**Annex D**(normative)  
**Protocol Implementation Conformance Statement (PICS) proforma[[1]](#footnote-1)**

The PICS proforma table should be completed as follows:

* Entries in the Item column may be hierarchical. Thus, an entry of the form N<a>.<b> indicates the item is part of the group identified by the item N<a> where all members of the group are subject to the conditions of applicability of N<a> (i.e., features lower in the numbering hierarchy (N<a>.<b>) are only applicable if the next higher level feature (N<a>) is identified in the **Conformance** column as being present).
* Parentheses in the Value column indicate the user should enter information as specified in the accompanying footnote.
* An entry of the form <pred>:<S> in the Status column indicates that the status <S> applies if the item identified by <pred> is identified in the **Conformance** column as being present.
* Valid status values in the Status column are M, O, O<n>, and C<n>.
* A status of M indicates a mandatory feature.
* A status of O indicates an optional feature.
* A status of O<n> indicates a mutual conditionality such that the feature is optional but that support of at least one of the items that have status O<n> is mandatory. For example, if mutliple features have status O2, then at least one of them is mandatory.
* A status of C<n> indicates a mutual conditionality such that support of one and only one of the items that have status C<n> is mandatory.

**Table D.1—PICS proforma for 802.11 as underlying communication technology**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **Feature** | **Value** | **Reference** | **Status** | **Support** |
| N1. | **DATA PLANE** |  | — | — |  |
| N1.1. | **LLC** |  | 5.2 | M |  |
| N1.1.1. | LLC extensions for WSMP |  | 7.5 | N1.3:M |  |
| N1.2. | **IPv6** |  | 5.3, 6.4 | O1 |  |
| N1.2.1. | Use stateless configuration |  | 6.4 | O |  |
| N1.2.2. | Send IP datagrams |  | 5.3 | O2 |  |
| N1.2.3. | Receive IP datagrams |  | 5.3 | O2 |  |
| N1.2.3.1. | Receive by link-local address |  | 6.4 | M |  |
| N1.2.3.2. | Receive by global address |  | 6.4 | M |  |
| N1.2.3.3. | Receive by host multicast addresses |  | 6.4 | O3 |  |
| N1.2.3.4. | Receive by router multicast addresses |  | 6.4 | O3 |  |
| N1.2.4. | UDP |  | 5.4 | O |  |
| N1.2.5. | TCP |  | 5.4 | O |  |
| N1.2.6. | Other IETF protocols | ( )a | 5.4 | O |  |
| N1.3. | **WSMP** |  | 5.5 | O1 |  |
| N1.3.1. | ***WSM reception*** |  | 5.5.3 | O4 |  |
| N1.3.1.1. | Check WSMP Version number | ( )b | 5.5.3, 8.3.2 | M |  |
| N1.3.1.2. | Check Subtype field | ( )r | 5.5.3, 8.3.2 | M |  |
| N1.3.1.3. | Check *TPID* field | ( )s | 5.5.3, 8.3.2 | M |  |
| N1.3.1.4. | WAVE Info Elem Extension field |  | 8.1.1 | M |  |
| N1.3.1.5. | Deliver message based on Address Info (PSID) |  | 5.5.3 | M |  |
| N1.3.2. | ***WSM transmission*** |  | 5.5.2 | O4 |  |
| N1.3.2.1. | Insert WSMP Version number |  | 8.3.2 | M |  |
| N1.3.2.2. | Insert Address Info (PSID) |  | 8.3.3 | M |  |
| N1.3.2.3. | Outbound message size | ( )c | 5.5.2 | M |  |
| N1.3.2.4. | Transmit channel number |  | 8.3.4.2 | O |  |
| N1.3.2.5. | Transmit data rate |  | 8.3.4.3 | O |  |
| N1.3.2.6. | Transmit Power Used |  | 8.3.4.4 | O |  |
| N1.3.2.7. | Channel Load |  | 8.3.4.5 | O |  |
| N1.3.2.8. | Insert Subtype features | ( )r | 8.3.2 | M |  |
| N1.3.2.9. | Insert TPID features | ( )s | 8.3.2 | M |  |
| N2. | **MANAGEMENT PLANE** |  | — | — |  |
| N2.1. | **User role** |  | 6.2.1 | O |  |
| N2.1.1. | Receive WSAs over WSMP |  | 6.3.2 | O5 |  |
| N2.1.2. | Verify and accept Secured WSA |  | 6.3.3, 8.2.1 | O5 |  |
| N2.1.3. | Accept Unsecured WSA |  | 6.3.3, 8.2.1 | O5 |  |
| N2.1.4. | WAVE Info Elem Extension fields |  | 8.1.1 | M |  |
| N2.1.5. | Calculate avail service link quality |  | 6.3.4 | O |  |
| N2.1.6. | ***WSA header*** |  | 8.2.2 | M |  |
| N2.1.6.1. | Check WSA Version number | ( )d | 8.2.2.2 | M |  |
| N2.1.6.2. | Check WSA Identifier |  | 8.2.2.4 | O |  |
| N2.1.6.3. | Check Content Count |  | 8.2.2.5 | O |  |
| N2.1.6.4. | WSA header Info Element Ext field |  | 8.2.2.6 | M |  |
| N2.1.6.4.1. | Repeat Rate |  | 8.2.2.6.2 | O |  |
| N2.1.6.4.2. | 2DLocation |  | 8.2.2.6.3 | O |  |
| N2.1.6.4.3. | 3DLocation |  | 8.2.2.6.4 | O |  |
| N2.1.6.4.4. | Advertiser Identifier |  | 8.2.2.6.5 | O |  |
| N2.1.6.4.5. | Other info elements | ( )e | 8.2.2.6 | O |  |
| N2.1.7. | ***Service Info Segment*** |  | 8.2.3 | M |  |
| N2.1.7.1. | Number of Service Info Instances | ( )f | 8.2.3 | M |  |
| N2.1.7.2. | WAVE Information Element Extension |  | 8.2.3.6 | M |  |

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| **Table D.1—PICS proforma for 802.11 as underlying communication technology *(continued)*** | | | | | |
| **Item** | **Feature** | **Value** | **Reference** | **Status** | **Support** |
| N2.1.7.2.1. | PSC |  | 8.2.3.6.2 | O |  |
| N2.1.7.2.2. | IPv6 Address |  | 8.2.3.6.3 | O |  |
| N2.1.7.2.3. | Service Port |  | 8.2.3.6.4 | O |  |
| N2.1.7.2.4. | Provider MAC address |  | 8.2.3.6.5 | O |  |
| N2.1.7.2.5. | RCPI Threshold |  | 8.2.3.6.6 | O |  |
| N2.1.7.2.6. | WSA Count Threshold |  | 8.2.3.6.7 | O |  |
| N2.1.7.2.6.1. | WSA Count Threshold Interval |  | 8.2.3.6.8 | O |  |
| N2.1.7.2.6.2. | Alternate Interface |  | 8.2.3.6.9 | O |  |
| N2.1.7.2.6.3. | Application Data |  | 8.2.3.6.10 | O |  |
| N2.1.7.2.7. | Other info elements | ( )g | 8.2.3.6 | O |  |
| N2.1.8. | ***Channel Info Segment*** |  | 8.2.4 | M |  |
| N2.1.8.1. | Number of Channel Info Instances | ( )h | 8.2.4 | M |  |
| N2.1.8.2. | WAVE Info Elem Extension field |  | 8.2.4.9 | M |  |
| N2.1.8.2.1. | EDCA Parameter Set |  | 8.2.4.9.2 | O |  |
| N2.1.8.2.2. | Channel Access |  | 8.2.4.9.3 | O |  |
| N2.1.8.2.3. | Other info elements | ( )i | 8.2.4.9 | O |  |
| N2.1.9. | ***WAVE Router Advertisement*** |  | 8.2.5.2 | O |  |
| N2.1.9.1. | WAVE Info Elem Extension field |  | 8.2.5.8 | M |  |
| N2.1.9.1.1. | Secondary DNS |  | 8.2.5.8.2 | O |  |
| N2.1.9.1.2. | Gateway MAC address |  | 8.2.5.8.3 | O |  |
| N2.1.9.1.3. | Other info elements | ( )j | 8.2.5.8 | O |  |
| N2.2. | **Provider role** |  | 6.2.1 | O |  |
| N2.2.1. | Send WSA over WSMP |  | 6.2.3.3 | M |  |
| N2.2.1.1. | Send Secured WSA |  | 6.2.4.2.1, 8.2.1 | O6 |  |
| N2.2.1.2. | Send Unsecured WSA |  | 6.2.4.2.1, 8.2.1 | O6 |  |
| N2.2.2. | Send repeated advertisements |  | 6.2.4.2.1 | O |  |
| N2.2.3. | Change ongoing advertisements |  | 6.2.2.3, 6.2.4.2.2 | O |  |
| N2.2.4. | Delete service |  | 6.2.3.6 | O |  |
| N2.2.5. | ***WSA header*** |  | 8.2.2 | M |  |
| N2.2.5.1. | Set WSA Version |  | 8.2.2.2 | M |  |
| N2.2.5.2. | Set WSA Identifier |  | 8.2.2.4 | M |  |
| N2.2.5.3. | Set Content Count |  | 8.2.2.5 | M |  |
| N2.2.6. | WSA header Info Element Ext field |  | 8.2.2.6 | M |  |
| N2.2.6.1. | Repeat Rate |  | 8.2.2.6.2 | O |  |
| N2.2.6.2. | 2DLocation |  | 8.2.2.6.3 | O |  |
| N2.2.6.3. | 3DLocation |  | 8.2.2.6.4 | O |  |
| N2.2.6.4. | Advertiser Identifier |  | 8.2.2.6.5 | O |  |
| N2.2.6.5. | Other info elements | ( )k | 8.2.2.6 | O |  |
| N2.2.7. | ***Service Info Segment*** |  | 8.2.3 | M |  |
| N2.2.8. | Number of Service Info Instances | ( )l | 8.2.3 | M |  |
| N2.2.9. | WAVE Info Elem Extension field |  | 8.2.3.6 | O |  |
| N2.2.9.1. | N2.2.9. |  | 8.2.3.6.2 | O |  |
| N2.2.9.2. | N2.2.9. |  | 8.2.3.6.3 | O |  |
| N2.2.9.3. | N2.2.9. |  | 8.2.3.6.4 | O |  |
| N2.2.9.4. | N2.2.9. |  | 8.2.3.6.5 | O |  |
| N2.2.9.5. | N2.2.9. |  | 8.2.3.6.6 | O |  |
| N2.2.9.6. | N2.2.9. |  | 8.2.3.6.7 | O |  |
| N2.2.9.6.1. | WSA Count Threshold Interval |  | 8.2.3.6.8 | O |  |
| N2.2.9.6.2. | Alternate Interface |  | 8.2.3.6.9 | O |  |
| N2.2.9.6.3. | Application Data |  | 8.2.3.6.10 | O |  |
| N2.2.9.7. | Other info elements | ( )m | 8.2.3.6 | O |  |
| N2.2.10. | ***Channel Info Segment*** |  | 8.2.4 | M |  |
| N2.2.11. | Number of Channel Info Instances | ( )n | 8.2.4 | M |  |
| N2.2.12. | WAVE Info Elem Extension field |  | 8.2.4.9 | O |  |
| N2.2.12.1. | EDCA Parameter Set |  | 8.2.4.9.2 | O |  |

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| **Table D.1—PICS proforma for 802.11 as underlying communication technology *(continued)*** | | | | | |
| **Item** | **Feature** | **Value** | **Reference** | **Status** | **Support** |
| N2.2.12.2. | Channel Access |  | 8.2.4.9.3 | O |  |
| N2.2.12.3. | Other info elements | ( )o | 8.2.4.9 | O |  |
| N2.2.13. | ***Send WRA*** |  | 8.2.5 | O |  |
| N2.2.13.1. | WAVE Info Elem Extension field |  | 8.2.5.8 | O |  |
| N2.2.13.1.1. | Secondary DNS |  | 8.2.5.8.2 | O |  |
| N2.2.13.1.2. | Gateway MAC address |  | 8.2.5.8.3 | O |  |
| N2.2.13.1.3. | Other info elements | ( )p | 8.2.5.8 | O |  |
| N2.3. | **Timing advertisement** |  | — |  |  |
| N2.3.1 | Timing Advertisement generation |  | 6.2.4.3 | O |  |
| N2.4. | **MIB maintenance** |  | 6.5 | — |  |
| N2.4.1. | Managed WAVE device |  | 6.5 | O |  |
| N2.4.2. | MIB per standard |  | 6.5 | N2.4.1:M |  |
| N2.4.3. | Other MIB | ( )q | 6.5 | O |  |
| a List protocols supported.  b List version numbers supported.  c Enter maximum WAVE Short Message length.  d List version numbers supported.  e List any other WSA header WAVE Information Elements processed on reception.  f Enter maximum number of Service Info Instances processed on reception.  g List any other Service Info Segment WAVE Information Elements processed on reception.  h Enter maximum number of Channel Info Instances processed on reception.  i List any other Channel Info Segment WAVE Information Elements processed on reception.  j List any other WAVE routing advertisement WAVE Information Elements processed on reception.  k List any other WSA header WAVE Information Elements supported on transmission.  l Enter maximum number of Service Info Instances supported on transmission.  m List any other Service Info Segment WAVE Information Elements supported on transmission.  n Enter maximum number of Channel Info Instances supported on transmission.  o List any other Channel Info Segment WAVE Information Elements supported on transmission.  p List any other WAVE routing advertisement WAVE Information Elements supported on transmission.  q List any other MIBs supported.  r List Subtype values supported. | | | | | |

**Table D.2—PICS proforma for LTE-V2X as underlying communication technology**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Item** | **Feature** | **Value** | **Reference** | **Status** | **Support** |
| **N3.** | **DATA PLANE** |  | — | — |  |
| N3.1. | **Access Stratum** |  | M.3.2 | M |  |
| N3.1.1. | Service access point for AS |  | M.5.4 | N3.3:M |  |
| N3.2. | **IPv6** |  | 5.3, 6.4 | O1 |  |
| N3.2.1. | Use stateless configuration |  | 6.4 | O |  |
| N3.2.2. | Send IP datagrams |  | 5.3 | O2 |  |
| N3.2.3. | Receive IP datagrams |  | 5.3 | O2 |  |
| N3.2.3.1. | Receive by link-local address |  | 6.4 | M |  |
| N3.2.3.2. | Receive by global address |  | 6.4 | M |  |
| N3.2.3.3. | Receive by host multicast addresses |  | 6.4 | O3 |  |
| N3.2.3.4. | Receive by router multicast addresses |  | 6.4 | O3 |  |
| N3.2.4. | UDP |  | 5.4 | O |  |
| N3.2.5. | TCP |  | 5.4 | O |  |
| N3.2.6. | Other IETF protocols | ( )a | 5.4 | O |  |
| N3.3. | **WSMP** |  | 5.5 | O1 |  |
| N3.3.1. | ***WSM reception*** |  | 5.5.3 | O4 |  |
| N3.3.1.1. | Check WSMP Version number | ( )b | 5.5.3, 8.3.2 | M |  |
| N3.3.1.2. | Check Subtype field | ( )r | 5.5.3, 8.3.2 | M |  |
| N3.3.1.3. | Check TPID field | ( )s | 5.5.3, 8.3.2 | M |  |
| N3.3.1.4. | WAVE Info Elem Extension field |  | 8.1.1 | M |  |
| N3.3.1.5. | Deliver message based on Address Info (PSID) |  | 5.5.3 | M |  |
| N3.3.2. | ***WSM transmission*** |  | 5.5.2 | O4 |  |
| N3.3.2.1. | Insert WSMP Version number |  | 8.3.2 | M |  |
| N3.3.2.2. | Insert Address Info (PSID) |  | 8.3.3 | M |  |
| N3.3.2.3. | Outbound message size | ( )c | 5.5.2 | M |  |
| N3.3.2.4. | Transmit data rate |  | 8.3.4.3 | O |  |
| N3.3.2.5. | Transmit Power Used |  | 8.3.4.4 | O |  |
| N3.3.2.6. | Compact Time Confidence |  | 8.3.4.6 | O |  |
| N3.3.2.7. | Insert Subtype features | ( )r | 8.3.2 | M |  |
| N3.3.2.8. | Insert TPID features | ( )s | 8.3.2 | M |  |
| N4. | **MANAGEMENT PLANE** |  | — | — |  |
| N4.1. | **User role** |  | 6.2.1 | O |  |
| N4.1.1. | Receive WSAs over WSMP |  | 6.3.2 | O5 |  |
| N4.1.2. | Verify and accept Secured WSA |  | 6.3.3, 8.2.1 | O5 |  |
| N4.1.3. | Accept Unsecured WSA |  | 6.3.3, 8.2.1 | O5 |  |
| N4.1.4. | WAVE Info Elem Extension fields |  | 8.1.1 | M |  |
| N4.1.5. | Calculate avail service link quality |  | 6.3.4 | O |  |
| N4.1.6. | ***WSA header*** |  | 8.2.2 | M |  |
| N4.1.6.1. | Check WSA Version number | ( )d | 8.2.2.2 | M |  |
| N4.1.6.2. | Check WSA Identifier |  | 8.2.2.4 | O |  |
| N4.1.6.3. | Check Content Count |  | 8.2.2.5 | O |  |
| N4.1.6.4. | WSA header Info Element Ext field |  | 8.2.2.6 | M |  |
| N4.1.6.4.1. | Repeat Rate |  | 8.2.2.6.2 | O |  |
| N4.1.6.4.2. | 2DLocation |  | 8.2.2.6.3 | O |  |
| N4.1.6.4.3. | 3DLocation |  | 8.2.2.6.4 | O |  |
| N4.1.6.4.4. | Advertiser Identifier |  | 8.2.2.6.5 | O |  |
| N4.1.6.4.5. | Extended Channel Infos and Info |  | 8.2.2.6.6  8.2.2.6.6.2 | M |  |
| N4.1.6.4.6. | Other info elements | ( )e | 8.2.2.6 | O |  |
| N4.1.7. | ***Service Info Segment*** |  | 8.2.3 | M |  |
| N4.1.7.1. | Number of Service Info Instances | ( )f | 8.2.3 | M |  |
| N4.1.7.2. | WAVE Information Element Extension |  | 8.2.3.6 | M |  |
| N4.1.7.2.1. | PSC |  | 8.2.3.6.2 | O |  |
| N4.1.7.2.2. | IPv6 Address |  | 8.2.3.6.3 | O |  |
| N4.1.7.2.3. | Service Port |  | 8.2.3.6.4 | O |  |
| N4.1.7.2.4. | Provider MAC address |  | M.6.3 | O |  |
| N4.1.7.2.5. | WSA Count Threshold |  | 8.2.3.6.7 | O |  |
| N4.1.7.2.5.1. | WSA Count Threshold Interval |  | 8.2.3.6.8 | O |  |
| N4.1.7.2.6. | Other info elements | ( )g | 8.2.3.6 | O |  |
| N4.1.8. | ***WAVE Router Advertisement*** |  | 8.2.5.2 | O |  |
| N4.1.8.1. | WAVE Info Elem Extension field |  | 8.2.5.8 | M |  |
| N4.1.8.1. | Secondary DNS |  | 8.2.5.8.2 | O |  |
| N4.1.8.1.2. | Gateway MAC address |  | M.6.4 | O |  |
| **Table D.2—PICS proforma for LTE-V2X as underlying communication technology *(continued)*** | | | | | |
| **Item** | **Feature** | **Value** | **Reference** | **Status** | **Support** |
| N4.1.8.1.3. | Other info elements | ( )j | 8.2.5.8 | O |  |
| N4.2. | **Provider role** |  | 6.2.1 | O |  |
| N4.2.1. | Send Service Advertisements over WSMP |  | 6.2.3.3 | M |  |
| N4.2.1.1. | Send Secured WSA |  | 6.2.4.2.1, 8.2.1 | O6 |  |
| N4.2.1.2. | Send Unsecured WSA |  | 6.2.4.2.1, 8.2.1 | O6 |  |
| N4.2.2. | Send repeated advertisements |  | 6.2.4.2.1 | O |  |
| N4.2.3. | Change ongoing advertisements |  | 6.2.2.3, 6.2.4.2.2 | O |  |
| N4.2.4. | Delete service |  | 6.2.3.6 | O |  |
| N4.2.5. | ***WSA header*** |  | 8.2.2 | M |  |
| N4.2.5.1 | Set WSA Version |  | 8.2.2.2 | M |  |
| N4.2.5.2 | Set WSA Identifier |  | 8.2.2.4 | M |  |
| N4.2.5.3 | Set Content Count |  | 8.2.2.5 | M |  |
| N4.2.6. | WSA header Info Element Ext field |  | 8.2.2.6 | M |  |
| N4.2.6.1. | Repeat Rate |  | 8.2.2.6.2 | O |  |
| N4.2.6.2. | 2DLocation |  | 8.2.2.6.3 | O |  |
| N4.2.6.3. | 3DLocation |  | 8.2.2.6.4 | O |  |
| N4.2.6.4. | Advertiser Identifier |  | 8.2.2.6.5 | O |  |
| N4.2.6.5. | Extended Channel Infos and Info |  | 8.2.2.6.6  8.2.2.6.6.2 | M |  |
| N4.2.6.6. | Other info elements | ( )k | 8.2.2.6 | O |  |
| N4.2.7. | ***Service Info Segment*** |  | 8.2.3 | M |  |
| N4.2.8. | Number of Service Info Instances | ( )l | 8.2.3 | M |  |
| N4.2.9. | WAVE Info Elem Extension field |  | 8.2.3.6 | O |  |
| N4.2.9.1. | PSC |  | 8.2.3.6.2 | O |  |
| N4.2.9.2. | IPv6 Address |  | 8.2.3.6.3 | O |  |
| N4.2.9.3. | Service Port |  | 8.2.3.6.4 | O |  |
| N4.2.9.4. | Provider MAC address |  | M.6.3 | O |  |
| N4.2.9.5. | WSA Count Threshold |  | 8.2.3.6.7 | O |  |
| N4.2.9.5.1. | WSA Count Threshold Interval |  | 8.2.3.6.8 | O |  |
| N4.2.9.6. | Other info elements | ( )m | 8.2.3.6 | O |  |
| N4.2.10. | ***Send WRA*** |  | 8.2.5 | O |  |
| N4.2.10.1. | WAVE Info Elem Extension field |  | 8.2.5.8 | O |  |
| N4.2.10.1.1. | Secondary DNS |  | 8.2.5.8.2 | O |  |
| N4.2.10.1.2. | Gateway MAC address |  | M.6.4 | O |  |
| N4.2.10.1.3. | Other info elements | ( )p | 8.2.5.8 | O |  |
| N4.3. | **Timing advertisement** |  | — |  |  |
| N4.3.1. | Timing Advertisement generation |  | 6.2.4.3 | O |  |
| N4.4. | **MIB maintenance** |  | 6.5 | — |  |
| N4.4.1. | Managed WAVE device |  | 6.5 | O |  |
| N4.4.2. | Other MIB | ( )q | 6.5 | O |  |
| a List protocols supported.  b List version numbers supported.  c Enter maximum WAVE Short Message length.  d List version numbers supported.  e List any other WSA header WAVE Information Elements processed on reception.  f Enter maximum number of Service Info Instances processed on reception.  g List any other Service Info Segment WAVE Information Elements processed on reception.  h Enter maximum number of Channel Info Instances processed on reception.  i List any other Channel Info Segment WAVE Information Elements processed on reception.  j List any other WAVE routing advertisement WAVE Information Elements processed on reception.  k List any other WSA header WAVE Information Elements supported on transmission.  l Enter maximum number of Service Info Instances supported on transmission.  m List any other Service Info Segment WAVE Information Elements supported on transmission.  n Enter maximum number of Channel Info Instances supported on transmission.  o List any other Channel Info Segment WAVE Information Elements supported on transmission.  p List any other WAVE routing advertisement WAVE Information Elements supported on transmission.  q List any other MIBs supported.  r List Subtype values supported.  s List TPID values supported. | | | | | |

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