# Hardcopy Cable Replacement Profile (HCRP)

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	HCRP v1.0	[1]	C.1
2	HCRP v1.2	[4]	C.1

C.1: Mandatory to support one and only one.

## 2.2 Core Configuration

**Table 0b: 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	Server	[1] 2.2	C.1
2	Client	[1] 2.2	C.1

C.1: Mandatory to support at least one.

#### 2.4 Server role

Table 2: Basic Server application capabilities

Prerequisite: HCRP 1/1 "Server"

Item	Capability	Reference	Status	Inter-Layer Dependency		
Disco	Discovery and Connection					
1	Public Online	[1] 3	М	N/A		
2	Private Online	[1] 3	0	N/A		
2a	General discoverable mode	[1] 3	C.2	[2] GAP 1/3		
2b	Limited discoverable mode	[1] 3	C.2	[2] GAP 1/2		
2c	Non-discoverable mode	[1] 3	C.3	[2] GAP 1/1		
3	Offline Mode	[1] 3	0	N/A		
4	Respond to SD query	[1] 7	M	N/A		
5	Bondable mode	[1] 2.4, 3	М	[2] GAP 1/7		
6	Service Discovery	[1] 7	M	N/A		



Item	Capability	Reference	Status	Inter-Layer Dependency	
Data C	Channel Control	•			
7	Printing Functionality	[1] 6, 6.5	C.1	N/A	
8	Scanning Functionality	[1] 6, 6.5	C.1	N/A	
Contro	Control Channel Control				
9	LPT Status bits supported	[1] 6, 6.4.12	0	N/A	
10	1284 ID string supported	[1] 6, 6.4.13	0	N/A	
11	Soft Reset supported	[1] 6, 6.4.14	0	N/A	
12	Hard Reset supported	[1] 6, 6.4.15	0	N/A	
Notific	Notification Handling				
13	Notifications supported	[1] 6, 6.6, 6.4.16, 6.4.17	0	N/A	

- C.1: Mandatory to support at least one.
- C.2: Mandatory to support at least one IF HCRP 2/1 "Public Online", otherwise Optional.
- C.3: Mandatory IF HCRP 2/2 "Private Online" OR HCRP 2/3 "Offline Mode", otherwise not defined.

#### 2.5 Client role

**Table 3: Basic Client application capabilities** 

Prerequisite: HCRP 1/2 "Client"

Item	Capability	Reference	Status	Inter-Layer Dependency		
Disco	Discovery and Connection					
1	Initiation of general inquiry	[1] 3	C.1	[2] GAP 3/1		
2	Initiation of limited inquiry	[1] 3	C.1	[2] GAP 3/2		
3	Initiation of device discovery	[1] 3	0	[2] GAP 3/4		
4	Perform SD query	[1] 7	C.2	N/A		
5	Bondable mode	[1] 2.4, 3	М	[2] GAP 1/7		
6	Service Discovery	[1] 7	C.2	N/A		
Data (	Channel Control					
7	Printing Functionality	[1] 6, 6.5	C.3	N/A		
8	Scanning Functionality	[1] 6, 6.5	C.3	N/A		
Contr	ol Channel Control					
9	LPT Status bits supported	[1] 6, 6.4.12	0	N/A		
10	1284 ID string supported	[1] 6, 6.4.13	0	N/A		
11	Soft Reset supported	[1] 6, 6.4.14	0	N/A		
12	Hard Reset supported	[1] 6, 6.4.15	0	N/A		
12a	LPT Status whilst printing*	[1] 6, 6.4.12	0	N/A		
Notifi	cation Handling					
13	Notifications supported	[1] 6, 6.6, 6.4.16, 6.4.17	0	N/A		

C.1: Mandatory to support at least one.



- C.2: Mandatory IF HCRP 3/13 "Notifications supported", otherwise Excluded.
- C.3: Mandatory to support at least one.

\*Note: Client is able to poll LPT Status during normal job processing.

### 2.6 SDP requirements

**Table 4: SDP Requirements** 

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Server	[1] 7	C.1	[3] SDP 1b/1
2	ProtocolDescriptorList	[1] 7	C.1	[3] SDP 9/2
3	AdditionalProtocolDescriptorList	[1] 7	C.2	[3] SDP 9/17

- C.1: Mandatory IF HCRP 2/6 "Service Discovery" OR HCRP 3/6 "Service Discovery", otherwise not defined.
- C.2: Mandatory IF HCRP 2/6 "Service Discovery", otherwise not defined.



## 3 References

- [1] Bluetooth Hardcopy Cable Replacement Profile Specification, Version 1.0 or later
- [2] ICS Proforma for Generic Access Profile (GAP)
- [3] ICS Proforma for Service Discovery Protocol (SDP)
- [4] Bluetooth Hardcopy Cable Replacement Profile Specification, Version 1.2 or later



# 4 Revision history and acknowledgments

#### **Revision History**

Publication Number	Revision Number	Date	Comments
0	1.0	2002-07-19	Release number raised to 1.0
	1.0a	2002-11-18	Removed note to Table 1, added further references in tables 2 and 3
	1.2.1r1	2005-11-30	Editorial adjustment according BTI style guide
	1.2.1r2	2006-02-04	Accept review comments; TSE 904: remove Table 2 Note C1 and Table 3, remove Note C2.
1	1.2.1	2006-02-14	Prepare for publication.
	1.2.2r00	2017-04-12	TSE 8344: Template conversion, reference section and Table 0 added.
2	1.2.2	2017-07-03	Approved by BTI. Prepared for TCRL 2017-1 publication.
	p3r00-r02	2021-04-01 — 2021-06-14	TSE 15969 (rating 2): Correction to conditional C.3 of Table 3 to reference correct ICS item.  Template-related and consistency checker editorials, including assigning previous v1.2.2 as p2.
3	р3	2021-07-13	Approved by BTI on 2021-06-03. Prepared for TCRL 2021-1 publication.
	p4r00-r03	2023-10-12 — 2023-11-27	TSE 23956 (rating 2): Made editorial edits to align the document with the latest ICS template, including updates to the IUT identification section, table and section titles, and spacing. In Table 1, updated the Version value for Items 1 and 2 and updated conditional C.1. Updated C.1 in Table 1. In Table 2, added an ILD column, added Item 2c, updated the Capability and Reference values in Item 5, updated C.1 and C.2, and added C.3. In Table 3, added an ILD column and updated the Capability value for Items 1–3, the Capability and Reference values for Item 5, the Status value for Item 6, and conditionals C.1–C.3. Added new Table 4 (SDP requirements). Removed "is supported" language from conditionals. Updated the references.  Updated the copyright page to align with the latest version of the DNMD. Deleted draft revision history comments prior to p0.
4	p4	2024-07-01	Approved by BTI on 2024-05-22. Prepared for TCRL 2024-1 publication.
	p5r00–r01	2025-02-25 — 2025-05-13	TSE 26955 (rating 2): Updated Table 0 Reference values. Added "Core Configuration" section and Table 0b. Updated "References" section. Applied current ICS template.
5	p5	2025-07-08	Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication.



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