Hardcopy Cable Replacement Profile (HCRP)

***Bluetooth*® Test Suite**

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Contents

1 Scope

This Bluetooth document contains the Test Suite Structure (TSS) and test cases to test the implementation of the Bluetooth Hardcopy Cable Replacement Profile (HCRP) with the objective to provide a high probability of air interface interoperability between the tested implementation and other manufacturers' Bluetooth devices.

2 References, definitions, and abbreviations

2.1 References

This document incorporates provisions from other publications by dated or undated reference. These references are cited at the appropriate places in the text, and the publications are listed hereinafter. Additional definitions and abbreviations can be found in [1], [2], and [4].

[1] Specification of the Bluetooth System, Core System, Version 2.0 or later

[2] Hardcopy Cable Replacement Profile

[3] Generic Access Profile

[4] Test Strategy and Terminology Overview

[5] ICS Proforma for Hardcopy Cable Replacement Profile (HCRP)

[6] SDP Test Suite, SDP.TS

2.2 Definitions

In this Bluetooth document, the definitions from [1], [2], and [4] apply.

Term	Definition
Idle Mode	As seen from a remote device, a Bluetooth device is idle, or is in Idle mode, when there is no link established between them.
Online Mode	For the purposes of this document Online mode means Public or Private Online mode.
Ready State	Not in an error state, and device is able to continue receiving and processing commands.

Table 2.1: HCRP definitions

2.3 Acronyms and abbreviations

In this Bluetooth document, the definitions, acronyms, and abbreviations from [1], [2], and [4] apply.

3 Test Suite Structure (TSS)

3.1 Overview

The Hardcopy Cable Replacement profile specifies two typical configurations of devices, or roles, for this profile:

Server: The device that receives print data from the Client and prints it, or scans images and sends scan data to the Client.

Client: The device sending the data to be printed or the device to receive the scanned data.

3.2 Test Strategy

The test objectives are to verify the functionality of the Hardcopy Cable Replacement Profile within a Bluetooth Host and enable interoperability between Bluetooth Hosts on different devices. The testing approach covers mandatory and optional requirements in the specification and matches these to the support of the IUT as described in the ICS. Any defined test herein is applicable to the IUT if the ICS logical expression defined in the Test Case Mapping Table (TCMT) evaluates to true.

The test equipment provides an implementation of the Radio Controller and the parts of the Host needed to perform the test cases defined in this Test Suite. A Lower Tester acts as the IUT's peer device and interacts with the IUT over-the-air interface. The configuration, including the IUT, needs to implement similar capabilities to communicate with the test equipment. For some test cases, it is necessary to stimulate the IUT from an Upper Tester. In practice, this could be implemented as a special test interface, a Man Machine Interface (MMI), or another interface supported by the IUT.

This Test Suite contains Valid Behavior (BV) tests complemented with Invalid Behavior (BI) tests where required. The test coverage mirrored in the Test Suite Structure is the result of a process that started with catalogued specification requirements that were logically grouped and assessed for testability enabling coverage in defined test purposes.

3.3 Test groups

The following test groups have been defined:

- Generic SDP Integrated Tests
- Discovery and Connection Setup
- Service Discovery
- Data Channel Flow Control
- Control Channel Protocol
- Notification Handling

4 Test cases (TC)

4.1 Introduction

4.1.1 Test case identification conventions

Test cases are assigned unique identifiers per the conventions in [4]. The convention used here is:
<spec abbreviation>/<IUT role>/<class>/**<feat>**/<func>/<subfunc>/<cap>/**<xx>-<nn>-<y>**.

Additionally, testing of this specification includes tests from the SDP Test Suite [6] referred to as Generic SDP Integrated Tests (GSIT); when used, the test cases in GSIT are referred to through a TCID string using the following convention:
<spec abbreviation>/<IUT role>/<GSIT test group>/<GSIT class>/<xx>-<nn>-<y>.

Identifier Abbreviation	**Spec Identifier <spec abbreviation>**
HCRP	Hardcopy Cable Replacement Profile
Identifier Abbreviation	**Role Identifier <IUT role>**
CL	Client
SR	Server
Identifier Abbreviation	**Reference Identifier <GSIT test group>**
CGSIT	Client Generic SDP Integrated Test
SGSIT	Server Generic SDP Integrated Test
Identifier Abbreviation	**Reference Identifier <GSIT class>**
ATTR	Attribute
SERR	Service Record
SFC	SDP Future Compatibility
Identifier Abbreviation	**Feature Identifier <feat>**
CCP	Control Channel Protocol
DCS	Discovery and Connection Set-up
DFC	Data Channel Flow Control
NTF	Notification Handling

Table 4.1: HCRP TC feature naming conventions

4.1.2 Conformance

When conformance is claimed for a particular specification, all capabilities are to be supported in the specified manner. The mandated tests from this Test Suite depend on the capabilities to which conformance is claimed.

The Bluetooth Qualification Program may employ tests to verify implementation robustness. The level of implementation robustness that is verified varies from one specification to another and may be revised for cause based on interoperability issues found in the market.

Such tests may verify:

- That claimed capabilities may be used in any order and any number of repetitions not excluded by the specification
- That capabilities enabled by the implementations are sustained over durations expected by the use case

- That the implementation gracefully handles any quantity of data expected by the use case
- That in cases where more than one valid interpretation of the specification exists, the implementation complies with at least one interpretation and gracefully handles other interpretations
- That the implementation is immune to attempted security exploits

A single execution of each of the required tests is required to constitute a Pass verdict. However, it is noted that to provide a foundation for interoperability, it is necessary that a qualified implementation consistently and repeatedly pass any of the applicable tests.

In any case, where a member finds an issue with the test plan generated by the Bluetooth SIG qualification tool, with the test case as described in the Test Suite, or with the test system utilized, the member is required to notify the responsible party via an erratum request such that the issue may be addressed.

4.1.3 Pass/Fail verdict conventions

Each test case has an Expected Outcome section. The IUT is granted the Pass verdict when all the detailed pass criteria conditions within the Expected Outcome section are met.

The convention in this Test Suite is that, unless there is a specific set of fail conditions outlined in the test case, the IUT fails the test case as soon as one of the pass criteria conditions cannot be met. If this occurs, then the outcome of the test is a Fail verdict.

4.2 Generic SDP Integrated Tests

4.2.1 Server Generic SDP Integrated Tests

4.2.1.1 Hardcopy Cable Replacement - Server

Execute the Generic SDP Integrated Tests defined in Section 6.3, Server test procedures (SGSIT), in [6] using Table 4.2 below as input:

TCID	Reference	Attribute ID Name	Attribute ID definition source (Universal, Profile)	Value/Secondary Value	Attribute presence (Present/Present for [role], Optionally present, TCMT defined)
HCRP/SR/SGSIT/SERR/BV-01-C [Service record GSIT – HCRP Server, Print]	[2] 7.1	ServiceClassIDList	Universal	“HCR_Print” (UUID)	TCMT defined
HCRP/SR/SGSIT/SERR/BV-02-C [Service record GSIT – HCRP Server, Scan]	[2] 7.1	ServiceClassIDList	Universal	“HCR_Scan” (UUID)	TCMT defined
HCRP/SR/SGSIT/ATTR/BV-01-C [Attribute GSIT – Service ID]	[2] 7.1	ServiceID	Universal	skip (UUID)	Optionally present
HCRP/SR/SGSIT/ATTR/BV-02-C [Attribute GSIT – Protocol Descriptor List]	[2] 7.1	ProtocolDescriptorList	Universal	“L2CAP” (UUID): PSM – skip (Uint16), “HardcopyControlChannel” (UUID)	Present for Server
HCRP/SR/SGSIT/ATTR/BV-03-C [Attribute GSIT – Bluetooth Profile Descriptor List]	[2] 7.1	BluetoothProfileDescriptorList	Universal	“HardcopyCableReplacement” (UUID): Version – skip (Uint16)	Optionally present
HCRP/SR/SGSIT/ATTR/BV-04-C [Attribute GSIT – Additional Protocol Descriptor Lists]	[2] 7.1	AdditionalProtocolDescriptorLists	Universal	“L2CAP” (UUID): PSM –skip (Uint16), “HardcopyDataChannel” (UUID)	Present for Server
HCRP/SR/SGSIT/ATTR/BV-05-C [Attribute GSIT – 1284 ID]	[2] 7.1	1284ID	Profile	skip (String)	Optionally present
HCRP/SR/SGSIT/ATTR/BV-06-C [Attribute GSIT – Device Name]	[2] 7.1	Device Name	Profile	skip (String)	Optionally present
HCRP/SR/SGSIT/ATTR/BV-07-C [Attribute GSIT – Friendly Name]	[2] 7.1	Friendly Name	Profile	skip (String)	Optionally present

TCID	Reference	Attribute ID Name	Attribute ID definition source (Universal, Profile)	Value/Secondary Value	Attribute presence (Present/Present for [role], Optionally present, TCMT defined)
HCRP/SR/SGSIT/ATTR/BV-08-C [Attribute GSIT – Device Location]	[2] 7.1	Device Location	Profile	skip (String)	Optionally present

Table 4.2: Input for the Hardcopy Cable Replacement Server SGSIT SDP test procedure

4.2.1.2 Notification Service on the Hardcopy Cable Replacement - Client

Execute the Generic SDP Integrated Tests defined in Section 6.3, Server test procedures (SGSIT), in [6] using Table 4.3 below as input:

TCID	Reference	Attribute ID Name	Attribute ID definition source (Universal, Profile)	Value/Secondary Value	Attribute presence (Present/Present for [role], Optionally present, TCMT defined)
HCRP/CL/SGSIT/SERR/BV-01-C [Service record GSIT – HCRP Client, Print]	[2] 7.2	ServiceClassIDList	Universal	“HCR_Print” (UUID)	TCMT defined
HCRP/CL/SGSIT/SERR/BV-02-C [Service record GSIT – HCRP Server, Scan]	[2] 7.2	ServiceClassIDList	Universal	“HCR_Scan” (UUID)	TCMT defined
HCRP/CL/SGSIT/ATTR/BV-01-C [Attribute GSIT – Protocol Descriptor List]	[2] 7.2	ProtocolDescriptorList	Universal	“L2CAP” (UUID): PSM –skip (Uint16), “HardcopyNotificationChannel” (UUID)	Present for Client
HCRP/CL/SGSIT/ATTR/BV-02-C [Attribute GSIT – Bluetooth Profile Descriptor List, HCRP 1.0 or 1.2]	[2] 7.2	BluetoothProfileDescriptorList	Universal	“HardcopyCableReplacement” (UUID): Version – skip (Uint16)	Optionally present

Table 4.3: Input for the Hardcopy Cable Replacement Client SGSIT SDP test procedure

4.2.1.3 Hardcopy Cable Profile – Attribute ID Offset String tests

Execute the Generic SDP Integrated Tests defined in Section 6.3, Server test procedures (SGSIT), in [6] using Table 4.4 below as input:

TCID	Reference	ServiceSearchPattern	Attribute ID Name	Attribute ID Offset	Attribute presence (Present/Present for [role], Optionally present, TCMT defined)
HCRP/SR/SGSIT/OFFS/BV-01-C [Attribute ID Offset String GSIT – Service Name]	[2] 7.1	HCR_Print, HCR_Scan	ServiceName	0x0000	Optionally present
HCRP/CL/SGSIT/OFFS/BV-01-C [Attribute ID Offset String GSIT – Service Name]	[2] 7.2	HCR_Print, HCR_Scan	ServiceName	0x0000	Optionally present

Table 4.4: Input for the Hardcopy Cable Profile SGSIT Attribute ID Offset String tests

4.2.2 Client Generic SDP Integrated Tests

Execute the Generic SDP Future Compatibility Tests defined in Section 6.4, Client test procedures (CGSIT), in [6] using Table 4.5 below as input:

TCID	Reference	Service Record Service Class UUID Description	Lower Tester SDP Record Initial Conditions
HCRP/CL/CGSIT/SFC/BV-01-C [SDP Future Compatibility – IUT is HCRP Client, Print]	[2] 3, 7, 11	HCR_Print	The Lower Tester exposes an HCRP Print Server SDP record. The version in the Bluetooth Profile Descriptor List is greater than the most recently adopted version.
HCRP/CL/CGSIT/SFC/BV-02-C [SDP Future Compatibility – IUT is HCRP Client, Scan]	[2] 3, 7, 11	HCR_Scan	The Lower Tester exposes an HCRP Print Server SDP record. The version in the Bluetooth Profile Descriptor List is greater than the most recently adopted version.

Table 4.5: Input for the Client CGSIT SDP future compatibility tests

4.3 Discovery and Connection Set-up

4.3.1 Public Online Mode

Verify that the Server supports Public Online mode and can be discovered by and connected to the Client using the General and Limited Inquiry, Name Discovery, and Device Discovery procedures and provide information like Bluetooth Device Address, name, etc.

4.3.1.1 General Inquiry – Public Online

- Test Purpose

  Verify that the Client can use the General Inquiry procedure and can discover the Server, when the Server is in Public Online mode.

- Reference

  [2] 3

- Initial Condition

  - Server: Offline mode or Public Online mode
  - Client: Standby mode

- Test Case Configuration

Test Case
HCRP/SR/DCS/BV-01-C [General Inquiry – Public Online]
HCRP/CL/DCS/BV-01-C [General Inquiry – Public Online]

Table 4.6: General Inquiry – Public Online test cases

- Test Procedure

  1. Set the Server to Public Online mode if it is in a different mode.
  2. After the Server is set to Public Online mode, the Client performs a General Inquiry procedure to get a list of devices in the vicinity.

- Expected Outcome

  Pass verdict

  It is possible from the Upper Tester on the Client to activate the Bluetooth Device Inquiry function.

  It is possible to put the Server into Public Online mode

  A list of discovered devices is presented to the Upper Tester of the Client and the Server is included in the list.

4.3.1.2 Limited Inquiry – Public Online

- Test Purpose

  Verify that the Client makes correct use of the Limited Inquiry procedure and can discover the Server in Limited Discoverable mode.

- Reference

  [2] 3

- Initial Condition
  - Server: Offline mode or Public Online mode
  - Client: Standby mode
- Test Case Configuration

Test Case
HCRP/SR/DCS/BV-02-C [Limited Inquiry – Public Online]
HCRP/CL/DCS/BV-02-C [Limited Inquiry – Public Online]

Table 4.7: Limited Inquiry – Public Online test cases

- Test Procedure
  1. Set the Server to Public Online mode and Limited Discoverable mode if it is in a different mode.
  2. After the Server is set to Public Online mode, the Client performs a Limited Inquiry procedure to get a list of devices in the vicinity.
- Expected Outcome

  Pass verdict

  It is possible from the Upper Tester on the Client to activate the Bluetooth Device Inquiry function.

  It is possible to put the Server into Public Online mode.

  It is possible to put the Server into Limited Discoverable mode.

  A list of discovered devices is presented to the Upper Tester of the Client and the Server is included in the list.
- Notes

  The Server must be in both Public Online mode and in Limited Discoverable mode to be discovered with a Limited Inquiry. The manufacturer supplies, via the IXIT, instructions for setting the Server to Limited Discoverable mode, if necessary.

4.3.1.3 Device Discovery – Public Online

- Test Purpose

  Verify that the Client can use the Device Discovery procedure and can discover the Server, when the Server is in Public Online mode.
- Reference

  [2] 3
- Initial Condition
  - Server: Offline mode or Public Online mode
  - Client: Standby mode

- Test Case Configuration

Test Case
HCRP/SR/DCS/BV-03-C [Device Discovery – Public Online]
HCRP/CL/DCS/BV-03-C [Device Discovery – Public Online]

Table 4.8: Device Discovery – Public Online test cases

- Test Procedure

  1. Set the Server to Public Online mode if it is in a different mode.
  2. After the Server is set to Public Online mode perform a Device Discovery on the Client to get a list of devices in the vicinity.

- Expected Outcome

  Pass verdict

  It is possible from the Upper Tester on the Client to activate the Bluetooth Device Discovery procedure.

  It is possible to put the Server into Public Online mode.

  A list of discovered devices is presented to the Upper Tester and the Server is included in the list.

4.3.2 Private Online mode

Verify that the Server supports Private Online mode and cannot be discovered by the Client using General Inquiry or Limited Inquiry.

4.3.2.1 Inquiry – Private Online

- Test Purpose

  Verify that a Server in Private Online mode (not discoverable) cannot be discovered by the Client using the General or Limited Inquiry procedure.

- Reference

  [2] 3

- Initial Condition

  - Server: Offline mode or Private Online mode
  - Client: Standby mode

- Test Case Configuration

Test Case
HCRP/SR/DCS/BV-04-C [Inquiry – Private Online]
HCRP/CL/DCS/BV-04-C [Inquiry – Private Online]

Table 4.9: Inquiry – Private Online test cases

- Test Procedure

  1. Set the Server to Private Online mode if it is in a different mode.
  2. After the Server is set to Private Online mode, the Client performs a General or Limited Inquiry to get a list of devices in the vicinity.

- Expected Outcome

  Pass verdict

  It is possible from the Upper Tester on the Client to activate the Bluetooth Device Inquiry function.

  It is possible from the Upper Tester on the Server to put the Server into Private Online mode.

  A list of discovered devices is presented to the Upper Tester of the Client and the Server is not included in the list.

4.3.3 Offline mode

Verify that the Server supports Offline mode and can neither be discovered by nor connected to the Client using General Inquiry or Service Discovery procedures.

4.3.3.1 Inquiry – Offline

- Test Purpose

  Verify that a Server in Offline mode (not discoverable) cannot be discovered by the Client using the General Inquiry or Limited Inquiry procedure.

- Reference

  [2] 3

- Initial Condition

  - Server: Offline mode
  - Client: Standby mode

- Test Case Configuration

Test Case
HCRP/SR/DCS/BV-05-C [Inquiry – Offline]
HCRP/CL/DCS/BV-05-C [Inquiry – Offline]

Table 4.10: Inquiry – Offline test cases

- Test Procedure

  1. Set the Server to Offline mode if it is in a different mode.
  2. After the Server is set to Offline mode, the Client performs a General Inquiry or Limited Inquiry to get a list of devices in the vicinity.

- Expected Outcome

  Pass verdict

  It is possible from the Upper Tester on the Client to activate the Bluetooth Device Inquiry function.

  It is possible to put the Server into Offline mode

  A list of discovered devices is presented to the Upper Tester of the Client and the Server is not included in the list.

4.3.4 Bonding mode

Verify that the Server and Client support Bonding mode and can be paired.

4.3.4.1 Bonding

- Test Purpose

  Verify that the Server can be bonded with the Client and the PIN codes are exchanged correctly.

- Reference

  [2] 3

- Initial Condition

  - Server: Public Online mode and not currently bonded with the Client device.

- Test Case Configuration

Test Case
HCRP/SR/DCS/BV-06-C [Bonding]
HCRP/CL/DCS/BV-06-C [Bonding]

Table 4.11: Bonding test cases

- Test Procedure

  1. The Server is put in Bondable mode.
  2. After the Server is set to “Bondable” mode issue the “Bluetooth Bonding” function on the Client.
  3. Enter PIN codes (maximum of 16 digits) on both the Client and the Server, unless a fixed PIN code is used.
  4. After the bonding procedure executes, disconnect the Bluetooth baseband link (this can be accomplished by powering down, a disconnect function, or walking out of range). Note that some clients may automatically disconnect the link after successful execution of the bonding function.
  5. Configure at least one of the devices (client or server) to require authentication.
  6. Re-establish Bluetooth connection.
  7. Send a job from the Client to the Server and verify that no PIN is requested by either device as part of the transaction.

- Expected Outcome

  Pass verdict

  It is possible to activate the Bluetooth Bonding procedure on the Client.

  It is possible to activate the Bondable mode on the Server.

  It is possible to enter a PIN code on both UIs, unless a fixed PIN code is used.

  Once the second connection is established (following bonding and disconnecting), no request for a PIN code is made from the Upper Tester of either the Client or the Server.

4.4 HCRP/CL/SGSIT/SERR/BV-01-CData Channel Flow Control

Verify that data is transferred reliably between Server and Client. To verify that the implementation being tested handles credit correctly regardless of relative speed of data flow, it is recommended that the tests in this test group be performed against multiple Clients/Servers, varying in their capacity if possible.

4.4.1 Printing Functionality

Verify that the print data can be transmitted from the Client to the Server on the data channel.

4.4.1.1 Print Data Transmission

- Test Purpose

  Verify that the Server capable of printing is able to receive the print data from the Client.

- Reference

  [2] 6, 6.5

- Initial Condition

  - The Server is in Private or Public Online mode and prepared for printing.
  - The Client has retrieved the Server's device information based on one of the inquiry and discovery procedures so that the Server is selectable from a list.
  - The printing application is activated.
  - The document to be printed is available for printing.

- Test Case Configuration

Test Case
HCRP/SR/DFC/BV-01-C [Print Data Transmission]
HCRP/CL/DFC/BV-01-C [Print Data Transmission]

Table 4.12: Print Data Transmission test cases

- Test Procedure

  1. The Client initiates the print with the Server using the applications procedure.

- Expected Outcome

  Pass verdict

  The Server prints the document correctly.

  The Client is able to initiate a subsequent job.

  The Server is able to accept a subsequent job.

- Notes

  What is being tested is not the quality of the printed output, but only whether the printer delivers printed data similar to what is expected by the user.

4.4.2 Scanning Functionality

Verify that the scanned data can be transmitted from the Server to the Client on the data channel.

4.4.2.1 Scanned Data Transmission

- Test Purpose

  Verify that the Server capable of scanning is able to send the scanned data to the Client.

- Reference

  [2] 6, 6.5

- Initial Condition

  - The Server is in Private or Public Online mode and prepared for scanning.
  - The document to be scanned is prepared.
  - The Client has retrieved the Server's device information based on one of the inquiry and discovery procedures.
  - The scanning application is activated.

- Test Case Configuration

Test Case
HCRP/SR/DFC/BV-02-C [Scanned Data Transmission]
HCRP/CL/DFC/BV-02-C [Scanned Data Transmission]

Table 4.13: Scanned Data Transmission test cases

- Test Procedure

  Initiate the scan using the application's procedure(s) on the Client.

- Expected Outcome

  Pass verdict

  The Client receives the scanned data correctly.

  The Client is ready to accept a subsequent task.

  The Server is ready for a subsequent task.

- Notes

  This test does not test the quality of the scanned input, but only whether the scanner delivers scanned data similar to what is expected by the user.

4.5 Control Channel Protocol

Verify that the control channel features function correctly.

4.5.1 CR_GetLPTStatus

Verify that the Client can obtain the IEEE 1284 job status from the Server using the CR_GetLPTStatus request.

4.5.1.1 Idle – CR_GetLPTStatus

- Test Purpose

  Verify that the Client can obtain the IEEE 1284 job status when the Server is in an idle state.

- Reference

  [2] 6, 6.4.12

- Initial Condition

  The Server is in Online mode and is currently idle.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-01-C [Idle – CR_GetLPTStatus]
HCRP/CL/CCP/BV-01-C [Idle – CR_GetLPTStatus]

Table 4.14: Idle – CR_GetLPTStatus test cases

- Test Procedure

  1. The Client checks the status of the Server.

- Expected Outcome

  Pass verdict

  The Server remains idle throughout the test procedure and returns the IEEE 1284 job status.

  The Client reports the status of the Server correctly.

4.5.1.2 Successfully processing – CR_GetLPTStatus

- Test Purpose

  Verify that the Client can obtain the IEEE 1284 job status while the Server is processing a job.

- Reference

  [2] 6, 6.4.12

- Initial Condition

  The Server is in Online mode and prepared to process.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-02-C [Successfully processing – CR_GetLPTStatus]
HCRP/CL/CCP/BV-02-C [Successfully processing – CR_GetLPTStatus]

Table 4.15: Successfully processing – CR_GetLPTStatus test cases

- Test Procedure

1. The Client selects the Server to use and initiate a job.
2. The Client views the status of the Server.

- Expected Outcome

Pass verdict

The Client reports the status of the Server accurately.

The Server correctly reports status to the Client or tool.

The Server processes the job correctly.

4.5.1.3 Paper empty – CR_GetLPTStatus

- Test Purpose

Verify that the Client can obtain the IEEE 1284 job status when the Server is in “Paper empty” state.

- Reference

[2] 6, 6.4.12

- Initial Condition

  - The Server is in Online mode and prepared to process.
  - The Server is available to use.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-03-C [Paper empty – CR_GetLPTStatus]
HCRP/CL/CCP/BV-03-C [Paper empty – CR_GetLPTStatus]

Table 4.16: Paper empty – CR_GetLPTStatus test cases

- Test Procedure

1. The Client selects the Server to use and initiates a print job.
2. The Client views the status of the Server.
3. The Server starts processing the print job.
4. Force the Server into a paper empty state.
5. The Client views the status of the Server.

- Expected Outcome

Pass verdict

The Client reports the paper out status of the Server accurately.

- Notes

  This test case is only valid for Servers that print, not Servers that scan, since the paper-empty state would be undefined in the scanner case.

  Some printers don't support paper out or error states and always return "paper in" and "no error".

4.5.1.4 Not supported by Server – CR_GetLPTStatus

- Test Purpose

  Verify that when the Server receives, but does not support, the CR_GetLPTStatus PDU request from the Client that the situation is handled properly.

- Reference

  [2] 6, 6.4.6, 6.4.12

- Initial Condition

  - The Server is in Online mode and prepared to process.
  - The Server is available to use.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-04-C [Not supported by Server – CR_GetLPTStatus]
HCRP/CL/CCP/BV-04-C [Not supported by Server – CR_GetLPTStatus]

Table 4.17: Not supported by Server – CR_GetLPTStatus test cases

- Test Procedure

  1. The Client selects the Server to use and initiate a job.
  2. The Server processes the job.
  3. Force the Server into a state that should cause the Client to see a change in status.
  4. The Client views the status of the Server.

- Expected Outcome

  Pass verdict

  The Server responds with a reply PDU with the status code parameter containing the not supported error status (0x0000).

  The Client retains its connection and can continue to function.

4.5.2 CR_Get1284ID

Verify that the Client can obtain the IEEE 1284 ID string from the Server using the CR_Get1284ID request.

4.5.2.1 Supported – CR_Get1284ID

- Test Purpose

  Verify that the Client can obtain the IEEE 1284 ID string from the Server.

- Reference

  [2] 6, 6.4.13

- Initial Condition
  - The Server is in Online mode and in a Ready state.
  - The Server is available to use.
- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-05-C [Supported – CR_Get1284ID]
HCRP/CL/CCP/BV-05-C [Supported – CR_Get1284ID]

Table 4.18: Supported – CR_Get1284ID test cases

- Test Procedure

  1. Initiate a process that causes the Client to obtain the IEEE 1284 ID string.

- Expected Outcome

  Pass verdict

  The Client retains its connection and can continue to function.

  The Client obtains the entire IEEE 1284 ID.

4.5.2.2 Not supported – CR_Get1284ID

- Test Purpose

  Verify that when the Server receives, but does not support, the CR_Get1284ID PDU from the Client that the situation is handled properly.

- Reference

  [2] 6, 6.4.6, 6.4.13

- Initial Condition
  - The Server is in Online mode and prepared to process.
  - The Server is available to use.
- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-06-C [Not supported – CR_Get1284ID]
HCRP/CL/CCP/BV-06-C [Not supported – CR_Get1284ID]

Table 4.19: Not supported – CR_Get1284ID test cases

- Test Procedure

  1. Initiate a process from the Client that queries for the IEEE 1284 ID string from the Server.

- Expected Outcome

  Pass verdict

  The Server responds with a reply PDU with the status code parameter containing the not supported error status (0x0000).

  The Client retains its connection and can continue to function.

4.5.3 CR_SoftReset

Verify that the Client can request the Server to perform a soft reset and that the Server performs a soft reset.

4.5.3.1 Idle – CR_SoftReset

- Test Purpose

  Verify that the Server can perform a soft reset when it receives the request from the Client while in the idle state.

- Reference

  [2] 6, 6.4.14

- Initial Condition

  - The Server is in Online mode and prepared to process. (Note: if the Server accepts multiple connections, it is connected to by more than one Client.)
  - The Server is available to use.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-07-C [Idle – CR_SoftReset]
HCRP/CL/CCP/BV-07-C [Idle – CR_SoftReset]

Table 4.20: Idle – CR_SoftReset test cases

- Test Procedure

  1. The Client selects the Server and initiates a soft reset.
  2. The Client initiates a new connection with the Server.
  3. The Client sends a new job to the Server.

- Expected Outcome

  Pass verdict

  All of the Client's connections are closed by the Server. Any other Clients connected to the Server are unaffected.

  Server accepts a new connection from the initiating Client and accepts and correctly processes a subsequent job.

4.5.3.2 Processing a job – CR_SoftReset

- Test Purpose

  Verify that the Server can respond to a CR_SoftReset request from the Client while processing a job.

- Reference

  [2] 6, 6.4.14

- Initial Condition

  - The Server is in Online mode and has the maximum number of supported clients connected.
  - An additional client is available as Lower Tester 2.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-08-C [Processing a job – CR_SoftReset]
HCRP/CL/CCP/BV-08-C [Processing a job – CR_SoftReset]

Table 4.21: Processing a job – CR_SoftReset test cases

- Test Procedure

1. The Client selects the Server and sends a job to the Server to process.
2. The Server starts processing the job.
3. The Client sends a soft reset request to the Server.
4. When the soft reset request is received, the Server performs the soft reset.
5. The additional Client (Lower Tester 2) starts processing a new job.

- Expected Outcome

Pass verdict

All of the connections established by the initial Client under test are closed by the Server. Any other Clients connected to the Server are unaffected.

The Server aborts the initial Client's job and returns to a state from which it can process a new job from the Lower Tester 2.

The job initiated by the Lower Tester 2 is successfully processed by the Server.

4.5.3.3 Not supported – CR_SoftReset

- Test Purpose

Verify that when the Server receives, but does not support, the CR_SoftReset PDU request from the Client that the situation is handled properly.

- Reference

[2] 6, 6.4.6, 6.4.14

- Initial Condition

  - The Server is in Online mode and prepared to process.
  - The Server is available to use.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-09-C [Not supported – CR_SoftReset]
HCRP/CL/CCP/BV-09-C [Not supported – CR_SoftReset]

Table 4.22: Not supported – CR_SoftReset test cases

- Test Procedure

1. The Client selects the Server and sends a job to the Server to process.
2. The Server starts processing the job.
3. The Client initiates a soft reset on the Server.
4. When the soft reset request is received, the Server indicates that the request is not supported.

- Expected Outcome

  Pass verdict

  The Server responds with a reply PDU with the status code parameter containing the not supported error status (0x0000).

  The Client retains its connection and can continue to function.

4.5.4 CR_HardReset

Verify that the Client can request the Server to perform a hard reset and that the Server performs a hard reset.

4.5.4.1 Idle – CR_HardReset

- Test Purpose

  Verify that the Server can respond to a CR_HardReset request from the Client while idle.

- Reference

  [2] 6, 6.4.15

- Initial Condition

  - The Server is in Online mode and ready to process.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-10-C [Idle – CR_HardReset]
HCRP/CL/CCP/BV-10-C [Idle – CR_HardReset]

Table 4.23: Idle – CR_HardReset test cases

- Test Procedure

  1. The Client selects the Server and initiates a hard reset on the Server.
  2. The Server remains idle throughout the test procedure.

- Expected Outcome

  Pass verdict

  All attached connections between Client and Server are closed.

  The Server returns to its initial state at time of power on.

4.5.4.2 Processing a job – CR_HardReset

- Test Purpose

  Verify that the Client can send the CR_HardReset request to the Server while the Server is processing a job.

- Reference

  [2] 6, 6.4.15

- Initial Condition
  - The Server is in Online mode and prepared to process.
  - The Server is available to use.
- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-11-C [Processing a job – CR_HardReset]
HCRP/CL/CCP/BV-11-C [Processing a job – CR_HardReset]

Table 4.24: Processing a job – CR_HardReset test cases

- Test Procedure

1. The Client selects the Server and sends a job to the Server to process.
2. The Server starts to process the job.
3. The Client initiates a hard reset on the Server.
4. When the Server receives the hard reset request, it initiates the hard reset.

- Expected Outcome

  Pass verdict

  All the connections between Client and Server are closed.

  The Server stops processing all jobs and returns to its initial state at time of power on.

4.5.4.3 Error status – CR_HardReset

- Test Purpose

  Verify that the Server can respond to a CR_HardReset request from the Client when the Server is in an error state.

- Reference

  [2] 6, 6.4.15

- Initial Condition
  - The Server is in Online mode and prepared to process.
  - The Server is available to use.
- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-12-C [Error status – CR_HardReset]
HCRP/CL/CCP/BV-12-C [Error status – CR_HardReset]

Table 4.25: Error status – CR_HardReset test cases

- Test Procedure

1. The Client selects the Server and sends a job to the Server to process.
2. After the Server starts to process the job, force the Server into an error state.
3. Initiate a hard reset on the Server when it is in an error state.
4. When the Server receives the hard reset request, it executes the hard reset.

- Expected Outcome

  Pass verdict

  All connections between Client and Server are closed.

  The Server stops processing all jobs and returns to its initial state at time of power on. Note: recovery from some error states may require user intervention.

4.5.4.4 Not supported – CR_HardReset

- Test Purpose

  Verify that when the Server receives, but does not support, the CR_HardReset request from the Client that the situation is handled properly.

- Reference

  [2] 6, 6.4.6, 6.4.15

- Initial Condition

  - The Server is in Online mode and prepared to process.

- Test Case Configuration

Test Case
HCRP/SR/CCP/BV-13-C [Not supported – CR_HardReset]
HCRP/CL/CCP/BV-13-C [Not supported – CR_HardReset]

Table 4.26: Not supported – CR_HardReset test cases

- Test Procedure

  1. The Client selects the Server and sends a job to the Server to process.
  2. The Server starts to process the job.
  3. The Client initiates a hard reset on the Server.
  4. When the Server receives the hard reset request, it continues to process and ignores the request.

- Expected Outcome

  Pass verdict

  The Server responds with a reply PDU with the status code parameter containing the not supported error status (0x0000).

  The Client retains its connection and can continue to function.

4.6 Notification Handling

Verify notification handling capabilities.

4.6.1 Notifications

Verify that the Client can register to receive notifications from the Server and that the Server can provide notifications to the Client.

4.6.1.1 Notifications – Supported

- Test Purpose

  Verify that the Server is able to accept and reply to a CR_RegisterNotification request from the Client and that the Server connects back to the Client to send a notification.

- Reference

  [2] 6, 6.6, 6.4.16

- Initial Condition

  - The Server is in Online mode and currently idle.

- Test Case Configuration

Test Case
HCRP/SR/NTF/BV-01-C [Notifications – Supported]
HCRP/CL/NTF/BV-01-C [Notifications – Supported]

Table 4.27: Notifications – Supported test cases

- Test Procedure

  1. The Client sends a notification registration to the Server.
  2. Once a notification registration has been received, generate an event on the Server that will cause the Server to connect back to the Client to notify it of the event.

- Expected Outcome

  Pass verdict

  The Client indicates to the User that the event has occurred.

  The Client continues processing or initiates a subsequent task, appropriately.

  The Server continues processing or initiates a subsequent task, appropriately.

4.6.1.2 Notifications – Unsupported

- Test Purpose

  Verify that the Server is able to accept the CR_RegisterNotification request from the Client when it does not support it and ignore it.

- Reference

  [2] 6, 6.6, 6.4.16

- Initial Condition

  - The Server is in Online mode and currently idle.

- Test Case Configuration

Test Case
HCRP/SR/NTF/BV-02-C [Notifications – Unsupported]
HCRP/CL/NTF/BV-02-C [Notifications – Unsupported]

Table 4.28: Notifications – Unsupported test cases

- Test Procedure

  1. The Client sends a notification registration to the Server.

- Expected Outcome

  Pass verdict

  The Server responds with a reply PDU with the status code parameter containing the not supported error status (0x0000).

  The Client retains its connection and can continue to function.

4.6.1.3 Notifications – Timeout Elapsed

- Test Purpose

  Verify that the Server does not generate notifications after the registration timeout period has expired.

- Reference

  [2] 6, 6.6

- Initial Condition

  - The Server is in Online mode and currently idle, but has registered notifications from the Client.
  - The Client has no active connection to Server but has registered for notification with the Server.

- Test Case Configuration

Test Case
HCRP/SR/NTF/BV-03-C [Notifications – Timeout Elapsed]
HCRP/CL/NTF/BV-03-C [Notifications – Timeout Elapsed]

Table 4.29: Notifications – Timeout Elapsed test cases

- Test Procedure

  1. The Client registers notifications with the Server.
  2. After the timeout period has expired, create a condition that would have generated a notification connection to the Client if it had occurred prior to the timeout.

- Expected Outcome

  Pass verdict

  No notification is sent to the Client from the Server.

4.6.1.4 Notifications – Retries

- Test Purpose

  Verify that if the Client is made unconnectable, e.g., goes out of range, that the Server can successfully open the Notification channel once the Client is connectable.

- Reference

  [2] 6, 6.6

- Initial Condition
  - The Server in Online mode and currently idle.
  - There is no active connection from the Client to the Server, but the Client has registered for notification.
- Test Case Configuration

Test Case
HCRP/SR/NTF/BV-04-C [Notifications – Retries]
HCRP/CL/NTF/BV-04-C [Notifications – Retries]

Table 4.30: Notifications – Retries test cases

- Test Procedure

  1. Make the Client unconnectable.
  2. Create a condition on the Server that generates a notification to the Client (e.g., press scan button).
  3. After a period of time greater than the Server's time to make a single connection, make the Client connectable again.

- Test Condition

  The Client can be made unconnectable by taking the Client out of range.

- Expected Outcome

  Pass verdict

  When the Client is made connectable again in the given time period, the Server successfully connects to the Client and provides the requested notification.

- Notes

  Although the appropriate amount of time during which the Client should be made unconnectable will vary, depending on implementations and the mechanism by which the Client is made unconnectable, the following guideline should suffice for most circumstances: The Client should be made unconnectable for more than 15 seconds and less than 60 seconds.

HCRP/SR/NTF/BV-05-C [Notifications – Client Unavailable]

- Test Purpose

  Verify that if the Server IUT fails to open the Notification channel, it ceases to retry, returns to the Ready state, and is able to perform a subsequent task.

- Reference

  [2] 6, 6.6

- Initial Condition
  - The IUT is in Online mode and currently idle.
  - There is no active connection, but the Lower Tester has registered for notification.

- Test Procedure

  1. The Lower Tester is made unconnectable.
  2. Create a condition on the IUT that generates a notification to the Lower Tester (e.g., press scan button).

- Expected Outcome

  Pass verdict

  The IUT functions correctly after failing to send the notification to the Lower Tester.

5 Test case mapping

The Test Case Mapping Table (TCMT) maps test cases to specific requirements in the ICS. The IUT is tested in all roles for which support is declared in the ICS document.

The columns for the TCMT are defined as follows:

Item: Contains a logical expression based on specific entries from the associated ICS document. Contains a logical expression (using the operators AND, OR, NOT as needed) based on specific entries from the applicable ICS document(s). The entries are in the form of y/x references, where y corresponds to the table number and x corresponds to the feature number as defined in the ICS document for Hardcopy Cable Replacement Profile (HCRP) [5].

Feature: A brief, informal description of the feature being tested.

Test Case(s): The applicable test case identifiers are required for Bluetooth Qualification if the corresponding y/x references defined in the Item column are supported. Further details about the function of the TCMT are elaborated in [4].

For the purpose and structure of the ICS/IXIT, refer to [4].

Item	Feature	Test Case(s)
HCRP 1/1	Hardcopy Cable Replacement – Server SDP service	HCRP/SR/SGSIT/ATTR/BV-01-C HCRP/SR/SGSIT/ATTR/BV-02-C HCRP/SR/SGSIT/ATTR/BV-03-C HCRP/SR/SGSIT/ATTR/BV-04-C HCRP/SR/SGSIT/ATTR/BV-05-C HCRP/SR/SGSIT/ATTR/BV-06-C HCRP/SR/SGSIT/ATTR/BV-07-C HCRP/SR/SGSIT/ATTR/BV-08-C HCRP/SR/SGSIT/OFFS/BV-01-C
HCRP 2/7	Hardcopy Cable Replacement – Server SDP service, Print	HCRP/SR/SGSIT/SERR/BV-01-C
HCRP 2/8	Hardcopy Cable Replacement – Server SDP service, Scan	HCRP/SR/SGSIT/SERR/BV-02-C
HCRP 3/13	Hardcopy Cable Replacement – Client Notification SDP Service	HCRP/CL/SGSIT/ATTR/BV-01-C HCRP/CL/SGSIT/ATTR/BV-02-C HCRP/CL/SGSIT/OFFS/BV-01-C
HCRP 3/13 AND HCRP 3/7	Hardcopy Cable Replacement – Client Notification SDP Service, Print	HCRP/CL/SGSIT/SERR/BV-01-C
HCRP 3/13 AND HCRP 3/8	Hardcopy Cable Replacement – Client Notification SDP Service, Scan	HCRP/CL/SGSIT/SERR/BV-02-C
HCRP 1/2 AND HCRP 3/7	Successful Connection with future SDP Record value – HCRP Client, Print	HCRP/CL/CGSIT/SFC/BV-01-C
HCRP 1/2 AND HCRP 3/8	Successful Connection with future SDP Record value – HCRP Client, Scan	HCRP/CL/CGSIT/SFC/BV-02-C
HCRP 2/1 AND HCRP 2/2a	General Inquiry and Public Online mode	HCRP/SR/DCS/BV-01-C
HCRP 3/1	General Inquiry and Public Online mode	HCRP/CL/DCS/BV-01-C

Item	Feature	Test Case(s)
HCRP 2/1 AND HCRP 2/2b	Limited Inquiry – Public Online	HCRP/SR/DCS/BV-02-C
HCRP 3/2	Limited Inquiry – Public Online	HCRP/CL/DCS/BV-02-C
HCRP 2/1	Device Discovery – Public Online	HCRP/SR/DCS/BV-03-C
HCRP 3/3	Device Discovery – Public Online	HCRP/CL/DCS/BV-03-C
HCRP 2/2	General Inquiry – Private Online	HCRP/SR/DCS/BV-04-C
HCRP 3/1	General Inquiry – Private Online	HCRP/CL/DCS/BV-04-C
HCRP 2/3	General Inquiry – Offline	HCRP/SR/DCS/BV-05-C
HCRP 3/1	General Inquiry – Offline	HCRP/CL/DCS/BV-05-C
HCRP 2/5	Bonding	HCRP/SR/DCS/BV-06-C
HCRP 3/5	Bonding	HCRP/CL/DCS/BV-06-C
HCRP 2/7	Print Data Transmission	HCRP/SR/DFC/BV-01-C
HCRP 3/7	Print Data Transmission	HCRP/CL/DFC/BV-01-C
HCRP 2/8	Scanned Data Transmission	HCRP/SR/DFC/BV-02-C
HCRP 3/8	Scanned Data Transmission	HCRP/CL/DFC/BV-02-C
HCRP 2/9	Idle - CR_GetLPTStatus	HCRP/SR/CCP/BV-01-C
HCRP 3/9	Idle - CR_GetLPTStatus	HCRP/CL/CCP/BV-01-C
HCRP 2/9	Successfully processing - CR_GetLPTStatus	HCRP/SR/CCP/BV-02-C
HCRP 3/9 AND HCRP 3/12a	Successfully processing - CR_GetLPTStatus	HCRP/CL/CCP/BV-02-C
HCRP 2/7 AND HCRP 2/9	Paper empty – CR_GetLPTStatus	HCRP/SR/CCP/BV-03-C
HCRP 3/9	Paper empty – CR_GetLPTStatus	HCRP/CL/CCP/BV-03-C
HCRP 1/1 AND NOT HCRP 2/9	Not supported by Server - CR_GetLPTStatus	HCRP/SR/CCP/BV-04-C
HCRP 1/2 AND HCRP 3/9	Not supported by Server - CR_GetLPTStatus	HCRP/CL/CCP/BV-04-C
HCRP 2/10	Supported - CR_Get1284ID	HCRP/SR/CCP/BV-05-C
HCRP 3/10	Supported - CR_Get1284ID	HCRP/CL/CCP/BV-05-C
HCRP 1/1 AND NOT HCRP 2/10	Not supported - CR_Get1284ID	HCRP/SR/CCP/BV-06-C
HCRP 1/2 AND HCRP 3/10	Not supported - CR_Get1284ID	HCRP/CL/CCP/BV-06-C
HCRP 2/11	Idle – CR_SoftReset	HCRP/SR/CCP/BV-07-C
HCRP 3/11	Idle – CR_SoftReset	HCRP/CL/CCP/BV-07-C
HCRP 2/11	Processing a job – CR_SoftReset	HCRP/SR/CCP/BV-08-C
HCRP 3/11	Processing a job – CR_SoftReset	HCRP/CL/CCP/BV-08-C
HCRP 1/1 AND NOT HCRP 2/11	Not supported – CR_SoftReset	HCRP/SR/CCP/BV-09-C
HCRP 3/11	Not supported – CR_SoftReset	HCRP/CL/CCP/BV-09-C
HCRP 2/12	Idle - CR_HardReset	HCRP/SR/CCP/BV-10-C
HCRP 3/12	Idle - CR_HardReset	HCRP/CL/CCP/BV-10-C

Item	Feature	Test Case(s)
HCRP 2/12	Processing a job - CR_HardReset	HCRP/SR/CCP/BV-11-C
HCRP 3/12	Processing a job - CR_HardReset	HCRP/CL/CCP/BV-11-C
HCRP 2/12	Error status - CR_HardReset	HCRP/SR/CCP/BV-12-C
HCRP 3/12	Error status - CR_HardReset	HCRP/CL/CCP/BV-12-C
HCRP 1/1 AND NOT HCRP 2/12	Not supported - CR_HardReset	HCRP/SR/CCP/BV-13-C
HCRP 3/12	Not supported - CR_HardReset	HCRP/CL/CCP/BV-13-C
HCRP 2/13	Notifications - Supported	HCRP/SR/NTF/BV-01-C
HCRP 3/13	Notifications - Supported	HCRP/CL/NTF/BV-01-C
HCRP 1/1 AND NOT HCRP 2/13	Notifications - Unsupported	HCRP/SR/NTF/BV-02-C
HCRP 3/13	Notifications - Unsupported	HCRP/CL/NTF/BV-02-C
HCRP 2/13	Notifications - Timeout Elapsed	HCRP/SR/NTF/BV-03-C
HCRP 3/13	Notifications - Timeout Elapsed	HCRP/CL/NTF/BV-03-C
HCRP 2/13	Notifications - Retries	HCRP/SR/NTF/BV-04-C
HCRP 3/13	Notifications - Retries	HCRP/CL/NTF/BV-04-C
HCRP 2/13	Notifications - Client Unavailable	HCRP/SR/NTF/BV-05-C

Table 5.1: Test case mapping

6 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	2002-10-31	Revisions based on BTI feedback: additional references added; use of Bluetooth Protocol Analyzer allowed for TP/SD/BV-01-I; Large & multiple short documents note removed from 5.4; 5.5.1.2.5 fail verdict amended; 5.5.1.4 test description reworded
1	1.1	2004-08-18	Incorporated TSE 606 (Added document number) and editorial changes
	1.2.1r1	2005-11-30	Editorial adjustment according BTI style guide update to conform to 1.2 or later test specs
	1.2.1r2	2006-01-13	Editorial updates
	1.2.1r3	2006-02-06	Revise per technical review comments. Removes “Tests must be performed under normal conditions” TSE 896 for TP/CCP/BV-04-I, TP/CCP/BV-06-I, TP/CCP/BV-09, TP/CCP/BV-13, and TP/NTF/BV-02 TSE 900 for TP/CCP/BV-03-I TSE 901 for TP/CCP/BV-09-I TSE 902 for TP/CCP/BV-09, TP/CCP/BV-13, and TP/NTF/BV-02 TSE 903 for TP/NTF/BV-05-I
2	1.2.1	2006-02-17	Publication date
	1.2.2r0	2006-04-07	TSE 914: TP/DCS/BV-03-I Change 2nd ‘Pass verdict’ to ‘Fail verdict’ TSE 916: TP/CCP/BV-02: Change Test Procedure to N/A, add pass/fail cases TSE 917: TP/CCP/BV-08-I[Processing a job – CR_SoftReset]
3	1.2.2	2006-05-16	Prepare for publication.
	1.2.3r0	2006-11-24	TSE 1849: TCMT item to be neither 2/11 nor 3/11for TP/CCP/BV-09-I.
4	1.2.3	2007-01-08	Prepare for publication.
	1.2.4r0	2008-02-01	TSE:2310: TP/CCP/BV-04-I: TCMT change TSE 2311: TP/CCP/BB-06-I: TCMT change
5	1.2.4	2008-04-01	Prepare for publication.
	1.2.5r00	2016-10-11	Converted to new Test Case ID conventions as defined in TSTO v4.1
6	1.2.5r01	2016-11-23	Miscellaneous edits. Removed UI from test procedure and replaced with Upper Tester.
	1.2.6r00	2017-04-12	TSE 8429: Converted test specification template.
7	1.2.6	2017-07-03	Approved by BTI. Prepared for TCRL 2017-1 publication.

Publication Number	Revision Number	Date	Comments
	p8r00–r07	2023-10-20 – 2024-04-26	TSE 23917 (rating 1): Converted -I tests to -C tests as appropriate; updated the TCMT and TCRL accordingly. TSE 24526 (rating 4): Added a new GSIT section with new TCs HCRP/SR/SGSIT/SERR/BV-01-C and -02-C, HCRP/SR/SGSIT/ATTR/BV-01-C – -08-C, HCRP/CL/SGSIT/SERR/BV-01-C and -02-C, HCRP/CL/SGSIT/ATTR/BV-01-C and -02-C, HCRP/CL/SGSIT/OFFS/BV-01-C, HCRP/SR/SGSIT/OFFS/BV-01-C, and HCRP/CL/CGSIT/SFC/BV-01-C and -02-C. Deleted TCs HCRP/SR/SD/BV-01-I and HCRP/CL/SD/BV-01-I. Updated the TCMT accordingly. Updated the references list, the test groups list, and the TC class naming conventions table. Editorial updates, including setting previous v1.2.6 to p7 and removing draft rev history entries. Updated the disclaimer text and footers to align with the latest DNMD and logo. Simplified the test groups section and replaced all boilerplate text per the latest TS template.
8	p8	2024-07-01	Approved by BTI on 2024-05-22. Prepared for TCRL 2024-1 publication.

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