Internet Protocol Support Profile (IPSP)

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

- ▪ **Revision:** IPSP.ICS.p3
- ▪ **Revision Date:** 2025-07-08
- ▪ **Prepared By:** Internet Working Group
- ▪ **Published during TCRL:** TCRL.pkg100

Contents

1 General principles

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.

1.2 Enforcement of inter-layer dependencies

This ICS includes one or more tables with inter-layer dependencies (ILDs). ILDs are used for specification requirements that are dependent on other supporting specifications. ILDs can refer to an individual ICS item in a separate layer (individual ILD), or it can refer to the full layer (full-layer ILD).

ILDs residing in an X2Core layer will be enforced from the Bluetooth SIG qualification tool in the following conditions, depending on where the referred ILD is residing:

Referred ILD resides in	Individual ILD	Full-layer ILD
Controller layer	Core-Complete configuration, or Referred layer is supported	N/A
Lower HCI layer	HCI is supported	N/A
Upper HCI layer	Core-Host configuration, or UHCI is supported	N/A
Host layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	N/A
X2Core layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	Core-Host configuration, or Core-Complete configuration

Table 1.1: Enforcement of an ILD within the Bluetooth SIG qualification tool

2   ICS declarations

2.1   Versions

Table 0: X.Y Versions

Item	Version	Reference	Status
1	IPSP v1.0	[1]	M

Table 0a: No longer used

2.2   Roles

Table 1: Role Requirements

Item	Role	Reference	Status
1	Node	[1] 3.1	C.1
2	Router	[1] 3.1	C.1

C.1:   Mandatory to support at least one.

2.3   Transports

Table 2: Transport Requirements

Item	Transport	Reference	Status
1	Profile supported over LE	[1] 1	C.2, C.3
2	Profile supported over BR/EDR	[1] 1	C.1

C.1:   Excluded for this Profile.
C.2:   Excluded for this Profile IF CORE 41/1 "BR/EDR Core Configuration".
C.3:   Mandatory for this Profile.

2.4   Node role

2.4.1   Service requirements (Node)

Table 3: Service Requirements (Node)

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	IP Support Service Declaration	[1] 4.1.1	M	N/A
2	Service UUID	[1] 4.1.3	M	[3] GAP 20a/1

2.4.2   Features (Node)

Table 4: Features (Node)

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status
1	Accept L2CAP Connection Request	[1] 6, 4.2	M

2.4.3   GATT requirements (Node)

Table 5: GATT Requirements (Node)

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
2	GATT Server over BR/EDR	[1] 4	C.1	[2] GATT 1a/4
3	GATT Server over LE	[1] 4	C.2	[2] GATT 1a/3

C.1:   Mandatory IF IPSP 2/2 "Profile supported over BR/EDR", otherwise not defined.
C.2:   Mandatory IF IPSP 2/1 "Profile supported over LE", otherwise not defined.

2.4.4   GAP requirements (Node)

Table 6: GAP Requirements (Node)

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Peripheral	[1] 3.3	M	[3] GAP 5/3 OR GAP 38/3
2	Central	[1] 3.3	O	[3] GAP 5/4 OR GAP 38/4
3	LE security mode 1	[1] 7.2	M	[3] GAP 25/1

2.4.5   L2CAP requirements (Node)

Table 7: L2CAP Requirements (Node)

Prerequisite: IPSP 1/1 "Node"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	LE Credit Based Flow Control Mode	[1] 4	M	[4] L2CAP 2/46

2.5   Router

2.5.1   Service requirements (Router)

Table 8: Service Requirement (Router)

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status
1	Discover IPSS Service	[1] 5	M

2.5.2   Features (Router)

Table 9: L2CAP Requirements (Router)

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status
1	Initiate L2CAP Connection	[1] 6, 5.1	M
2	Reject L2CAP Connection Request	[1] 6	M

2.5.3   GATT requirements (Router)

Table 10: GATT Requirements (Router)

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
1a	GATT Client over BR/EDR	[1] 5	C.2	[2] GATT 1a/2
1b	GATT Client over LE	[1] 5	C.3	[2] GATT 1a/1
2	Discover All Primary Services	[1] 5	C.1	[2] GATT 3/2
3	Discover Primary Services by Service UUID	[1] 5	C.1	[2] GATT 3/3

C.1:   Mandatory to support at least one.

C.2:   Mandatory IF IPSP 2/2 "Profile supported over BR/EDR", otherwise not defined.

C.3:   Mandatory IF IPSP 2/1 "Profile supported over LE", otherwise not defined.

2.5.4   GAP requirements (Router)

Table 11: GAP Requirements (Router)

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Peripheral	[1] 3.3	O	[3] GAP 5/3 OR GAP 38/3
2	Central	[1] 3.3	M	[3] GAP 5/4 OR GAP 38/4

Item	Capability	Reference	Status	Inter-Layer Dependency
3	LE security mode 1	[1] 7.2	M	[3] GAP 35/1

2.5.5 L2CAP requirements (Router)

Table 12: L2CAP Requirements (Router)

Prerequisite: IPSP 1/2 "Router"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	LE Credit Based Flow Control Mode	[1] 5	M	[4] L2CAP 2/46

Table 13: No longer used

3 References

[1] Internet Protocol Support Profile, Version 1.0

[2] ICS Proforma for Generic Attribute Profile (GATT)

[3] ICS Proforma for Generic Access Profile (GAP)

[4] ICS Proforma for Logical Link Control and Adaptation Protocol (L2CAP)

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2014-12-22	Prepared for publication
	1.0.1r00	2017-10-08	TSE 9951 (rating 1): Update ICS template. Remove the Global Statement of Conformance section in accordance with the current template.
1	1.0.1	2018-06-27	Approved by BTI. Prepared for TCRL 2018-1 publication.
	p2r00–r02	2022-10-26 – 2022-11-17	TSE 20348 (rating 3): Updated to align with current ICS conventions/template. Removed Support columns. In Table 0, updated the table title, reference, and version title. Deleted Tables 0a and 13 because they are no longer used. In Table 1, updated the table title, references, and C.1. In Table 2, updated references and added Item 2 and C.1. In Table 3, 5, 10, and 11, updated the prerequisite, capabilities, and references; added an ILD column. In Tables 4, 8, and 9, updated the prerequisite and references. In Table 6, updated the prerequisite and references and added an ILD column and Item 3. In Tables 7, 10, and 12 updated the prerequisite and references and added an ILD column. In Table 10, also updated C.1. Updated the references list. Added a Publication Number column to the Revision History. Revised the document numbering convention, setting the last release publication of 1.0.1 as p1. Performed additional template-related formatting fixes. Replaced the Bluetooth logo in the footer and updated the copyright page to align with v2 of the DNMD.
2	p2	2023-02-07	Approved by BTI on 2022-12-28. Prepared for TCRL 2022-2 publication.
	p3r00–r01	2025-01-31 – 2025-02-18	TSE 27122 (rating 2): Updated Table 0 title. Updated Table 1 conditional C.1. For Table 2, updated items 2/1 and 2/2 and added C.2 and C.3. For Table 5, updated 5/1 and added 5/2, 5/3, C.1, and C.2. For Table 10, updated 10/1 and C.1 and added 10/1a, 10/1b, C.1, and C.2. Updated "Inter-Layer Dependency" value formatting for 6/1, 6/2, 11/1, and 11/2.
3	p3	2025-07-08	Approved by BTI on 2025-06-15. Prepared for TCRL pkg100 publication.

Acknowledgments

Name	Company
Joe Decuir	CSR
Frank Berntsen	Nordic Semiconductor
Krishna Shingala	Nordic Semiconductor