BR/EDR Connection Handover Profile (CHP)

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

- **Revision:** CHP.ICS.p2
- **Revision Date:** 2025-07-08
- **Prepared By:** Discovery of Things 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 Roles

Table 1: Role Requirements

Item	Role	Reference	Status
1	Provider	[1] 2.2.1	C.1
2	Seeker	[1] 2.2.1	C.1

C.1: Mandatory to support at least one.

2.2 Transports

Table 2: Transport Requirements

Item	Transport	Reference	Status
1	Profile supported over BR/EDR	[1] 2, 6.2	C.1, C.3
2	Profile supported over LE	[1] 2, 6.2	C.2, C.3

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

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

C.3: Mandatory for this Profile.

2.3 Provider Role

Table 3: X.Y Versions (Provider)

Prerequisite: CHP 1/1 “Provider”

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

Table 4: X.Y.Z Versions (Provider)

Table number reserved but not yet in use

2.3.1 Provider requirements

Table 5: Provider Requirements

Prerequisite: CHP 1/1 “Provider”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Transport Discovery Service (TDS)	[1] 3	C.1	[4] TDS
2	Public Target Address	[1] 3	O	[3] GAP 20a/12
3	Transport Discovery Data AD Type	[1] 3, 3.2.1	C.1	N/A
4	Multiple Transport Blocks supported in Transport Discovery Data AD Type	[1] 3, 3.2.1	C.2	N/A

C.1: Mandatory to support at least one.

C.2: Optional IF CHP 5/3 “Transport Discovery Data AD Type”, otherwise Excluded.

Table 6: TDS Control Point Requirements

Prerequisite: CHP 5/1 “Transport Discovery Service (TDS)”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	TDS Control Point characteristic	[1] 3.1.1	M	[4] TDS 4/1
2	Activate Transport Procedure	[1] 3.2.2	M	[4] TDS 5/1
3	Transport Data Field in Transport Discovery Data AD Type	[1] 3.2.1	M	[4] TDS 3/1
4	Multiple Transport Blocks supported in Transport Discovery Data AD Type	[1] 3.2.1	C.1	[4] TDS 3/2

C.1: Mandatory IF CHP 5/4 “Multiple Transport Blocks supported in Transport Discovery Data AD Type”, otherwise Optional.

2.3.2 TDS requirements

Table 7: TDS Requirements

Prerequisite: CHP 5/1 “Transport Discovery Service (TDS)”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	BR-EDR Handover Data	[1] 3.3	O	[4] TDS 4/2
2	Bluetooth SIG Data	[1] 3.3	O	[4] TDS 4/3
3	Complete BR-EDR Transport Block Data descriptor	[1] 3.3	C.1	[4] TDS 4/4

C.1: Optional IF CHP 7/2 “Bluetooth SIG Data”, otherwise not defined.

2.3.3 GATT requirements

Table 8: GATT Requirements

Prerequisite: CHP 5/1 “Transport Discovery Service (TDS)”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
1a	GATT Server over LE	[1] 2.2.1	M	[2] GATT 1a/3
1b	GATT Server over BR/EDR	[1] 2.2.1	M	[2] GATT 1a/4
2	Write Characteristic Value	[1] 3.1.2	M	[2] GATT 4/14
3	Indications	[1] 3.1.2	M	[2] GATT 4/18
4	Read Characteristic Descriptors	[1] 3.1.2	M	[2] GATT 4/19
5	Write Characteristic Descriptors	[1] 3.1.2	M	[2] GATT 4/21

2.3.4 GAP requirements

Table 9: GAP Requirements

Prerequisite: CHP 1/1 "Provider"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Broadcaster	[1] 2.2.3	C.1	[3] GAP 5/1 OR GAP 38/1
2	Peripheral	[1] 2.2.3	C.1	[3] GAP 5/3 OR GAP 38/3

C.1: Mandatory to support at least one.

Table 10: No longer used

2.3.5 SDP requirements

Table 17: SDP Requirements

Prerequisite: CHP 1/1 "Provider"

Item	Version	Reference	Status
1	SDP record present for CHP	[1] 4.2	M

2.4 Seeker Role

Table 11: X.Y Versions (Seeker)

Prerequisite: CHP 1/2 "Seeker"

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

Table 12: X.Y.Z Versions (Seeker)

Table number reserved but not yet in use

2.4.1 Seeker requirements

Table 13: Seeker Requirements

Prerequisite: CHP 1/2 "Seeker"

Item	Capability	Reference	Status
1	Discover Transport Discovery Service	[1] 4, 4.2	M
2	Discover TDS Control Point characteristic and Client Characteristic Configuration Descriptor	[1] 4, 4.5.1	M
3	Discover BR-EDR Handover Data characteristic	[1] 4, 4.5.2	M

Item	Capability	Reference	Status
4	Discover Bluetooth SIG Data characteristic	[1] 4, 4.5.3	O
5	Discover Complete BR-EDR Transport Block Data descriptor	[1] 4, 4.5.3.1	C.1
6	Receive Transport Discovery Data AD Type	[1] 4.4	M

C.1: Optional IF CHP 13/4 “Discover Bluetooth SIG Data characteristic”, otherwise Excluded.

Table 14: TDS Control Point Op Code Requirements

Prerequisite: CHP 13/2 “Discover TDS Control Point characteristic and Client Characteristic Configuration Descriptor”

Item	Capability	Reference	Status
1	Activate Transport	[1] 4.5.1.1	M

2.4.2 GATT requirements

Table 15: GATT Requirements

Prerequisite: CHP 1/2 “Seeker”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
1a	GATT Client over LE	[1] 2.2.1	M	[2] GATT 1a/1
1b	GATT Client over BR/EDR	[1] 2.2.1	M	[2] GATT 1a/2
2	Discover All Primary Services	[1] 4.1, 4.2	C.1	[2] GATT 3/2
3	Discover Primary Services by Service UUID	[1] 4.1, 4.2	C.1	[2] GATT 3/3
4	Discover All Characteristics of a Service	[1] 4.1, 4.3	C.2	[2] GATT 3/5
5	Discover Characteristics by UUID	[1] 4.1, 4.3	C.2	[2] GATT 3/6
6	Discover All Characteristic Descriptors	[1] 4.1, 4.3	M	[2] GATT 3/7
7	Read Characteristic Value	[1] 4.1	M	[2] GATT 3/8
8	Read Characteristic Descriptors	[1] 4.1	M	[2] GATT 3/19
9	Write Characteristic Descriptors	[1] 4.1	M	[2] GATT 3/21
10	Indications	[1] 4.1	M	[2] GATT 3/18

C.1: Mandatory to support at least one.

C.2: Mandatory to support at least one.

2.4.3 GAP requirements

Table 16: GAP Requirements

Prerequisite: CHP 1/2 "Seeker"

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Central	[1] 2.2.3	M	[3] GAP 5/4 OR GAP 38/4

3 References

[1] BR/EDR Connection Handover Profile (CHP), Version 1.0

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

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

[4] ICS Proforma for Transport Discovery Service (TDS)

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	p0	2020-08-18	Set publication number to publication 0. Approved by BTI on 2020-08-03. CHP v1.0 specification adopted by BoD on 2020-08-11. Prepared for publication.
	p1r00–r01	2023-09-12 – 2023-12-11	TSE 23948 (rating 2): Resolved GATT inter-layer dependencies. In Tables 3 and 11, updated the table title and the Version value for Item 1. Updated the title for Tables 4, 12, and 16. In Table 5, updated the Capability and ILD values for Item 2. In Table 6, added an ILD column, Items 3 and 4, and conditional C.1. Updated the title for the TDS requirements section and Table 7. In Tables 8 and 15, marked Item 1 as no longer used and added Items 1a and 1b. Updated C.1 for Table 9 and C.1–C.2 for Table 15. Marked Table 10 as no longer used. Added Table 17, SDP Requirements. Made editorial edits to align the document with the latest ICS template. Updated the copyright year and the references. Deleted draft revision history comments prior to p0.
1	p1	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p2r00	2025-04-29	TSE 27382 (rating 1): Updated the Status value for CHP 2/1 and CHP 2/2 and added conditions C.1 – C.3 to Table 2. Incorporated editorials to align the document with the latest ICS template, including updates to Section 1 and the addition of a section heading for the ICS declarations section.
2	p2	2025-07-08	Approved by BTI on 2025-06-15. Prepared for TCRL pkg100 publication.

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