IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PICs baseline | | | | |
| Date: 2023-01-01 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email | |
| Assaf Kasher | Qualcomm |  |  | akasher@qti.qualcomm.com | |
| Solomon Trainin | Qualcomm |  |  | strainin@qti.qualcomm.com | |

Abstract

This document proposes a baseline for the PICS annex changes

# *TGaz Editor: Insert the following text before Annex C:*

# Annex B

(normative)

**Protocol Implementation Conformance Statement (PICS) proforma**

## B.4 PICS proforma—IEEE Std 802.11-2016

Change B.4.3 as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| B.4.3 IUT configuration | | | | |
| Item | IUT configuration | References | Status | Support |
|  | What is the configuration of the IUT? |  |  |  |
| CFSSTA | WLAN Sensing STA | 11.55.1.2 Dependencies | SENS:O | Yes  No  |
| CFSBP | WLAN Sensing by Proxy STA | 11.55.2.1 General | SENS:O | Yes  No  |
| CFDSSTA | DMG Sensing STA | 11.55.3.2 Dependencies | SENS:O | Yes  No  |
| CFDSBP | DMG Sensing by Procxy STA | 11.55.4.1 General | SENS:O | Yes  No  |
| CFDSPASS | DMG Passive Sensing | 11.55.3.9 DMG passive sensing | SENS:O | Yes  No  |

### B.4.4 MAC protocol

#### B.4.4.1 MAC protocol capabilities

***Insert the new rows at the end of the table***:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PC<ANA1> | Support for WLAN Sensing Initiator | 11.55.1 WLAN sensing procedure | CFSSTA:M | Yes  No  |
| PC<ANA3> | Support for WLAN Sensing Responder | 11.55.1 WLAN sensing procedure | CFSSTA:M | Yes  No  |
| PC<ANA5> | Support for Basic Reporting Phase | 11.55.1.5.2.6.1 Basic reporting phase | CFSSTA:M | Yes  No  |
| PC<ANA6> | Support for Threshold-based reporting phase | 11.55.1.5.2.6.2 Threshold-based reporting phase | CFSSTA:O | Yes  No  |
| PC<ANA7> | Support for Reponder-to-Reponder Sensing | 11.55.1.5.2.5 SR2SR sounding phase | CFSSTA:O | Yes  No  |
| PC<ANA8> | Support for Sensing Measurement setup termination | 11.55.1.6 Sensing measurement setup termination | CFSSTA:M | Yes  No  |
| PC<ANA9> | Support for Sensing Measurement session termination | 11.55.1.7 Sensing session termination | CFSSTA:M | Yes  No  |
| PC<ANA10> | Support for SBP procedure as initiator | 11.55.2 SBP procedure | CFSBP:M | Yes  No  |
| PC<ANA11> | Support for SBP procedure as respodner | 11.55.2 SBP procedure | CFSBP:M | Yes  No  |
| PC<ANA12> | Support for DMG Sensing Initiator | 11.55.3 DMG sensing procedure | CFDSSTA:M | Yes  No  |
| PC<ANA15> | Support for DMG Sensing Responder | 11.55.3 DMG sensing procedure | CFDSSTA:M | Yes  No  |
| PC<ANA16> | Support for DMG SBP procedure as initiator | 11.55.4 DMG SPB Procedure | CFDSBP:M | Yes  No  |
| PC<ANA17> | Support for DMG SBP procedure as respodner | 11.55.4 DMG SPB Procedure | (CFDSBP AND CFDSSTA):M | Yes  No  |
| PC<ANA18> | Support for TB Sensing | 11.55.1.5.2 TB sensing measurement instance | CFSSTA:M | Yes  No  |
| PC<ANA19> | Support for non-TB Sensing | 11.55.1.5.3 Non-TB sensing measurement instance | CFSSTA:M | Yes  No  |
| PC<ANA20> | Support for DMG Coordianted Monostatic Sensing | 11.55.3.6.2 Coordinated monostatic DMG sensing instance | (CFDSSTA AND NOT (PC<ANA21> OR PC<ANA23>)):M  (CFDSSTA AND (PC<ANA21> OR PC<ANA23>)):O | Yes  No  |
| PC<ANA21> | Support for DMG Bistatic Sensing | 11.55.3.6.3 Bistatic DMG sensing instance | (CFDSSTA AND NOT (PC<ANA20> OR PC<ANA23>)):M  (CFDSSTA AND (PC<ANA20> OR PC<ANA23>)):O | Yes  No  |
| PC<ANA21>.1 | Support for DMG Bistatic Sensing as Transmitter | 11.55.3.6.3 Bistatic DMG sensing instance | PC<ANA21>:O | Yes  No  |
| PC<ANA21>.2 | Support for DMG Bistatic Sensing as Receiver | 11.55.3.6.3 Bistatic DMG sensing instance | PC<ANA21>:O | Yes  No  |
| PC<ANA22> | Support for DMG Coordianted Bistatic Sensing | 11.55.3.6.4 Coordinated bistatic DMG sensing instance | CFDSSTA AND PC<ANA21>:O | Yes  No  |
| PC<ANA22>.1 | Support for DMG Bistatic Sensing as Transmitter | 11.55.3.6.4 Coordinated bistatic DMG sensing instance | (PC<ANA22> AND NOT PC<ANA22>.2 ):M  (PC<ANA22> AND PC<ANA22>.2 ):O | Yes  No  |
| PC<ANA22>.2 | Support for DMG Bistatic Sensing as Receiver | 11.55.3.6.4 Coordinated bistatic DMG sensing instance | (PC<ANA22> AND NOT PC<ANA22>.1 ):M  (PC<ANA22> AND PC<ANA22>.1 ):O | Yes  No  |
| PC<ANA23> | Support for DMG Multistatic Sensing | 11.55.3.6.5 Multistatic EDMG sensing instance | (CFDSSTA AND NOT (PC<ANA21> OR PC<ANA20>)):M  (CFDSSTA AND (PC<ANA21> OR PC<ANA20>)):O | Yes  No  |
| PC<ANA24> | Support for DMG Sensing measurement setup termination | 11.55.3.7 DMG sensing Measuremetn termination | CFDSSTA:M | Yes  No  |
| PC<ANA25> | Support for DMG Passive Sensing | 11.55.3.9 DMG passive sensing | CFDSPASS | Yes  No  |

Change B.4.4.2 as follows: (#3281, #3387)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| B.4.4.2 MAC frames | | | | |
| Item | MAC frame | References | Status | Support |
|  | Is transmission of the following MAC frames supported? | 9 (Frame formats) |  |  |
| FT<ANA26> | Sensing Measurement Setup Request frame | 9.6.7.49 Sensing Measurement Setup Request frame format | CFSSTA:M | Yes  No  N/A  |
| FT<ANA27> | Sensing Measurement Setup Response frame | 9.6.7.50 Sensing Measurement Setup Response frame format | CFSSTA:M | Yes  No  N/A  |
| FT<ANA28> | Sensing Measurement Report frame | 9.6.7.51 Sensing Measurement Report frame format | CFSSTA:M | Yes  No  N/A  |
| FT<ANA29> | Sensing Measurement Setup Termination frame | 9.6.7.52 Sensing Measurement Setup Termination frame format | PC<ANA8>:M | Yes  No  N/A  |
| FT<ANA30> | Sensing Measurement Setup Query frame | 9.6.7.53 Sensing Measurement Setup Query frame format | CFSSTA:M | Yes  No  N/A  |
| FT<ANA31> | SBP Request frame format | 9.6.7.54 SBP Request frame format | CFSBP:M | Yes  No  N/A  |
| FT<ANA32> | SBP Response frame | 9.6.7.55 SBP Response frame format | CFSBP:M | Yes  No  N/A  |
| FT<ANA33> | SBP Termination frame | 9.6.7.56 SBP Termination frame format | CFSBP:M | Yes  No  N/A  |
| FT<ANA34> | SBP Report frame | 9.6.7.57 SBP Report frame format | CFSBP:M | Yes  No  N/A  |
| FT<ANA35> | DMG Sensing Measurement Setup Request | 9.6.21.8 DMG Sensing Measurement Setup Request frame format | CFDSSTA:M | Yes  No  N/A  |
| FT<ANA36> | DMG Sensing Measurement Setup Response | 9.6.21.9 DMG Sensing Measurement Setup Response frame format | CFDSSTA:M | Yes  No  N/A  |
| FT<ANA37> | DMG Sensing Measurement Report frame | 9.6.21.10 DMG Sensing Measurement Report frame format | CFDSSTA:M | Yes  No  N/A  |
| FT<ANA38> | DMG Sensing Measurement Setup Termination frame | 9.6.21.11 DMG Sensing Measurement Setup Termination frame format | PC<ANA24>:M | Yes  No  N/A  |
| FT<ANA39> | DMG SBP Request frame | 9.6.21.12 DMG SBP Request frame format | CFDSBP:M | Yes  No  N/A  |
| FT<ANA40> | DMG SBP Response frame | 9.6.21.13 DMG SBP Response frame format | CFDSBP:M | Yes  No  N/A  |
| FT<ANA41> | DMG SBP Report frame | 9.6.21.14 DMG SBP Report frame format | CFDSBP:M | Yes  No  N/A  |
| FT<ANA42> | DMG SBP Termination frame | 9.6.21.15 DMG SBP Termination frame format | CFDSBP:M | Yes  No  N/A  |
| FT<ANA43> | DMG Sensing Request frame | 9.3.1.25 TDD Beamforming frame format | CFDSSTA:M | Yes  No  N/A  |
| FT<ANA44> | DMG Sensing Response frame | 9.3.1.25 TDD Beamforming frame format | CFDSSTA:M | Yes  No  N/A  |
| FT<ANA45> | DMG Sensing Poll frame | 9.3.1.25 TDD Beamforming frame format | CFDSSTA:M | Yes  No  N/A  |

Insert a new Subclause B.4.37 as follows:

### B.4.37 WLAN Sensing features

B.4.37.1 WLAN Sensing MAC Features

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Are the following MAC protocol features supported? |  |  |  |
| SENS1 | TB Sensing | 11.55.1.5.2 TB sensing measurement instance | CFSSTA:M | Yes  No  |
| SENS2 | Non-TB Sensing | 11.55.1.5.3 Non-TB sensing measurement instance | CFSSTA:M | Yes  No  |
| SENS3 | Responder to Responder Sensing | 11.55.1.5.2.5 SR2SR sounding phase | (CFSSTA AND SENS1):O | Yes  No  |
| SENS4 | Sensing reporting | 11.55.1.5.2.6 Reporting phase | CFSSTA:M | Yes  No  |
| SENS5 | Basic Sensing Reporting | 11.55.1.5.2.6.1 Basic reporting phase | SENS4:M | Yes  No  |
| SENS6 | Threshold Based Reporting | 11.55.1.5.2.6.2 Threshold-based reporting phase | SENS5:O | Yes  No  |
| SENS7 | Sensing Measurement Setup Termination | 11.55.1.6 Sensing measurement setup termination | CFSSTA:M | Yes  No  |
| SENS8 | Sensing Measurement Session Termination | 11.55.1.6 Sensing measurement setup termination | CFSSTA:M | Yes  No  |
| SENS9 | Sensing By Proxy | 11.55.2 SBP procedure | CFSBP:M | Yes  No  |
| SENS10 | Sensing by Proxy Reporting | 11.55.2.3 Reporting | CFSBP:M | Yes  No  |
| SENS11 | Sensing by Proxy Termination | 11.55.2.4 Termination | SENS9:M | Yes  No  |
| SENS12 | DMG Passive Sensing | 11.55.3.9 DMG passive sensing | CFDSPASS:M | Yes  No  |
| SENS13 | DMG Coordinated Monostatic Sequential | 11.55.3.6.2.2 Sequential coordinated monostatic DMG sensing instance | CFDSSTA:O | Yes  No  |
| SENS14 | DMG Coordinated Monostatic Parallel | 11.55.3.6.2.3 Parallel coordinated monostatic DMG sensing instance | CFDSSTA:O | Yes  No  |
| SENS15 | DMG Bistatic Sensing | 11.55.3.6.3 Bistatic DMG sensing instance | CFDSSTA:O | Yes  No  |
| SENS16 | DMG Coordinated Bistatic Sensing | 11.55.3.6.4 Coordinated bistatic DMG sensing instance | CFDSSTA:O | Yes  No  |
| SENS17 | DMG Multistatic Sensing | 11.55.3.6.5 Multistatic EDMG sensing instance | CFDSSTA:O | Yes  No  |
| SENS18 | DMG SBP Procedure | 11.55.4 DMG SBP procedure | CFDSBP:M | Yes  No  |

B.4.37.2 WLAN Sensing PHY Features

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Item | Protocol capability | References | Status | Support |
|  | Are the following PHY protocol features supported? |  |  |  |
| SENSP1: | EDMG Multistiatic PPDU | 28.9.3.2 EDMG multistatic sensing PPDU structure | CFDSSTA:O | Yes  No  |

**References:**

**P802.11bf\_D0.5**