

# Headset Profile (HSP)

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

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# 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	HSP v1.1**	[1]	Deprecated 2025-02-01. Withdrawn 2027-02-01.
2	HSP v1.2	[2]	M

### 2.2 Core Configuration

Table 0a: Core Configuration Requirements

Item	Core Configuration	Reference	Status
1	Profile supported over BR/EDR	[1] 2.1	C.1, C.3
2	Profile supported over LE	[1] 2.1	C.2

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

C.2: Excluded for this Profile.

C.3: Mandatory for this Profile.

### 2.3 Roles

Table 1: Role Requirements

Item	Role	Reference	Status
1	Audio Gateway (AG)	[1] 2.2	C.1
2	Headset (HS)	[1] 2.2	C.1

C.1: Mandatory to support at least one.

### 2.4 Audio Gateway Role

Table 2: Application Features (AG)

*Prerequisite: HSP 1/1 “Audio Gateway (AG)”*

Item	Capability	Reference	Status
1	Incoming audio connection establishment	[1] 4.2	M
2	Ring (AT command)	[1] 4.2	O
3	Inband ring tone	[1] 4.2	O
4	Outgoing audio connection establishment	[1] 4.3	O
5	Audio connection release from HS	[1] 4.4, [2] 4.5	M
6	Audio connection release from AG	[1] 4.4, [2] 4.5	O
7	Audio connection transfer: AG to HS	[1] 4.5.1, [2] 4.6.1	M

\*\* Deprecated versions may not appear in the Bluetooth SIG qualification tool after the deprecation date. TCRLs published after this date will not allow the use of deprecated versions.

Item	Capability	Reference	Status
8	Audio connection transfer: HS to AG	[1] 4.5.2, [2] 4.6.2	M
9	Remote audio volume control	[1] 4.6, [2] 4.7	C.1
10	HS informs AG about local changes of audio volume	[1] 4.6, [2] 4.7	O
11	Audio volume setting storage by HS	[1] 4.6, [2] 4.7	O
12	Remote microphone gain control	[1] 4.6, [2] 4.7	C.2
13	HS informs AG about local changes of microphone gain	[1] 4.6, [2] 4.7	O
14	Microphone gain setting storage by HS	[1] 4.6, [2] 4.7	O
15	Connection Handling with Detach/Page	[1] 4.8.1, [2] 4.9.1	M
16	No longer used	N/A	N/A

C.1: Mandatory IF HSP 2/10 “HS informs AG about local changes of audio volume”, otherwise Optional.

C.2: Mandatory IF HSP 2/13 “HS informs AG about local changes of microphone gain”, otherwise Optional.

**Table 2a: GAP Requirements**

*Prerequisite: HSP 1/1 “Audio Gateway (AG)”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Initiation of general inquiry	[2] 6.3	M	[3] GAP 3/1

**Table 2b: SDP Requirements**

*Prerequisite: HSP 1/1 “Audio Gateway (AG)”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	ProtocolDescriptorList	[2] 5.3	M	[4] SDP 9/2
2	BluetoothProfileDescriptorList	[2] 5.3	M	[4] SDP 9/14

**Table 2c: RFCOMM Requirements**

*Prerequisite: HSP 1/1 “Audio Gateway (AG)”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	RFCOMM	[1] 2.1	M	[5] RFCOMM

## 2.5 Headset Role

**Table 3: Application Features (HS)**

*Prerequisite: HSP 1/2 “Headset (HS)”*

Item	Capability	Reference	Status
1	Incoming audio connection establishment	[1] 4.2	M
2	Ring (AT command)	[1] 4.2	M
3	Inband ring tone	[1] 4.2	M
4	Outgoing audio connection establishment	[1] 4.3	M
5	Audio connection release from HS	[1] 4.4, [2] 4.5	M
6	Audio connection release from AG	[1] 4.4, [2] 4.5	M
7	Audio connection transfer: AG to HS	[1] 4.5.1, [2] 4.6.1	M
8	Audio connection transfer: HS to AG	[1] 4.5.2, [2] 4.6.2	M
9	Remote audio volume control	[1] 4.6, [2] 4.7	C.1
10	HS informs AG about local changes of audio volume	[1] 4.6, [2] 4.7	O
11	Audio volume setting storage by HS	[1] 4.6, [2] 4.7	O
12	Remote microphone gain control	[1] 4.6, [2] 4.7	C.2
13	HS informs AG about local changes of microphone gain	[1] 4.6, [2] 4.7	O
14	Microphone gain setting storage by HS	[1] 4.6, [2] 4.7	O
15	Connection Handling with Detach/Page	[1] 4.8.1, [2] 4.9.1	M
16	No longer used	N/A	N/A

C.1: Mandatory IF HSP 3/10 “HS informs AG about local changes of audio volume”, otherwise Optional.

C.2: Mandatory IF HSP 3/13 “HS informs AG about local changes of microphone gain”, otherwise Optional.

**Table 3a: GAP Requirements**

*Prerequisite: HSP 1/2 “Headset (HS)”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Non-discoverable mode	[2] 6.1	M	[3] GAP 1/1
2	General discoverable mode	[2] 6.1	M	[3] GAP 1/3

**Table 3b: SDP Requirements**

*Prerequisite: HSP 1/2 “Headset (HS)”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	ProtocolDescriptorList	[2] 5.3	M	[4] SDP 9/2
2	BluetoothProfileDescriptorList	[2] 5.3	M	[4] SDP 9/14

**Table 3c: RFCOMM Requirements***Prerequisite: HSP 1/2 “Headset (HS)”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	RFCOMM	[2] 2.1	M	[4] RFCOMM

**Table 4: No longer used**



## 3 References

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- [1] Headset Profile Specification, Version 1.1 or later
- [2] Headset Profile Specification, Version 1.2
- [3] ICS Proforma for Generic Access Profile (GAP)
- [4] ICS Proforma for Service Discovery Protocol (SDP)
- [5] ICS Proforma for RFCOMM

## 4 Revision history and acknowledgments

### Revision History

Publication Number	Revision Number	Date	Comments
0	1.2.3	2008-12-18	Prepare for publication.
	1.2.4r1	2013-05-01	TSE 5038: Updated references in Table 0, Table 2 and Table 3. Updated references from O.X to C.X. Updated conditional wording to match current language. Updated Disclaimer and Copyright notice to 2013.
1	1.2.4	2013-07-02	Prepare for Publication
	1.2.5r01	2013-09-30	TSE 5305: Updated status of 2/5, Updated C.3 and added C.5 for Table 2.
	1.2.5r02	2013-10-23	Review by Siegfried
	1.2.5r03	2013-11-13	BQRB Review: Updated TSE change description for 5305.
2	1.2.5	2013-12-03	Prepare for Publication
	1.2.6r00	2016-12-07	TSE 8238: Template converted and miscellaneous editorial changes.
	1.2.6r01	2017-05-04	Updated copyright date to 2017. Updated document properties to "HSP ICS".
3	1.2.6	2017-07-03	Approved by BTI. Prepared for TCRL 2017-1 publication.
	1.2.7r00–r01	2019-04-01– 2019-06-19	TSE 11387 (rating 1): For Table 2, restored ICS items 11–16 names, which were showing up as DUN ICS item names, and updated C.1–C.5 notes. For Table 3, deleted introductory material and updated C.1–C.3 notes. For Table 4, updated C.1 note.
5	1.2.7	2019-07-28	Approved by BTI. Prepared for TCRL 2019-1 publication.
	p6r00–r03	2022-10-28 – 2022-12-02	TSE 20340 (rating 3): Updated to align with current ICS conventions/template. Removed Support columns and "is supported" language. In Table 0, updated the table title, capabilities, references, and C.1. In Table 1, updated the table title and C.1. In Table 2, updated the prerequisite and references and marked Item 16 and C.4 as no longer used. Added missing SDP tables (Tables 2b and 3b), GAP tables (Tables 2a and 3a), and RFCOMM tables (Tables 2c and 3c). In Table 3, updated the prerequisite and references, marked Item 16 as no longer used, and deleted C.3. In Table 4, updated the reference and 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 1.2.7 as p5.  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.

Publication Number	Revision Number	Date	Comments
6	p6	2023-02-07	Approved by BTI on 2022-12-19. Prepared for TCRL 2022-2 publication.
	p7r00–r04	2024-10-11 – 2024-12-02	TSE 26366 (rating 1): Updated Table 0 to indicate deprecation and withdrawal of HSP v1.1, and updated Item 2 status. Updated Table 2 to cut conditionals C.3, C.4, and C.5, and updated Item 2 to “O”. Updated Table 4 to indicate it is no longer used. Deleted Section 1.6 about errata service releases. Updated table spacing to current guidelines.
7	p7	2025-02-18	Approved by BTI on 2024-12-25. Prepared for TCRL 2025-1 publication.
	p8r00	2025-02-27	TSE 27007 (rating 2): Added “Core Configuration” section and Table 0a.
8	p8	2025-07-08	Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication.

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