Headset Profile (HSP)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

Revision: HSP.ICS.p6Revision Date: 2023-02-07

Prepared By: BTI

Published during TCRL: TCRL.2022-2



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 © 2001–2023 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	lden	tification of the implementationtification of the implementation	. 4
		Implementation Under Test (IUT) identification	
		Versions	
	1.3	Roles	. 5
	1.4	Audio Gateway Role	. 5
	1.5	Headset Role	. 6
	1.6	Errata Service Releases	. 7
2	Refe	erences	. 8
3	Revi	Revision history and acknowledgments	

1 Identification of the implementation

1.1 Implementation Under Test (IUT) identification

Identification of the Implementation Under Test (IUT) is to be filled in to provide as much detail as possible regarding version numbers and configuration options.

An ICS contact person to respond to queries regarding information supplied in this ICS proforma is named in Declaration of Compliance: Summary of Selected Specifications in Implementation.

1.2 Versions

Table 0: Major Versions (X.Y)

Item	Version	Reference	Status
1	HSP v1.1	[1]	C.1
2	HSP v1.2	[2]	C.1

C.1: Mandatory to support one and only one of HSP 0/1 "HSP v1.1" OR HSP 0/2 "HSP v1.2".

1.3 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 of HSP 1/1 "Audio Gateway (AG)" OR HSP 1/2 "Headset (HS)".

1.4 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	М
2	Ring (AT command)	[1] 4.2	C.3
3	Inband ring tone	[1] 4.2	0
4	Outgoing audio connection establishment	[1] 4.3	0
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	C.5
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	М
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	0
11	Audio volume setting storage by HS	[1] 4.6, [2] 4.7	0
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	0
14	Microphone gain setting storage by HS	[1] 4.6, [2] 4.7	0
15	Connection Handling with Detach/Page	[1] 4.8.1, [2] 4.9.1	М
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.



Bluetooth SIG Proprietary

C.3: Excluded IF HSP 2/3 "Inband ring tone" AND HSP 4/1 "E2112/TSE 1134 (212): Show that inband ringing and RING are mutually exclusive", otherwise Optional.

C.4: No longer used.

C.5: Mandatory IF HSP 0/1 "HSP v1.1", 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	М	[4] 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	М	[5] SDP 9/2
2	BluetoothProfileDescriptorList	[2] 5.3	М	[5] SDP 9/14

Table 2c: RFCOMM Requirements

Prerequisite: HSP 1/1 "Audio Gateway (AG)"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	RFCOMM with TS 07.10	[1] 2.1	М	[6] RFCOMM

1.5 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	М
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	0
11	Audio volume setting storage by HS	[1] 4.6, [2] 4.7	0

Item	Capability	Reference	Status
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	0
14	Microphone gain setting storage by HS	[1] 4.6, [2] 4.7	0
15	Connection Handling with Detach/Page	[1] 4.8.1, [2] 4.9.1	М
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	[4] GAP 1/1
2	General discoverable mode	[2] 6.1	M	[4] 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	[5] SDP 9/2
2	BluetoothProfileDescriptorList	[2] 5.3	M	[5] SDP 9/14

Table 3c: RFCOMM Requirements

Prerequisite: HSP 1/2 "Headset (HS)"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	RFCOMM with TS 07.10	[2] 2.1	М	[5] RFCOMM

1.6 Errata Service Releases

Table 4: Errata Service Releases (ESR)

Item	Capability	Reference	Status
1	E2112/TSE 1134 (212): Show that in-band ringing and RING are mutually exclusive	[3]	C.1

C.1: Excluded IF HSP 0/2 "HSP v1.2", otherwise Optional.



2 References

- [1] Headset Profile Specification, Version 1.1 or later
- [2] Headset Profile Specification, Version 1.2
- [3] Errata Service Release 1, ESR1, Version 1.02, released 25 August 2003
- [4] ICS Proforma for Generic Access Profile (GAP)
- [5] ICS Proforma for Service Discovery Protocol (SDP)
- [6] ICS Proforma for RFCOMM

3 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
	0.71	2001-07-01	First entry of Revision History
	1.0	2004-08-11	Reformatted in MS Word. Editorial changes. Added revision history. Incorporated TSE 212 (ESR 1) and 303 affecting tables HSP.2 and HSP.3
	1.0r1	2004-08-25	Corrected changes associated with TSE 212 per ESR 1, and added Table HSP.4.
	1.0r2	2004-08-30	Editorial changes.
	1.0r3	2004-08-31	Editorial changes
	1.1.1r1	2005-01-06	Editorial and format change.
	1.1.1	2005-01-25	Final update after review.
	1.1.2	2007-08-29	TSE: 2050, Table 4: Add TSE 212/1134 to E2112. Changed Table 2.2. status to "C.3" Removed PARK state tests
	1.1.3r0-1	2008-11-26	Add Table 0 for HSP versions to be used for ICS selections that are spec version-dependent. Table 4 Footnote addition based on E2112/TSE 113
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.

Publication Number	Revision Number	Date	Comments
	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.
6	p6	2023-02-07	Approved by BTI on 2022-12-19. Prepared for TCRL 2022-2 publication.

Acknowledgments

Name	Company
Alicia Courtney	Broadcom
Siegfried Lehman	Intel