HTTP Proxy Service (HPS)

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

- **Revision:** HPS.ICS.p4
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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	HPS v1.0	[1]	M

2.2 Transports

Table 1: Transport Requirements

Item	Transport	Reference	Status
1	Service supported over BR/EDR	[1] 1.5	C.1, C.3
2	Service supported over LE	[1] 1.5	C.2, C.3

C.1: Excluded for this Service IF CORE 41/2 “LE Core Configuration” OR CORE 40/1 “Core-Controller”.

C.2: Excluded for this Service IF CORE 41/1 “BR/EDR Core Configuration” OR CORE 40/1 “Core-Controller”.

C.3: Mandatory to support at least one.

2.3 Service requirements

Table 2: HPS Service and Characteristics

Item	Capability	Reference	Status
1	HTTP Proxy Service (HPS)	[1] 2	M
2	URI Characteristic	[1] 3.1	M
3	HTTP Header Characteristic	[1] 3.2	M
4	HTTP Entity Body Characteristic	[1] 3.3	M
5	HTTP Control Point Characteristic	[1] 3.4	M
6	HTTP Status Code Characteristic	[1] 3.5	M
7	HTTPS Security Characteristic	[1] 3.6	M
8	HTTP GET	[3] 9.3	M
9	HTTP HEAD	[3] 9.4	M
10	HTTP POST	[3] 9.5	M
11	HTTP PUT	[3] 9.6	M
12	HTTP DELETE	[3] 9.7	M
13	HTTPS GET	[3] 9.3, [4]	M
14	HTTPS HEAD	[3] 9.4, [4]	M
15	HTTPS POST	[3] 9.5, [4]	M
16	HTTPS PUT	[3] 9.6, [4]	M
17	HTTPS DELETE	[3] 9.7, [4]	M
18	HTTP CANCEL	[3] 9.8	M
19	HPS AD includes HPS UUID	[1] 4	C.1

Item	Capability	Reference	Status
20	HPS connects to client with HPS UUID in Service Solicitation AD type field	[1] 4	C.1

C.1: Mandatory IF HPS 1/2 “Service supported over LE”, otherwise Excluded.

2.4 GATT requirements

Table 3: GATT Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
1a	GATT Server over BR/EDR	[1] 1.4	C.1	[2] GATT 1a/4
1b	GATT Server over LE	[1] 1.4	C.2	[2] GATT 1a/3
2	Read Characteristic Value	[1] 1.4	M	[2] GATT 4/8
3	Read Long Characteristic Value	[1] 1.4	M	[2] GATT 4/10
4	Write Characteristic Value	[1] 1.4	M	[2] GATT 4/14
5	Write Long Characteristic Value	[1] 1.4	M	[2] GATT 4/15
6	Single Notification	[1] 1.4	M	[2] GATT 4/17
7	Read Characteristic Descriptor	[1] 1.4	M	[2] GATT 4/19
8	Write Characteristic Descriptor	[1] 1.4	M	[2] GATT 4/21

C.1: Mandatory IF HPS 1/1 “Service supported over BR/EDR”, otherwise not defined.

C.2: Mandatory IF HPS 1/2 “Service supported over LE”, otherwise not defined.

2.5 SDP requirements

Table 4: SDP Requirements

Prerequisite: HPS 1/1 “Service supported over BR/EDR”

Item	Capability	Reference	Status
1	SDP record present for HPS	[1] 1.5	M
2	No longer used	N/A	N/A

2.6 GAP requirements

Table 5: LE Connection Procedures

Prerequisite: HPS 1/2 “Service supported over LE”

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

3 References

[1] Bluetooth HTTP Proxy Service Specification, Version 1.0

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

[3] IETF RFC-2616, Hyper Text Transfer Protocol – HTTP/1.1

[4] IETF RFC-2818, HTTP Over TLS

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

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2015-10-06	Prepared for publication
	1.0.1r00	2016-04-13	TSE 7013: TSE 7013: Update conditionals in Table 2 items 19 and 20 for LE dependency. Deleted Global Statement of Conformance section to align with the current ICS template. Table 5 (LE Connection Procedures) items updated for dual mode GAP ICS. Reference section document titles updated.
	1.0.1r01	2016-04-21	Reviewed by Alicia Courtney. Editorial changes made.
1	1.0.1	2016-07-13	Prepared for TCRL 2016-1 publication.
	1.0.1 edition 2r00	2018-11-26	Editorial changes only. Template updated. Revision History and contributors moved to the end of the document.
	1.0.1 edition 2	2019-12-12	Updated copyright page and confidentiality markings to support new Documentation Marking Requirements, performed minor formatting updates, and accepted all tracked changes to prepare for edition 2 publication.
	1.0.1ed3 r00–r02	2021-03-24 – 2021-05-22	TSE 16090 (rating 1): Updated Tables 3, 4, and 5 for consistency issues and Inter-Layer Dependency column; added a reference to the SDP.ICS in the References section. Editorials to align with the latest ICS template. Added a Publication Number column and assigned publication number 1 to the previous v1.0.1. Consistency checker findings.
	1.0.1 edition 3	2021-05-26	Approved by BTI on 2021-05-06. Prepared for publication.
	p2r00–r01	2023-09-27 – 2023-12-08	TSE 23667 (rating 2): Resolved GAP, GATT, and SDP inter-layer dependencies. In Table 3 (GATT Requirements), marked Item 1 as no longer used and added Items 1a and 1b and conditionals C.1 and C.2. In Table 4 (SDP Requirements), deleted the ILD column, updated the Capability value in Item 1, and marked Item 2 as no longer used. Updated the references. Made editorial edits to align the document with the latest ICS template. Replaced the copyright page to align with v2 of the DNMD.
2	p2	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p2ed2r00	2025-07-09	TSE 27328 (rating 1): Updated the Status for HPS 1/1 and HPS 1/2, added conditions C.1 and C.2, and renumbered the previous C.1 as C.3. Updated Capability for HPS 3/6.
	p2 edition 2	2025-08-05	Approved by BTI on 2025-08-05. Prepared for edition 2 publication.

Publication Number	Revision Number	Date	Comments
	p3r00	2025-08-14	TSE 27556 (rating 1): Updated the ILD column for Items 5/1 and 5/2 to delete references to GAP Table 38.
3	p3	2025-11-04	Approved by BTI on 2025-10-02. Prepared for TCRL pkg101 publication.
	p4r00–r01	2025-12-04 – 2025-12-31	TSE 28169 (rating 1): Updated the conditions in the transport table to make sure the layer is excluded when the design is an implementation of the Core-Controller Configuration by adding "OR CORE 40/1 “Core-Controller”" to an already excluded transport based on Core Configuration support.
4	p4	2026-02-17	Approved by BTI on 2026-01-21. Prepared for TCRL pkg102 publication.

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