Headset Profile (HSP)

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

- **Revision:** HSP.ICS.p9
- **Revision Date:** 2026-02-17
- **Prepared By:** BTI
- **Published during TCRL:** TCRL.pkg102

This document, regardless of its title or content, is not a Bluetooth Specification as defined in the Bluetooth Patent/Copyright License Agreement ("PCLA") and Bluetooth Trademark License Agreement. Use of this document by members of Bluetooth SIG is governed by the membership and other related agreements between Bluetooth SIG Inc. ("Bluetooth SIG") and its members, including the PCLA and other agreements posted on Bluetooth SIG's website located at www.bluetooth.com.

THIS DOCUMENT IS PROVIDED "AS IS" AND BLUETOOTH SIG, ITS MEMBERS, AND THEIR AFFILIATES MAKE NO REPRESENTATIONS OR WARRANTIES AND DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, TITLE, NON-INFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, THAT THE CONTENT OF THIS DOCUMENT IS FREE OF ERRORS.

TO THE EXTENT NOT PROHIBITED BY LAW, BLUETOOTH SIG, ITS MEMBERS, AND THEIR AFFILIATES DISCLAIM ALL LIABILITY ARISING OUT OF OR RELATING TO USE OF THIS DOCUMENT AND ANY INFORMATION CONTAINED IN THIS DOCUMENT, INCLUDING LOST REVENUE, PROFITS, DATA OR PROGRAMS, OR BUSINESS INTERRUPTION, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, AND EVEN IF BLUETOOTH SIG, ITS MEMBERS, OR THEIR AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This document is proprietary to Bluetooth SIG. This document may contain or cover subject matter that is intellectual property of Bluetooth SIG and its members. The furnishing of this document does not grant any license to any intellectual property of Bluetooth SIG or its members.

This document is subject to change without notice.

Copyright © 2001–2026 by Bluetooth SIG, Inc. The Bluetooth word mark and logos are owned by Bluetooth SIG, Inc. Other third-party brands and names are the property of their respective owners.

Contents

1 General principles 4
1.1 Implementation Under Test (IUT) identification 4
1.2 Enforcement of inter-layer dependencies 4
2 ICS declarations 5
2.1 Versions 5
2.2 Core Configuration 5
2.3 Roles 5
2.4 Audio Gateway Role 5
2.5 Headset Role 7
3 References 9
4 Revision history and acknowledgments 10

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” OR CORE 40/1 “Core-Controller”.

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

[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.
	p9r00	2025-12-05 – 2026-01-07	TSE 28346 (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.
9	p9	2026-02-17	Approved by BTI on 2026-01-22. Prepared for TCRL pkg102 publication.

Acknowledgments

Name	Company
Alicia Courtney	Broadcom
Siegfried Lehman	Intel