

# Bluetooth Network Encapsulation Protocol (BNEP)

**Bluetooth® Implementation Conformance Statement (ICS) Proforma**

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# 1 General principles

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## 1.1 Implementation Under Test (IUT) identification

Using the Bluetooth SIG qualification tool, the implementer is expected to declare details about what will be implemented.

## 2 ICS declarations

### 2.1 Versions

Table 0: X.Y Versions

| Item | Version   | Reference | Status |
|------|-----------|-----------|--------|
| 1    | BNEP v1.0 | [1]       | M      |

### 2.2 Core Configuration

Table 0a: Core Configuration Requirements

| Item | Core Configuration             | Reference | Status   |
|------|--------------------------------|-----------|----------|
| 1    | Protocol supported over BR/EDR | [1] 1.4   | C.1, C.3 |
| 2    | Protocol supported over LE     | [1] 1.4   | C.2      |

C.1: Excluded for this Protocol IF CORE 41/2 “LE Core Configuration”.

C.2: Excluded for this Protocol.

C.3: Mandatory for this Protocol.

### 2.3 Bluetooth Network Encapsulation Protocol Features

Table 1a: Bluetooth Network Encapsulation Features

| Item | Capability                                           | Reference                 | Status |
|------|------------------------------------------------------|---------------------------|--------|
| 1    | BNEP Connection Setup                                | [1] 2.6.3, 2.6.2          | M      |
| 2    | BNEP Data Packet Reception                           | [1] 2.5, 2.7–2.9          | M      |
| 3    | BNEP General Ethernet Data Packet Transmission       | [1] 2.5                   | C.1    |
| 3a   | BNEP Compressed Packet Transmission                  | [1] 2.7                   | C.1    |
| 3b   | BNEP Compressed Packet Transmission Source Only      | [1] 2.8                   | O      |
| 3c   | BNEP Compressed Packet Transmission Destination Only | [1] 2.9                   | O      |
| 4    | BNEP Control Message Processing                      | [1] 2.6                   | M      |
| 5    | BNEP Extension Header Processing                     | [1] 3.1–3.3, 2.6.2, 2.6.3 | M      |
| 6    | Network Protocol Filter Message Transmission         | [1] 2.6.4, 2.6.5          | O      |
| 7    | Multicast Address Filter Message Transmission        | [1] 2.6.4, 2.6.6          | O      |

C.1: Mandatory to support at least one IF BNEP 1a/7 “Multicast Address Filter Message Transmission”, otherwise Optional.

## 3 References

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- [1] Bluetooth Network Encapsulation Protocol (BNEP) Specification

## 4 Revision history and acknowledgments

### Revision History

| Publication Number | Revision Number | Date                       | Comments                                                                                                                                                                                                                                                          |
|--------------------|-----------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0                  | 1.0             | 2003-02-14                 | ICS Adopted                                                                                                                                                                                                                                                       |
|                    | 1.0.1r1         | 2005-02-11                 | Editorial and format changes.<br>Change document numbering.                                                                                                                                                                                                       |
| 1                  | 1.0.1           | 2005-02-18                 | Prepare for publication.                                                                                                                                                                                                                                          |
|                    | 1.0.2r0         | 2005-09-29                 | TSE 823: Tables 2&3 to optionally support > 1 PANU                                                                                                                                                                                                                |
| 2                  | 1.0.2           | 2005-10-12                 | Prepare for publication.                                                                                                                                                                                                                                          |
|                    | 1.0.3r0-2       | 2006-11-16-<br>2007-01-08  | TSE 1796: Table 2: Add 2 rows 6a and 6b, and footnote C4 for 6b.<br>TSE 1894: Changes Tables 2, 3, and 4 to show LLMNR Sender and Responder support for IPv4 for IPv6<br>Changed adopted spec version from 1.1 to 1.0<br>Removed redundant reference section (MS) |
| 3                  | 1.0.3           | 2007-01-08                 | Prepare for publication.                                                                                                                                                                                                                                          |
|                    | 1.0.4r0         | 2008-02-01                 | TSE 2159: Table 3, 4, 5: Support for LLMNR Sender conditional                                                                                                                                                                                                     |
| 4                  | 1.0.4           | 2008-04-01                 | Prepare for publication.                                                                                                                                                                                                                                          |
| 5                  | 1.0.4a          | 2008-07-01                 | TSE 2632: Removed table number from first table introduced in v1.0.3                                                                                                                                                                                              |
|                    | 1.0.5r0-1       | 2008-09-01 –<br>2008-12-01 | TSE 2637; Table 2/9a, 14a: change footnotes, re-implement TSE 2632 with correct table numbering.                                                                                                                                                                  |
| 6                  | 1.0.5           | 2008-12-01                 | Prepare for publication.                                                                                                                                                                                                                                          |
|                    | 1.0.6r0-1       | 2009-04-29 –<br>2009-06-04 | TSE 2722: Clarification to TSE 2159 Tables 2, 3, 4<br>Correction to Table 4, C.2                                                                                                                                                                                  |
| 7                  | 1.0.6           | 2009-08-10                 | Prepare for publication.                                                                                                                                                                                                                                          |
|                    | 1.0.7r0         | 2011-11-10                 | TSE 4473: Table 1a; Add rows 3a, 3b<br>TSE 4519: Table 2/8: modify, Table 3/6: remove                                                                                                                                                                             |
| 8                  | 1.0.7           | 2012-03-30                 | Prepare for publication.                                                                                                                                                                                                                                          |
|                    | 1.0.8r01        | 2015-01-26                 | Update to current ICS template and conventions.<br>TSE 6196: Add pre-requisites to tables.                                                                                                                                                                        |
|                    | 1.0.8r02        | 2015-06-01                 | Updated terminology from “PICS” to “ICS”                                                                                                                                                                                                                          |
| 9                  | 1.0.8           | 2015-07-14                 | Prepared for TCRL 2015-1 publication                                                                                                                                                                                                                              |
|                    | 1.0.9r00        | 2015-10-05                 | TSE 6489: Added new item 1a/3c (BNEP Compressed Packet Transmission Destination Only); updated conditionals for items 1/3 and 1/3a.                                                                                                                               |
| 10                 | 1.0.9           | 2015-12-22                 | Prepared for TCRL 2015-2 publication.                                                                                                                                                                                                                             |
|                    | 1.0.10r00       | 2018-04-04                 | TSE 10573 (rating 1): Template Conversion.                                                                                                                                                                                                                        |
| 11                 | 1.0.10          | 2018-07-01                 | Approved by BTI. Prepared for TCRL 2018-1 publication.                                                                                                                                                                                                            |

| Publication Number | Revision Number | Date                    | Comments                                                                                                                                                                                                                                                                                        |
|--------------------|-----------------|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    | 1.0.11r00       | 2018-10-03              | TSE 10899 (rating 4): ICS: Revised Capability for Items 2/9, 2/14, 4/5, and 4/10. Deleted Items 3/7 and 3/12.                                                                                                                                                                                   |
| 12                 | 1.0.11          | 2018-11-21              | Approved by BTI. Prepared for TCRL 2018-2 publication.                                                                                                                                                                                                                                          |
|                    | 1.0.12r00       | 2019-09-16              | TSE 4382 (rating 2): Updated items in Tables 2, 3, and 4 to reflect that LLMNR is only an informational RFC.<br>Updated template and copyright/legal info.                                                                                                                                      |
| 13                 | 1.0.12          | 2020-01-07              | Approved by BTI on 2019-11-17. Prepared for TCRL 2019-2 publication.                                                                                                                                                                                                                            |
|                    | p14r00–r01      | 2021-08-10 – 2021-12-03 | TSE 17012 (rating 1): Split the BNEP ICS (Table 1a) from the PAN ICS into a separate document.<br>Incorporated consistency checker editorials.<br>Performed template-related fixes. Updated copyright page to align with v2 of the DNMD.                                                        |
| 14                 | p14             | 2022-01-25              | Approved by BTI on 2021-12-19. Prepared for TCRL 2021-2 publication.                                                                                                                                                                                                                            |
|                    | p15r00–r01      | 2025-02-24 – 2025-04-23 | TSE 26900 (rating 2): Added “Versions” and “Core Configuration” sections, and added Tables 0 and 0a. Deleted “Bluetooth Network Encapsulation Protocol” section. Updated Reference column entries and conditional C.1 for Table 1a. Updated “References” section. Applied current ICS template. |
| 15                 | p15             | 2025-07-08              | Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication.                                                                                                                                                                                                                            |

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