragraph and put the threats part into Annex B. Certainly b) has nothing directly related to encapsulated MAC addresses.
 Proposed Response Response Status O

Cl 7 SC 7.1 P27 L11 # 124
 Weis, Brian Cisco Systems
 Comment Type E Comment Status X
 Add a reference.
 SuggestedRemedy
 Since RFC 7624 is referenced, it would be helpful to add it to the Bibliography.
 Proposed Response Response Status O

Cl 7 SC 7.7 P28 L33 # 158
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 "The IEEE 802 family of standards"
 SuggestedRemedy
 Change to "The members of the IEEE 802 family of standards" or "The IEEE 802 standards". Unify "IEEE 802 standards" vs. "IEEE 802 Standards".
 Proposed Response Response Status O

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

Cl 7 SC 7.7 P28 L37 # 159
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 "Network discovery ... result"
 SuggestedRemedy
 Change to "Network discovery ... results" (where "result(s)" may not be the very best term here, but I have no better proposal).
 Proposed Response Response Status O

Cl 7 SC 7.7 P28 L38 # 125
 Weis, Brian Cisco Systems
 Comment Type E Comment Status X
 Grammatical error.
 SuggestedRemedy
 Replace "suitable networks to connect to" with 'suitable networks in which to connect'.
 Proposed Response Response Status O

Cl 7 SC 7.8 P29 L4 # 252
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 The description in this clause needs qualification. If the envisaged target device is not a mobile personal device then its identification may result in no more than the uninformative result 'the device that is always there'.
 SuggestedRemedy
 Qualify as per comment, clarifying the applicability to mobile personal devices.
 Proposed Response Response Status O

Cl 7 SC 7.8 P29 L5 # 99
 Congdon, Paul Huawei
 Comment Type ER Comment Status X
 We need concrete examples here, not just high-level statements. After reading the entire draft, it became obvious that Annex B has the concrete examples, but there is no reference to them here or anywhere in Clause 7
 SuggestedRemedy
 In the beginning of Clause 7, indicate that concrete examples can be found in Annex B. It may be necessary to point to each example from each clause - for example in Clause 7.8, you can refer to sub-clauses of B.5
 Proposed Response Response Status O

Cl 7 SC 7.8 P29 L6 # 126
 Weis, Brian Cisco Systems
 Comment Type E Comment Status X
 Grammatical error. There are two many "can"s in the sentence.
 SuggestedRemedy
 Replace "the end device and the infrastructure can exchange" with "the end device and the infrastructure exchange".
 Proposed Response Response Status O

Cl 7 SC 7.8 P29 L13 # 127
 Weis, Brian Cisco Systems
 Comment Type E Comment Status X
 Grammatical error.
 SuggestedRemedy
 Replce "perform such query" with "perform such a query".
 Proposed Response Response Status O

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

Cl 7 SC 7.9 P28 L9 # 134
 Cummings, Rodney National Instruments
 Comment Type T Comment Status X
 Subclause 7.9 has abstracted its description to such an extent that I do not understand what it refers to. NETCONF is an example of "a mechanism by which an endpoint can query an infrastructure device", but I am guessing NETCONF is not what the authors intend.
 SuggestedRemedy
 To help avoid this overall problem, in each subclause, provide a final sentence with an example (but not detail). Each example can reference Annex B if applicable.
 Proposed Response Response Status O

Cl 8 SC 8 P30 L2 # 111
 Andersdotter, Amelia amelia@article19.org
 Comment Type T Comment Status X
 Maybe this should referens back to Clause 5.3, which has a more explicit procedure for the creation of such an annex?
 SuggestedRemedy
 After the sentence "It is recommended that each standard contains a clause or annex describing to consumers of the standard what privacy features are envisaged in the standard." add a sentence "A procedure for the creation of this clause or annex is outlined in Clause 5.3."
 Proposed Response Response Status O

Cl 7 SC 7.9 P29 L9 # 181
 Gunther, Craig Craig Gunther Consulti
 Comment Type E Comment Status X
 This clause and clause 7.6 both talk about 802 Standards using particular frames to discover services. Is the difference between these two clauses meant to be that 7.6 queries the "network", whereas this clause queries a specific infrastructure "device"? Perhaps said a differente way, does 7.6 use multicast/broadcast discovery, and this clause uses unicast packets? I'm assuming this IS the difference since this clause is called
 SuggestedRemedy
 Perhaps add a bit more text to help clarify the difference between these two clauses.
 Proposed Response Response Status O

Cl 8 SC 8 P30 L3 # 104
 Andersdotter, Amelia amelia@article19.org
 Comment Type E Comment Status X
 The (beginning of a) sentence " Additionally it is recommended that:" looks a bit weird.
 SuggestedRemedy
 Remove the text from "Additionally" up to the colon.
 Proposed Response Response Status O

Cl 8 SC 8 P30 L2 # 100
 Congdon, Paul Huawei
 Comment Type TR Comment Status X
 Adding a specific clause or annex would be a lot of work and unclear that it would be complete at time of publication. This makes this part of the published standard a constant source of revision, amendment and maintenance. Adding such a clause is not the solution.
 SuggestedRemedy
 Privacy as well as other Security considerations would be better suited for an online set of resources that are managed outside of the standards development process. Something that could be updated when needed and when new threats are discovered. Note that in Clause 9, page 31, line 5 it is admitted this is not going to be exhaustive.
 Proposed Response Response Status O

Cl 8 SC 8 P30 L3 # 254
 Seaman, Mick Mick Seaman
 Comment Type ER Comment Status X
 Delete the "It is recommended that" and replace "contains" with "should contain", as the "should" is the correct way of expressing a recommendation. Remove the "Additionally it is recommended that", it is unnecessary and would require the construction of the paragraph at lines 4 and 23 as part of a list, with a) through h) and i) through j) as separate sublists (with numbered bullets).
 SuggestedRemedy
 As per comment.
 Proposed Response Response Status O

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Cl 8 SC 8 P30 L4 # 140
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 Does this sentence recommend against use of an EUI-48 MAC address? In other words, are we recommending to break millions of Ethernet products? The subsequent list of items are more practical and reasonable, but this sentence is not.
 SuggestedRemedy
 Remove this sentence.
 Proposed Response Response Status O

Cl 8 SC 8 P30 L4 # 255
 Seaman, Mick Mick Seaman
 Comment Type TR Comment Status X
 Almost all, if not all, the specific recommendations (a) through (h) are only applicable to mobile personal devices.
 SuggestedRemedy
 Replace "personal device" with "mobile personal device" in line 4.
 Proposed Response Response Status O

Cl 8 SC 8 P30 L7 # 105
 Andersdotter, Amelia amelia@article19.org
 Comment Type E Comment Status X
 Maybe an explicit mention of data minimization would make it easier to get the gist of the list a)-h)?
 SuggestedRemedy
 Insert before the final colon ", it is suggested that in accordance with the principle of data minimization:"
 Proposed Response Response Status O

Cl 8 SC 8 P30 L12 # 135
 Cummings, Rodney National Instruments
 Comment Type T Comment Status X
 Use "temporary" instead of "non-persistent" for consistency.
 SuggestedRemedy
 In item c), change "non-persistent" to "temporary".
 Proposed Response Response Status O

Cl 8 SC 8 P30 L14 # 136
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 Item d) is outside the scope of the standard that specifies the service. It is analogous to saying "Control all standards other than your standard, to make sure they never use your identifiers." I wish that was possible, but it isn't.
 SuggestedRemedy
 Remove item d).
 Proposed Response Response Status O

Cl 8 SC 8 P30 L16 # 137
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 Does item e) mean that we recommend against storing an EUI-48 MAC address in non-volatile storage? In other words, are we recommending to break millions of Ethernet products? I hope not.
 SuggestedRemedy
 Remove item e), or clarify what "service" means.
 Proposed Response Response Status O

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Cl 8 SC 8 P30 L18 # 138
 Cummings, Rodney National Instruments
 Comment Type **TR** Comment Status **X**
 I do not understand item f), but it seems to be recommending against use of TSN (i.e. deterministic communication is not allowed).
SuggestedRemedy
 Remove item f) or clarify what it means.
 Proposed Response Response Status **O**

Cl 9 SC 9 P31 L1 # 256
 Seaman, Mick Mick Seaman
 Comment Type **TR** Comment Status **X**
 The questions and implied suggestions in this clause (9) are really only applicable to, or will only be effective, when the device being considered is a mobile personal device.
SuggestedRemedy
 Qualify the questions and implied suggestions as per the comment.
 Proposed Response Response Status **O**

Cl 8 SC 8 P30 L21 # 139
 Cummings, Rodney National Instruments
 Comment Type **TR** Comment Status **X**
 IEEE 802 standards historically have not ventured into the specifics of how values are stored. Technically speaking, that has nothing to do with networking.
SuggestedRemedy
 Remove "storage" from item h).
 Proposed Response Response Status **O**

Cl 9 SC 9 P31 L2 # 106
 Andersdotter, Amelia amelia@article19.org
 Comment Type **E** Comment Status **X**
 The word "documenting" is left a bit hanging here, maybe specify that it is the recommended clause or annex provided for in clause 8 that is the intended referens point?
SuggestedRemedy
 Changing "Documenting privacy considerations during a standard development..." to "Documenting privacy considerations IN A CLAUSE OR ANNEX, AS RECOMMENDED IN CLAUSE 8 ABOVE, during a standard development ..."
 Proposed Response Response Status **O**

Cl 8 SC 8 P30 L23 # 141
 Cummings, Rodney National Instruments
 Comment Type **TR** Comment Status **X**
 IEEE 802 standards cover the device, not a person.
SuggestedRemedy
 Change this sentence to "A service which assumes parameter selection, configuration or settings that impact the privacy of a personal device should:"
 Proposed Response Response Status **O**

Cl 9 SC 9 P31 L4 # 101
 Congdon, Paul Huawei
 Comment Type **TR** Comment Status **X**
 The questions can serve as guidelines for protocol development, just as other guidelines for correctness, efficiency and determinism, but we do not need a dedicated clause or annex for just privacy considerations. There are many other considerations that are required, but don't demand their own clause to address the issues.
SuggestedRemedy
 Keep the guidelines and questions in this recommended practice, but do not suggest that an Annex or Clause just for privacy considerations be included in the base standards.
 Proposed Response Response Status **O**

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Cl 9 SC 9.1.1 P31 L12 # 142
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 There are many standards in IEEE and other SDOs that are focused on what P802E/D1.1 defines as a "shared service device". This fact needs to be reflected in the questions of 8.1.1, because the answer determines the relevance of the subsequent questions in that subclause.
 SuggestedRemedy
 As the first question in 9.1.1, add the following question: "Is this standard focused on shared service devices?"
 Proposed Response Response Status O

Cl 9 SC 9.1.1 P31 L13 # 143
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 What does "minimum" mean in this sentence? Is it a type of identifier, or a maximum quantity? For example, if my service requires allows use of up to 256 EUI-48 identifiers, is the answer 1 or 256?
 SuggestedRemedy
 Clarify if this quantity is for type of identifier, or maximum allowed.
 Proposed Response Response Status O

Cl 9 SC 9.1.1 P31 L13 # 144
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 Why is this numerical quantity requested? How does this value "prompt and assist in the development of privacy considerations"? Is the implication that a high value is bad, and therefore the standard must be re-designed to make the value lower? If so, that is extremely subjective.
 SuggestedRemedy
 Remove this question.
 Proposed Response Response Status O

Cl 9 SC 9.1.1 P31 L14 # 202
 Farkas, János Ericsson
 Comment Type T Comment Status X
 The first two questions are very natural. They are naturally taken into account in a good standard, good protocol design etc. We want to have the minimum set of variables managed object etc., e.g., for the ease of operation, and to avoid duplicates for many reasons.
 SuggestedRemedy
 Consider replacing "What is the minimum set of identifiers" with "What are the identifiers".
 Proposed Response Response Status O

Cl 9 SC 9.1.1 P31 L14 # 145
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 This Recommended Practice does not provide an explicit definition of "service" as compared to "manage", and doing so would be outside its scope. Therefore, "manage" is a type of "service", and this question is a duplicate.
 SuggestedRemedy
 Remove this question.
 Proposed Response Response Status O

Cl 9 SC 9.1.1 P31 L15 # 146
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 IEEE 802 standards historically have not ventured into the specifics of how values are stored. Technically speaking, that has nothing to do with networking.
 SuggestedRemedy
 Remove this question.
 Proposed Response Response Status O

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Cl 9 SC 9.1.1 P31 L16 # 147
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 Under what conditions do the authors of this Recommended Practice anticipate an answer of "No" to this question? The question is analogous to asking "Can adversaries break your security?", to which the answer is always "Yes", because there is no such thing as perfect security. If we want to keep this question, we need more text to explain how the answer will "prompt and assist in the development of privacy considerations".
 SuggestedRemedy
 Remove this question.
 Proposed Response Response Status O

Cl 9 SC 9.1.1 P31 L18 # 160
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 It cost me some time to identify the main sentence: "Would exposure of PII be continuous ..."
 SuggestedRemedy
 Re-phrase. Maybe put "such that it allows correlation or fingerprinting" into parenthesis? And maybe change "Would ... or can it be ..." to "Would ... ? If so, can it be ...".
 Proposed Response Response Status O

Cl 9 SC 9.1.1 P31 L22 # 161
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 "linkers"
 SuggestedRemedy
 Change to "linkages" as in L21.
 Proposed Response Response Status O

Cl 9 SC 9.1.1 P31 L23 # 148
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 As stated in the comment on 5.3 a), this list of questions/answers will not be published in the standard. Therefore, who will the answer to this question be directed to? If this Recommended Practice is not creating a permanent group to receive the answer and provide a response (i.e. like RAC), the question is irrelevant.
 SuggestedRemedy
 Remove this question.
 Proposed Response Response Status O

Cl 9 SC 9.1.2 P31 L25 # 149
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 I do not understand this question. What "state" is referred to? Relative to this Recommended Practice, why does it matter whether PII is exchanged before or after that state?
 SuggestedRemedy
 Clarify or remove.
 Proposed Response Response Status O

Cl 9 SC 9.1.2 P31 L27 # 150
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 This is a duplicate question, already asked in a different way on line 15.
 SuggestedRemedy
 Remove this question.
 Proposed Response Response Status O

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Cl 9 SC 9.1.2 P31 L30 # 151
 Cummings, Rodney National Instruments
 Comment Type **TR** Comment Status **X**
 This is a duplicate question, already asked in a different way by questions of 9.1.1. The question in 9.1.1 line 18 is clearer (i.e. continuous or temporary in duration).
 SuggestedRemedy
 Remove this question.
 Proposed Response Response Status **O**

Cl 9 SC 9.1.3 P32 L12 # 152
 Cummings, Rodney National Instruments
 Comment Type **TR** Comment Status **X**
 How is this question different than the question on line 10? When an identifier is transmitted, it exists.
 SuggestedRemedy
 Merge the questions on lines 10 and 12.
 Proposed Response Response Status **O**

Cl 9 SC 9.1.2 P32 L1 # 162
 Assmann, Ralf Marvell
 Comment Type **E** Comment Status **X**
 "What mechanism does the standard allow that enable"
 SuggestedRemedy
 Change to "What mechanism does the standard allow that enables" or "What mechanisms do the standard allow that enable".
 Proposed Response Response Status **O**

Cl 9 SC 9.1.3 P32 L16 # 153
 Cummings, Rodney National Instruments
 Comment Type **TR** Comment Status **X**
 In these comments I use line numbers to reference questions, but that will not work as a reference to each question as we proceed with standard development.
 SuggestedRemedy
 Number each question in the lists of clause 9.
 Proposed Response Response Status **O**

Cl 9 SC 9.1.3 P32 L7 # 115
 Weis, Brian Cisco Systems
 Comment Type **ER** Comment Status **X**
 This question is a bit hard to parse, and I think there are actually several discrete questions involved.
 SuggestedRemedy
 Break up this question into a series of questions, for a question with several parts. This should result in more valuable answers. One way to do this would be: (1) Are there identifiers that can be configured by the respondent device? (2) Are they persistent or temporary? (The analysis may be different for each.) (3) Can the identifiers be configured by a personal device? (4) Are there foreseen trajectories between nodes for these identifiers?
 Proposed Response Response Status **O**

Cl 9 SC 9.2 P32 L22 # 116
 Weis, Brian Cisco Systems
 Comment Type **TR** Comment Status **X**
 This sentence introduces the nomenclature of "transient or durable" identifiers. The text should use consistent terms.
 SuggestedRemedy
 Replace the terms "transient or durable" with defined terms "Temporary Identifiers or Persistent Identifiers".
 Proposed Response Response Status **O**

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CI 9 SC 9.3 P32 L29 # 154
 Cummings, Rodney National Instruments
 Comment Type TR Comment Status X
 These questions are duplicates of questions in 9.1, and it is unclear why distinct text would be provided in the published standard.
 SuggestedRemedy
 Remove 9.3.
 Proposed Response Response Status O

CI A SC A P33 L9 # 183
 Gunther, Craig Craig Gunther Consulti
 Comment Type ER Comment Status X
 AB uses different capitalization on the standard's title page than Q. However, the IEEE Get site uses the exact spelling you are using!
 SuggestedRemedy
 Use lower case on "metropolitan area networks" and use a long dash instead of a colon.
 Proposed Response Response Status O

CI 9 SC 9.3 P32 L36 # 117
 Weis, Brian Cisco Systems
 Comment Type E Comment Status X
 Grammatical error.
 SuggestedRemedy
 Change "elements be" to "elements can be"
 Proposed Response Response Status O

CI A SC A P33 L13 # 184
 Gunther, Craig Craig Gunther Consulti
 Comment Type ER Comment Status X
 AE uses different capitalization on the standard's title page than Q. However, the IEEE Get site uses the exact spelling you are using!
 SuggestedRemedy
 Use lower case on "metropolitan area networks" and use a long dash instead of a colon.
 Proposed Response Response Status O

CI A SC A P33 L7 # 182
 Gunther, Craig Craig Gunther Consulti
 Comment Type ER Comment Status X
 Use a long dash instead of a colon in the standard name.
 SuggestedRemedy
 Use a long dash instead of a colon.
 Proposed Response Response Status O

CI A SC A P34 L3 # 118
 Weis, Brian Cisco Systems
 Comment Type TR Comment Status X
 The leading note to the Bibliography section declares that the current Bibliography list has not been updated to be accurate. However, RFC 6973 is a good reference. But it is not referenced by the main text so is at risk of being removed. The main text should reference it someplace.
 SuggestedRemedy
 Reference RFC 6973 in the main text. Since it categorizes privacy threats, perhaps a good place is in the definitinn of Threat. Another choice would be Clause 7.
 Proposed Response Response Status O

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Cl B **SC B.2** **P35** **L11** # **185**
 Gunther, Craig Craig Gunther Consulti
Comment Type **E** **Comment Status** **X**
 Typo.
SuggestedRemedy
 Insert "an": "This provides an example ..."
Proposed Response **Response Status** **O**

Cl B **SC B.3** **P36** **L11** # **188**
 Gunther, Craig Craig Gunther Consulti
Comment Type **E** **Comment Status** **X**
 What does "This" refer to in the second sentence? This comment also applies to page 37 line 10, page 40 line 21.
SuggestedRemedy
 Change sentence to "This clause provides ..."
Proposed Response **Response Status** **O**

Cl B **SC B.2.2** **P35** **L28** # **186**
 Gunther, Craig Craig Gunther Consulti
Comment Type **E** **Comment Status** **X**
 802.1Q SRP is a protocol that recommends a specific VID mapping if you choose to use that as an example. It recommends VID 2; see Table 9-2. I mention that because you (correctly) note that most VID mappings are network specific, but you could use SRP as an example to the contrary.
SuggestedRemedy
 None
Proposed Response **Response Status** **O**

Cl B **SC B.3** **P36** **L11** # **163**
 Assmann, Ralf Marvell
Comment Type **E** **Comment Status** **X**
 "This provides" (with two spaces in between)
SuggestedRemedy
 Change to "This subclause provides" (several times).
Proposed Response **Response Status** **O**

Cl B **SC B.2.3** **P36** **L3** # **187**
 Gunther, Craig Craig Gunther Consulti
Comment Type **E** **Comment Status** **X**
 I'm not familiar with this use of square brackets. Is this meant to be a link to the bibliography entry for 802.1Q?
SuggestedRemedy
 None
Proposed Response **Response Status** **O**

Cl B **SC B.3.1** **P36** **L14** # **189**
 Gunther, Craig Craig Gunther Consulti
Comment Type **TR** **Comment Status** **X**
 Use cross references when you refer to figures. That way "figure 1" will be replaced by "Figure B-1". If new figures are added in the future this will make document maintenance much easier and less error-prone. Do the same thing for Figure B-2 reference. Note that the link to Table B-1 on page 40 line 23 works great.
SuggestedRemedy
 Use your word processors cross reference feature to reference figures.
Proposed Response **Response Status** **O**

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Cl B SC B.3.1 P36 L14 # 164
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 "figure 1"
 SuggestedRemedy
 Change to "Figure B-1", similar in L18. Maybe make references to (sub-)clauses, Figures, and Tables clickable.
 Proposed Response Response Status O

Cl B SC B.4.1 P37 L14 # 191
 Gunther, Craig Craig Gunther Consulti
 Comment Type ER Comment Status X
 Typo: beemitted
 SuggestedRemedy
 Change to "be emitted"
 Proposed Response Response Status O

Cl B SC B.3.1 P36 L15 # 190
 Gunther, Craig Craig Gunther Consulti
 Comment Type TR Comment Status X
 What is 11ac? Has 802.11ac been rolled in to an 802.11 update? If so, refer to the base standard and clause or clause name.
 SuggestedRemedy
 Refer to the full standard name in the reference.
 Proposed Response Response Status O

Cl B SC B.4.1 P37 L19 # 165
 Assmann, Ralf Marvell
 Comment Type E Comment Status X
 "can bused used"
 SuggestedRemedy
 Change to "can be used".
 Proposed Response Response Status O

Cl B SC B.4.1 P37 L14 # 102
 Congdon, Paul Huawei
 Comment Type ER Comment Status D
 typo
 SuggestedRemedy
 change "beemitted" to "be emmitted"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl B SC B.4.1 P37 L19 # 103
 Congdon, Paul Huawei
 Comment Type ER Comment Status D
 typo
 SuggestedRemedy
 delete "bused"
 Proposed Response Response Status W
 PROPOSED ACCEPT.

Cl B SC B.4.1 P37 L19 # 192
 Gunther, Craig Craig Gunther Consulti
 Comment Type ER Comment Status X
 Typo: bused
 SuggestedRemedy
 Change to "be".
 Proposed Response Response Status O

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Cl B **SC B.4.1** **P37** **L 20** # **166**
 Assmann, Ralf Marvell
Comment Type **E** **Comment Status** **X**
 "a class of"
SuggestedRemedy
 Change to "the class of a".
Proposed Response **Response Status** **O**

Cl B **SC B.5.1** **P41** **L 3** # **193**
 Gunther, Craig Craig Gunther Consulti
Comment Type **E** **Comment Status** **X**
 Compare this "(EAP) [RFC3748]" to line 13 "(e.g. TEAP (RFC7170))". Is there a reason for using square brackets in one place and parens in another?
SuggestedRemedy
 Use a consistent format if applicable.
Proposed Response **Response Status** **O**

Cl B **SC B.4.3** **P38** **L 24** # **167**
 Assmann, Ralf Marvell
Comment Type **E** **Comment Status** **X**
 "Additionally, an adversary can emit a Beacon containing an SSID string identical to that of another system. Attacker then attracts targets to the attacker's device rather than the legitimate AP"
SuggestedRemedy
 Change to "Additionally, an adversary can emit a Beacon containing an SSID string identical to that of another system, thus attracting targets to the attacker's device rather than the legitimate AP,".
Proposed Response **Response Status** **O**

Cl B **SC B.5.1** **P41** **L 18** # **169**
 Assmann, Ralf Marvell
Comment Type **E** **Comment Status** **X**
 "can identity"
SuggestedRemedy
 Change to "can identify".
Proposed Response **Response Status** **O**

Cl B **SC B.4.7** **P39** **L 22** # **168**
 Assmann, Ralf Marvell
Comment Type **E** **Comment Status** **X**
 "of the such as the"
SuggestedRemedy
 No idea.
Proposed Response **Response Status** **O**

Cl B **SC B.5.3** **P41** **L 31** # **171**
 Assmann, Ralf Marvell
Comment Type **E** **Comment Status** **X**
 "examined in a previous and can"
SuggestedRemedy
 Change to "examined in a previous subclause and can".
Proposed Response **Response Status** **O**

Cl B **SC B.5.3** **P41** **L 31** # **170**
 Assmann, Ralf Marvell
Comment Type **E** **Comment Status** **X**
 "Reasons Codes"
SuggestedRemedy
 Change to "Reason Codes".
Proposed Response **Response Status** **O**

P802E D1.1 Recom. Practice for Privacy Consi. for IEEE 802 Tech. Initial Working Group ballot comments

Cl **B** *SC* **B.6.1** *P***42** *L* **12** #

Gunther, Craig Craig Gunther Consulti

Comment Type **E** *Comment Status* **X**

Typo? On this line you capitalize "No". On line 11 and 13 you use lower case.

SuggestedRemedy

Use consistent upper/lower case.

Proposed Response *Response Status* **O**