IEEE P802.11
Wireless LANs

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| Resolutions for “Obsolete?” comments on 11md/D0.1  |
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Abstract

This submission proposes resolutions for CIDs 57-69

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.

CIDs covered in document R4:

CID 60 PCO Phased co-existance operation (Ready to discuss/approve)

CID 66 Strictly Ordered Service Class (Ready for discussion/approve

CID 67 L-SIG TXOP protection mechanism (Ready to discuss/approve)

CID 68 obsolete operating classes in Table E-3 (Approved)

CIDs covered in separate submissions:

CID 57, 58, 61 Basic Block ACK variant in new document 17/1137

CID 59 and 62 DLS and STSL now in new document 17/1518

CID 63 WEPand TKIP now in new document 17/1504

CID 64 DMG OFDM now in document 17/1238

CID 65 PCF in new document 17/1519

CID 69 RIFS for non-DMG in new document 17/1520

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| --- | --- | --- | --- | --- | --- | --- |
| CID | Commenter | Clause  | Page  | Line | Comment | Proposed |
| 57 | Graham Smith | 9.3.1.8.2 | 712 | 8 | Time to remove BlockAckReq? | Remove |
| 58 | Graham Smith | 9.3.1.9.2 | 716 | 14 | Time to remove basic BlockAck variant? | Remove |
| 59 | Graham Smith | 11.7 | 1806 | 5 | Time to remove DLS? | Remove |
| 60 | Graham Smith | 11.17 | 1881 | 56 | Time to remove PCO? | Remove |
| 61 | Graham Smith | 11.5.2.4 | 1802 | 31 | Time to remove Non-HT blockack ? | Remove, also at 2949L25, 2950L6 |
| 62 | Graham Smith | 12.2.5 | 2060 | 4 | Time to remove STSL support? | Remove |
| 63 | Graham Smith | 12.3.1 | 2062 | 6 | Time to remove all pre-RSNA security mechanisms other than Open System authentication? WEP | Remove |
| 64 | Graham Smith | 20.5.1 | 2627 | 7 | Time to remove DMG OFDM? | Remove |
| 65 | Graham Smith | 9.4.2.5 | 845 | 40 | Time to remove PCF ? | Remove, also at 1008 L45, 1312 L20, P1399L10, P1438 L 24 (10.4) |
| 66 | Graham Smith | 10.8 |  |  | Time to remove StricklyOrdered service class? | Remove |
| 67 | Graham Smith | 10.26.5 | 1553 | 38 | Time to remove L-SIG TXOP protection mechanism? | Remove |
| 68 | Graham Smith | E.2 | 3564 | 1 | Remove obsolete operating classes in Table E-3. | Remove |
| 69 | Graham Smith | 10.3.2.3.2 | 1409 | 38 | Time to remove RIFS? | Remove |

CID 57 BlockAckReq variant

**Separate document written. 17/1137**

CID 58 Basic BlockAck variant

**Separate document written. 17/1137**

CID 59 and CID 62 DLS and STSL

**Separate Document written 17/1518**

CID 61 NON\_HT Block Ack

**Separate document written. 17/1137**

CID 63 Pre-RSNA security methods

**Separate document written 17/1504**

CID 64 DMG OFDM

**See separate document 17/1238**

CID 65 PCF

**New document written 17/1519**

CID 69 RIFS

**New Document written 17/1520**

**CID 60 PCO Phased co-existance operation**

*11.17.1*

*The PCO mechanism is obsolete. Consequently, this subclause might be removed in a later revision of this standard.*

*PCO is an optional coexistence mechanism in which a PCO active AP divides time into alternating 20 MHz and 40 MHz phases (see Figure 11-31 (Phased coexistence operation (PCO))).*

Not used in mesh

261 instances of PCO but lots are in the terms

9.4.1.24 needs to be deleted,

9.6.12.5 needs to be deleted

Then delete it in the HT Extended Capabilities Field 1008.31, 1008.48, 1009.6

Delete it in the HT Operation Information field 1014.20 etc.

Delete it in HT Action field

It would free up a lot of bits!

Detailed editor instructions required.

Consensus to delete PCO

RESOLUTION

REVISED

159.42 delete lines 42 to 46

162.16 delete lines 16 to 47

180.53 delete “PCO phased coexistence operation”

777.49 delete name and change Status Code 29 to “reserved”

788.50 delete 9.4.1.24 in its entirety

1008.31 B0 to B7 to be “Reserved” (i.e. delete references to “PCO”)

1008.48 delete Subfield PCO and related Definition and Encoding text.

1009.6 delete Subfield “PCO Transition Time” and related Definition and Encoding text

1009.43 delete “The following subfield is reserved for a mesh STA: PCO.”

1014.21 B34 and B35 to be “Reserved”

1017.26 delete lines 26 to 48 (PCO Active and PCO Phase)

1310.43 set HT Action field value 3 to “Reserved” (delete “Set PCO Phase Yes”)

1312.20 delete 9.6.12.5 entirely

1453.61 replace “If not operating during the 40 MHz phase of PCO, a” with “A”

1454.1 delete lines 1 to 7.

1460.35 delete “except during the 40 MHz phase of PCO operation. During the 40 MHz phase of PCO operation, the rules in 11.17 (Phased coexistence operation (PCO)) apply.”

1549.24 delete “During the 40 MHz phase of PCO operation, a PCO active STA may act as though the HT Protection fieldwere equal to no protection mode, regardless of the actual value of the HT Protection field transmitted by theAP.”

1550.45 delete “The PCO Active field equal to 0 g)”

1637.28 delete “or PCO”, add "or" before "STBC"

1881.57 delete 11.17 in its entirety

2288.25 delete “or PCO”, add "or" before "STBC"

2883.20 (2886) delete “11.17.2 (Operation at a PCO active AP)”

2974.17 (2977) delete entries for HTM21, HTM21.1, HTM21.1.1, HTM21.2, HTM21.2.1

3138.23 (3141) delete entry for “dot11PCOOptionImplemented”

3255.48 (3258) delete entry for “dot11RMNeighborReportHTPCO”

3255.61 (3258) delete entry for “dot11RMNeighborReportHTPCOTransitionTime”

3265.9 (3268) delete entry for “dot11RMNeighborReportHTInfoPCOActive”

3265.23 (3268) delete entry for “dot11RMNeighborReportHTInfoPCOPhase”

3376.31 (3379) delete entry for “dot11PCOActivated”

3376.44 (3379) delete entry for “dot11PCOFortyMaxDuration”

3376.59 (3379) delete entry for”dot11PCOTwentyMaxDuration”

3377.9 (3380) delete entry for “dot11PCOFortyMinDuration”

3377.23 (3380) delete entry for “dot11PCOTwentyMinDuration”

**CID 66 StrictlyOrdered service class**

255.21

*Note that the use of the StrictlyOrdered service class is obsolete and the StrictlyOrdered service class might be removed in a future revision of the standard.*

5.1.3 MSDU ordering:

The services provided by the MAC sublayer permit, and might in certain cases require, the reordering of MSDUs.

There are 18 instances of StrictlyOrdered, relatively easy to delete this.

Consensus to remove

Non-QoS use of Service Class can also go away.

Note: I have looked at Service Class but have to admit not sure how to go about it. The Service Class seems to be the setting of QoS Ack or QoS NoAck, not the ordering of MSDUs. Hence I am ignoring this (for now)

RESOLUTION

REVISED

255.15 Delete entire paragraph at 255.15 to 255.23

266.23 Delete “or StrictlyOrdered”

266.30 delete all within parentheses.

267.4 delete “or StrictlyOrdered”

674.30 Delete "/Order"

674.54 At B15 delete "/Order"

674.48 Delete "/Order"

680.38 Delete "/Order"

680.40 Delete "/Order"

680.50 Delete "/Order"

680.52 Delete "/Order"

690.61 Delete "/Order"

690.62 Delete "/Order"

707.28 Delete "/Order"

728.7 Delete "/Order" (2x)

732.54 Delete "/Order" (2x)

2106.63 Delete "/Order"

2882.8 Delete "/Order"

2974.7 Delete "/Order"

680.40 Delete “It is used for two purposes:” Delete first bullet, then run second bullet as normal sentence, not bulleted.

1468.53 delete entire paragraph

1726.41 delete “, except those that have the StrictlyOrdered service class”

1729.23 delete “except those with a service class of StrictlyOrdered”

1760.45 delete “(excluding those with a service class of StrictlyOrdered)”

2871.6 delete row PC8.2

**CID 67 L-SIG TXOP protection mechanism**

10.26.5

1553.42

*The L-SIG TXOP protection mechanism is obsolete. Consequently, this subclause might be removed in a later revision of this standard.*

Clear enough

70 instances of L-SIG TXOP protection.

Removal in the HT Operation element

Requires detailed editor instructions

Consensus to remove

RESOLUTION

REVISED

871.38 delete “, L-SIG TXOP protection”

907.48 delete “, L-SIG TXOP protection”

1004.35 Figure 9-332—HT Capability Information field replace “L-SIG TXOP Protection Support” in B15 with “Reserved”

1006.14 delete row “L-SIG TXOP Protection Support”

1014.20 Figure 9-339—HT Operation Information field, replace “L-SIG TXOP Protection Full Support” in B33 with “Reserved”

1017.20 delete row “L-SIG TXOP Protection Full Support” in Table 9-168—HT Operation element fields and subfields

1414.49 to 1414.55 delete “A STA supporting L-SIG TXOP that used the information from a frame with different L-SIG duration and MAC duration endpoints (characteristics of an L-SIG TXOP initiating frame; see 10.26.5.4 (L-SIG TXOP protection NAV update rule) for details) as the most recent basis to update its NAV setting may reset its NAV if no PHY-RXSTART.indication primitive is received from the PHY during a period with a duration of aSIFSTime + aRxPHYStartDelay + (2 x aSlotTime) starting at the expiration of the L-SIG duration. For details of L-SIG duration, see 10.26.5 (L-SIG TXOP protection).”

1452.16 delete “a) A Control frame shall be carried in an HT PPDU when the Control frame contains an L-SIG duration value (see 10.26.5 (L-SIG TXOP protection)).”

1453.41 edit as follows: “An HT STA shall select an MCS…”

1453.48 delete "When L-SIG TXOP protection is used, an HT STA shall select an MCS from the SupportedMCSSet parameter of the intended receiver."

1457.1 delete “If the frame eliciting the response had an L-SIG duration value (see 10.26.5 (L-SIG TXOP protection)) and initiates a TXOP, the CandidateMCSSet is the MCS Set consisting of the intersection of the Rx Supported MCS Set of the STA that sent the frame that is eliciting the response and the set of MCSs that the responding STA is capable of transmitting.”

1457.6 replace "If none of the above conditions is true" with "Otherwise". (-- Will Dual CTS be deleted as well?)

1494.64 delete “TXOP truncation shall not be used in combination with L-SIG TXOP protection when the HT Protection field of the HT Operation element is equal to nonmember protection mode or non-HT mixed mode.”

1549.53 delete “L-SIG TXOP protection”

1550.44 delete item c ("c) The L-SIG TXOP Full Support field equal to 0")

1552.41 delete “or the L-SIG duration when L-SIG TXOP protection is used as defined in 10.26.5 (L-SIG TXOP protection)”

1552.49 delete “and that is not operating by the L-SIG TXOP protection rules described in 10.26.5 (L-SIG TXOP protection)”

1553.26 delete "A STA that is operating under L-SIG TXOP protection shall set the L\_LENGTH parameter according to rules described in 10.26.5 (L-SIG TXOP protection)."

1553.38 to 1557.20 delete “10.26.5 L-SIG TXOP protection” in its entirety

2500.56 delete “This parameter may be used for the protection of more than one PPDU as described in 10.26.5 (L-SIG TXOP protection).”

2970.40 Delete entry for HTM7

2970.48 delete entry for HTM7.1

3137.37 to 3137. 48 delete dot11LsigTxopProtectionOptionImplemented

3265.60 (3267) to 3266.7 (3268) delete dot11RMNeighborReportHTInfoLSIGTXOPProtectionSup

3391.52 (3394) to 3391.63 (3394) delete dot11RTSLSIGSuccessCount and dot11RTSLSIGFailureCount

3582.38 (3585) delete l-sig entry

3586.52 (3589) delete “L-sig-protected-sequence |”

3586.58 (3589) delete “(\* an L-sig-protected-sequence is a sequence protected using the L-sig TXOP protection feature \*)

L-sig-protected-sequence = L-sig-protection-set 1{initiator-sequence} resync-sequence;”

3587.47 (3590) to 3587.57 (3590) delete the sequence between these line numbers

CID 68 obsolete operating classes in Table E-3.

3564.1

*Operating classes for operation in Japan are enumerated in Table E-3 (Operating classes in Japan). Note that some of the operating classes in this table were never used and are obsolete. The obsolete operating classes indicated by an asterisk (\*) might be removed in a future revision of the standard.*

There are 30 such classes in the Table

As the Operating Classes are in numberical order, suggest that they are just made Reserved

Discussed on Telecon. “Ready for Motion”

Peter may be willing to go thru list for others.

Typical a “reserved” like this is marked not for re-allocaton.

RESOLUTION

REVISED

3564.1 (3567) delete "Note that some of the operating classes in this table were never used and are obsolete. The obsolete operating classes indicated by an asterisk (\*) might be removed in a future revision of the standard."

Table E-3, 3564.8 (3567), for each Operating class indicated by an asterisk, replace text in each column with “Reserved”

CID 69 RIFS

**New Document written 17/1520**