

Video Distribution Profile (VDP)

Bluetooth® Test Suite

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1 Scope

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

The VDP utilizes the Generic Audio/Video Distribution profile (GAVDP) [2], which defines the signaling procedures. To test VDP procedures, it is necessary to initiate a part of the GAVDP procedures. Conformance tests for GAVDP are fully defined in the GAVDP Test Suite [4].

2 References, definitions, and abbreviations

2.1 References

This document incorporates, by dated or undated reference, provisions from other publications. These references are cited at the appropriate places in the text, and the publications are listed hereafter.

Additional definitions and abbreviations can be found in [7] and [9].

- [1] Video Distribution Profile
- [2] Generic Audio/Video Distribution Profile
- [3] ICS proforma for Video Distribution Profile, VDP.ICS
- [4] Generic Audio/Video Distribution Profile Test Suite, GAVDP.TS
- [5] ISO/IEC 14496-4:2000, Information technology - Coding of audio-visual objects - Part 4: Conformance testing
- [6] ISO/IEC 14496-5:2000, Information technology - Coding of audio-visual objects - Part 5: Reference software
- [7] Test Strategy and Terminology Overview
- [8] Bluetooth SIG, Conformance Test Video available at the Bluetooth SIG website in Test Suite section
- [9] Bluetooth Core Specification, Version 2.0 or later

2.2 Definitions

In this Bluetooth document, the definitions from [7] and [9] apply.

2.3 Acronyms and abbreviations

In this Bluetooth document, the definitions, acronyms, and abbreviations from [7] and [9] apply.

3 Test Suite Structure (TSS)

3.1 Overview

The qualification of products claiming their compliance with the Bluetooth specification involves the execution of test suites.

Therefore, two types of qualification tests are used: the conformance tests and the interoperability tests. The VDP is qualified with both conformance tests of video codec and interoperability tests.

The conformance tests of video codec are performed according to the test procedure specified in Section 4.7.

The interoperability tests aim at ensuring the interoperability between different Bluetooth products by covering functional testing based on operational scenarios

3.2 Test Suite Structure

This section defines the tree structure of the interoperability tests and conformance tests specified for VDP. The Test Suite Structure (TSS) is presented in Figure 3.1. The TSS is composed of nested test groups organized in a top-down approach.

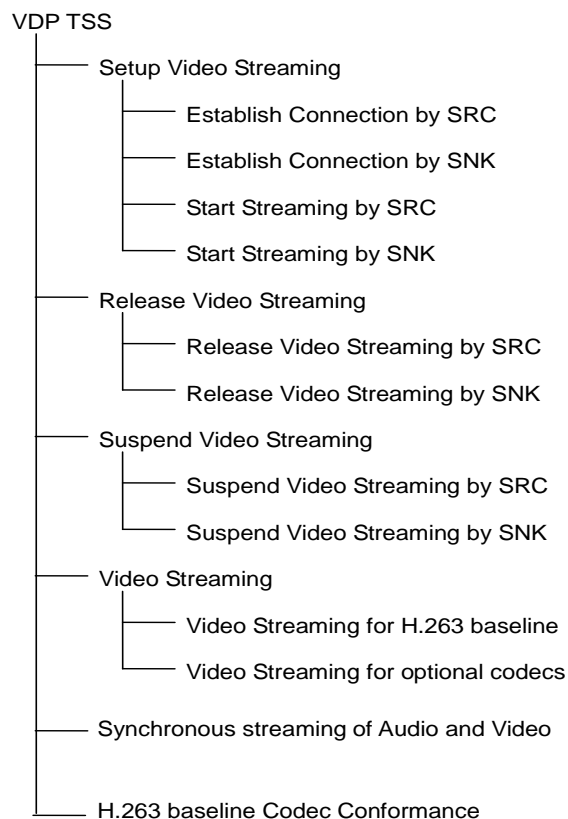


Figure 3.1: VDP Test Suite Structure

3.3 Test groups

The test groups are organized in three levels. The first level defines the procedure groups representing the profile services. The second level separates the procedures in functional modules. The third level in each branch contains the standard ISO group BV.

4 Test cases (TC)

4.1 Introduction

4.1.1 Test case identification conventions

Test cases are assigned unique identifiers per the conventions in [7]. The convention used here is: **<spec abbreviation>/<IUT role>/<class>/<feat>/<func>/<subfunc>/<cap>/<xx>-<nn>-<y>**.

Identifier Abbreviation	Feature Identifier <feat>
HC	H.263 Baseline Decoder Conformance
REL	Release Video Streaming
SET	Setup Video Streaming
SNK	Sink (role)
SRC	Source (role)
SUS	Suspend Video Streaming
SYN	Synchronous Streaming of Audio and Video
VDP	Video Distribution Profile
VS	Video Streaming

Table 4.1: VDP 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 (process-mandatory). 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 Launch Studio, 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, the outcome of the test is a Fail verdict.

4.2 Setup Video Streaming

Verify streaming setup.

4.2.1 Establish Connection initiated by SRC

Verify that the parameters are configured and stream connection is established by SRC.

4.2.1.1 Establish Connection – SRC

- Test Purpose
Verify that SRC can establish stream connection successfully.

- Reference

[1] 5.1.1

[2] 4.1.1

- Initial Condition
 - SRC: Standby mode.
 - SNK: Standby mode.
- Test Case Configuration

Test Case
VDP/SRC/SET/BV-01-I
VDP/SNK/SET/BV-01-I

Table 4.2: Establish Connection – SRC test cases

- Test Procedure
 1. Initiate the user action (e.g., press button) on SRC to setup connection.
 2. Initiate another user action (e.g., press button) on SRC to start video streaming, if it does not start streaming consecutively after connection establishment.
- Expected Outcome
Pass verdict
SRC/SNK:
 - If there is a corresponding indicator, then establishment of connection is indicated.
 - It is indicated that video streaming started upon user action.

4.2.2 Establish Connection Initiated by SNK

Verify that the parameters are configured and stream connection is established by SNK.

4.2.2.1 Establish Connection – SNK

- Test Purpose

Verify that SNK can establish stream connection successfully.

- Reference

[1] 5.1.1

[2] 4.1.1

- Initial Condition

- SRC: Standby mode.
- SNK: Standby mode.

- Test Case Configuration

Test Case
VDP/SRC/SET/BV-02-I
VDP/SNK/SET/BV-02-I

Table 4.3: Establish Connection – SNK test cases

- Test Procedure

Initiate the user action (e.g., press button) on SNK to setup connection. If it does not start streaming consecutively after connection establishment, initiate another user action (e.g., press button) on SNK to start video streaming.

- Expected Outcome

Pass verdict

SRC/SNK:

- If there is a corresponding indicator, then establishment of connection is indicated.
- It is indicated that video streaming started upon user action.

4.2.3 Start Video Streaming initiated by SRC

Verify that video streaming is started by SRC.

4.2.3.1 Start Streaming – SRC

- Test Purpose

Verify that SRC can start video streaming.

- Reference

[1] 5.1.1

[2] 4.1.1

- Initial Condition

- SRC/SNK: Connection has been established.



- Test Case Configuration

Test Case
VDP/SRC/SET/BV-03-I
VDP/SNK/SET/BV-03-I

Table 4.4: Start Streaming – SRC test cases

- Test Procedure

Initiate the user action (e.g., press button) on SRC to start video streaming. No user action may be required when Start streaming is preceded from connection establishment consecutively.

- Expected Outcome

Pass verdict

SRC/SNK:

- If there is a corresponding indicator, then start video streaming is indicated. Otherwise, streaming video is monitored on SNK.

4.2.4 Start Video Streaming initiated by SNK

Verify that video streaming is started by SNK.

4.2.4.1 Start Streaming – SNK

- Test Purpose

Verify that SNK can start video streaming.

- Reference

[1] 5.1.1

[2] 4.1.1

- Initial Condition

- SRC/SNK: Connection has been established.

- Test Case Configuration

Test Case
VDP/SRC/SET/BV-04-I
VDP/SNK/SET/BV-04-I

Table 4.5: Start Streaming – SNK

- Test Procedure

Initiate the user action (e.g., press button) on SNK to start video streaming. No user action may be required when Start streaming is preceded from connection establishment consecutively.

- Expected Outcome

Pass verdict

SRC/SNK:

- If there is a corresponding indicator, then start video streaming is indicated. Otherwise, streaming video is monitored on SNK.

4.3 Release Video Streaming

Verify that the video stream connection is released.

4.3.1 Release Video Streaming initiated by SRC

Verify that the video stream connection is released by SRC.

4.3.1.1 Release Streaming – SRC

- Test Purpose

SRC: Verify that SRC can release streaming.

SNK: Verify that SNK can accept streaming release.

- Reference

[1] 5.1.1

[2] 4.1.3

- Initial Condition

- SRC/SNK: Streaming connection is established.

- Test Case Configuration

Test Case
VDP/SRC/REL/BV-01-I
VDP/SNK/REL/BV-01-I

Table 4.6: Release Streaming – SRC test cases

- Test Procedure

SRC: Initiate the user action (e.g., press button) on SRC to release streaming. Then, re-establish a video streaming connection and start video streaming.

SNK: No user action is required.

- Expected Outcome

Pass verdict

SRC/SNK:

- If there is a corresponding indicator, release video streaming is indicated. Otherwise, video streaming is stopped.
- The user action releases video streaming connection, and it is possible to re-establish a video streaming connection and start video streaming.

4.3.2 Release Video Streaming initiated by SNK

Verify that the video stream connection is released by SNK.

4.3.2.1 Release Streaming – SNK

- Test Purpose
 - SRC: Verify that SRC can accept streaming release.
 - SNK: Verify that SNK can release streaming.

- Reference

[1] 5.1.1

[2] 4.1.3

- Initial Condition
 - SRC/SNK: Streaming connection is established.
- Test Case Configuration

Test Case
VDP/SRC/REL/BV-02-I
VDP/SNK/REL/BV-02-I

Table 4.7: Release Streaming – SNK test cases

- Test Procedure
 - SRC: No user action is required.
 - SNK: Initiate the user action (e.g., press button) on SNK to release streaming. Then, re-establish a video streaming connection and start video streaming.
- Expected Outcome

Pass verdict

SRC/SNK:

 - If there is a corresponding indicator, release video streaming is indicated. Otherwise, video streaming is stopped.
 - The user action releases video streaming connection and is possible to re-establish a video streaming connection and start video streaming.

4.4 Suspend Video Streaming

Verify that the video streaming is suspended.

4.4.1 Suspend Video Streaming initiated by SRC

Verify that the video streaming is suspended by SRC.

4.4.1.1 Suspend Stream – SRC

- Test Purpose
 - SRC: Verify that SRC can suspend streaming.
 - SNK: Verify that SNK can accept streaming suspend.

- Reference

[1] 5.1.1

[2] 4.1.4

- Initial Condition

- SRC/SNK: Streaming connection is established.

- Test Case Configuration

Test Case
VDP/SRC/SUS/BV-01-I
VDP/SNK/SUS/BV-01-I

Table 4.8: Suspend Stream – SRC test cases

- Test Procedure

SRC: Initiate the user action (e.g., press button) on SRC to suspend streaming. Then resume video streaming by restarting video streaming afterwards.

SNK: No user action is required.

- Expected Outcome

Pass verdict

SRC/SNK:

- If there is a corresponding indicator, suspend video streaming is indicated.
- Video streaming is stopped by the user action. Indication of restart video streaming is monitored when resumed.

4.4.2 Suspend Video Streaming initiated by SNK

Verify that the video stream connection is suspended by SNK.

4.4.2.1 Suspend Stream – SNK

- Test Purpose

SRC: Verify that SRC can accept streaming suspend.

SNK: Verify that SNK can suspend streaming.

- Reference

[1] 5.1.1

[2] 4.1.4

- Initial Condition

- SRC/SNK: Streaming connection is established.

- Test Case Configuration

Test Case
VDP/SRC/SUS/BV-02-I
VDP/SNK/SUS/BV-02-I

Table 4.9: Suspend Stream – SNK test cases

- Test Procedure

SRC: No user action is required.

SNK: Initiate the user action (e.g., press button) on SNK to suspend streaming. Then resume video streaming by restarting video streaming afterwards.

- Expected Outcome

Pass verdict

SRC/SNK:

- If there is a corresponding indicator, suspend video streaming is indicated.
- Video streaming is stopped by the user action. Indication of restart video streaming is monitored when resumed.

4.5 Video Streaming

Verify that video streaming is executed successfully by streaming a video data.

The video data to test this test case can be arbitrary provided that the expected outcome of decoded video is known beforehand. Some codec has reference test vectors for codec conformance test such as MPEG-4 in [5] which can be used for streaming. The expected outcome of decoded video from such reference test vectors can be reproduced by using the reference codec software which is also provided. With the reference codec software test vectors can be generated as well.

If a codec does not have reference test vector nor reference codec software, it is advised to consult with the codec owner organization on how to verify conformance of codec implementation.

4.5.1 Video Streaming for H.263 baseline

Verify that video streaming based on H.263 baseline is executed successfully.

4.5.1.1 Streaming – H.263 baseline

- Test Purpose

SRC: Verify that SRC can stream video data encoded in H.263 baseline to the SNK.

SNK: Verify that SNK can receive the video data encoded in H.263 baseline.

- Reference

[1] 3.2

- Initial Condition

- SRC/SNK: Streaming connection is established and configured using H.263 baseline.

- Test Case Configuration

Test Case
VDP/SRC/VS/BV-01-I
VDP/SNK/VS/BV-01-I

Table 4.10: Streaming – H.263 baseline test cases

- Test Procedure

SRC: Start streaming. If defined test vectors are available, then they should be used for the input, otherwise appropriate input is applied. For more information on test vectors for H.263 baseline, refer to Section 4.7 of this document.

SNK: No user action is required.

- Expected Outcome

Pass verdict

SRC/SNK:

- If a video output is available, an expected video is monitored. Otherwise, it is indicated that streaming was successfully executed.
- If a test vector is used as an input of SRC, the video output matches to expected outcome derived by the reference codec software.

4.5.2 Video Streaming for Optional Codecs

Verify that video streaming based on optional codec format is executed successfully.

4.5.2.1 Streaming – Options

- Test Purpose

SRC: Verify that SRC can stream video data encoded in optional codec to the SNK.

SNK: Verify that SNK can receive the video data encoded in optional codec.

- Reference

[1] 3.2

- Initial Condition

- SRC/SNK: Streaming connection is established and configured using optional codec.

- Test Case Configuration

Test Case
VDP/SRC/VS/BV-02-I
VDP/SNK/VS/BV-02-I

Table 4.11: Streaming – Options test cases

- Test Procedure

SRC: Start streaming. If defined test vectors for the codec under test are available, then they should be used for the input, otherwise appropriate input is applied. For more information on test vectors for the optional codec, refer to the codec owner organization.

SNK: No user action is required.

- Expected Outcome

Pass verdict

SRC/SNK:

- If a video output is available, an expected video is monitored. Otherwise, it is indicated that streaming was successfully executed.
- If a test vector is used as an input of SRC, the video output matches to expected outcome derived by the reference codec software.

4.6 Synchronous streaming of Audio and Video

Verify the correct implementation of audio video synchronization.

VDP/SNK/SYN/BV-01-I [Delay Reporting with VDP video playback]

- Test Purpose

The presentation of audio and video is synchronized, e.g., the presentation has to occur without a noticeable delay.

- Reference

[2] 4.1.18

[8]

- Initial Condition

- Source is connected with A2DP sink and a VDP sink (IUT).

- Test Procedure

Start streaming of a test video.

A sample video [8] is provided that contains a sequence of numbers that are spoken by a user and displayed at the same time. An acoustic marker appears whenever the number changes.

It is up to the manufacturer to use the provided video or to apply their own test procedure to ensure audio and video presentation is synchronized if the sample video cannot be used for some reasons.

- Expected Outcome

Pass verdict

Audio and video are synchronized.

This means the spoken number need to be the same as the number shown on the screen and the number change in the video need to be aligned with the corresponding acoustic marker in the video.

- Notes

If the test video is not used the manufacturer is responsible to use an effective method to verify the synchronization.

VDP/SNK/SYN/BV-01-C [Delay Value]

- Test Purpose

Verify that the reported delay value is correct.

- Reference

[2] 4.1.18

- Initial Condition

- A stream connection is established.
- IUT is SNK.

- Test Procedure

Start streaming and receive a delay report from SNK.

- Expected Outcome

Pass verdict

The reported delay value is within a given range expected by the manufacturer.

- Notes

This is a subjective plausibility test.

4.7 H.263 baseline Codec Conformance Test

Verify that the mandatory codec H.263 baseline is properly implemented.

This conformance test is conducted locally by the implementer because it cannot always be tested by an interoperability test against another device. Furthermore, the intent of this test is to assure basic conformity to the codec specification and is not to control the quality or performance of the codec implementation. The quality and performance of the codec is up to the implementation as far as it complies with the specification.

The conformance test of H.263 baseline codec is performed according to the MPEG-4 conformance testing [5] and its reference software [6]. It is mandated to satisfy the requirement described in [5] to be compliant with H.263 baseline. The reasons for utilizing MPEG-4 conformance test [5] to H.263 baseline codec are:

- There is no conformance test suite in ITU standard for H.263 baseline codec available in public.
- H.263 baseline (without annexes) is incorporated as part of MPEG-4 visual specification (known as 'short header' in the specification), and the conformance test suite of MPEG-4 [5] covers H.263 baseline as well.

4.7.1 H.263 baseline Decoder Conformance

Verify that H.263 baseline decoder is properly implemented.

VDP/SNK/HC/BV-01-C [H.263 baseline Conformance – Decoder]

- Test Purpose

Verify that H.263 baseline decoder is properly implemented on SNK.

Check that the decoder satisfies the requirement for conformance. See [5] and [6].
- Reference

[5]

[6]
- Initial Condition
 - SNK device is in decoding mode of H.263 baseline bitstreams.
 - IUT in normal operation with supported parameters defined in Section 4.3 in [1].
- Test Procedure

Input test bitstreams in the electronics annex in [5]. The bitstream files are located on the CD-ROM which is included as an electronic annex in reference [5] as following:
./CONFORMANCE_BITSTREAMS_CD1/Visual/natural/simple/Short.zip.
- Expected Outcome

Pass verdict

The video output of the decoder satisfies the requirement in [5].

4.7.2 H.263 baseline Encoder Conformance

Verify that H.263 baseline Encoder is properly implemented.

VDP/SRC/HC/BV-02-C [H.263 baseline Conformance – Encoder]

- Test Purpose

Verify that H.263 baseline encoder is properly implemented on SRC.

Check that the bitstreams produced by the encoder satisfies the requirement for conformance. See [5] and [6].
- Reference

[5]

[6]
- Initial Condition
 - SRC device is in encoding mode of H.263 baseline.
 - IUT in normal operation with supported parameters defined Section 4.3 in [1].
- Test Procedure

Activate the encoder and input video sequence.

- Expected Outcome

Pass verdict

The video output of the encoder satisfies the requirement in [5]. Furthermore, in detail, the following items are observed:

- The reference decoder [6] can decode the bitstreams encoded by the implementation without an error.
- It is confirmed that the reference decoder [6] can decode the bitstreams encoded by the implementation as a short header bitstream.

5 Test case mapping

The Test Case Mapping Table (TCMT) maps test cases to specific requirements in the ICS. The IUT will be 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 Video Distribution Profile (VDP) [3].

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

Test Case(s): The applicable test case identifiers, 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 [7].

For purpose and structure of the ICS/IXIT, refer to [7].

Item	Feature	Test Case(s)
VDP 2/1	Connection Establishment by SRC	VDP/SRC/SET/BV-01-I
VDP 4/2	Connection Establishment by SRC	VDP/SNK/SET/BV-01-I
VDP 2/2	Connection Establishment by SNK	VDP/SRC/SET/BV-02-I
VDP 4/1	Connection Establishment by SNK	VDP/SNK/SET/BV-02-I
VDP 2/3	Start Streaming by SRC	VDP/SRC/SET/BV-03-I
VDP 4/4	Start Streaming by SRC	VDP/SNK/SET/BV-03-I
VDP 2/4	Start Streaming by SNK	VDP/SRC/SET/BV-04-I
VDP 4/3	Start Streaming by SNK	VDP/SNK/SET/BV-04-I
VDP 2/5	H.263 baseline Video Stream	VDP/SRC/VS/BV-01-I
VDP 4/5	H.263 baseline Video Stream	VDP/SNK/VS/BV-01-I
VDP 2/6 OR VDP 2/7 OR VDP 2/8	Other Video Streams	VDP/SRC/VS/BV-02-I
VDP 4/6 OR VDP 4/7 OR VDP 4/8	Other Video Streams	VDP/SNK/VS/BV-02-I
VDP 2/10	Connection Release by SRC	VDP/SRC/REL/BV-01-I
VDP 4/10	Connection Release by SRC	VDP/SNK/REL/BV-01-I
VDP 2/11	Connection Release by SNK	VDP/SRC/REL/BV-02-I
VDP 4/9	Connection Release by SNK	VDP/SNK/REL/BV-02-I
VDP 2/12	Suspend by SRC	VDP/SRC/SUS/BV-01-I
VDP 4/12	Suspend by SRC	VDP/SNK/SUS/BV-01-I
VDP 2/13	Suspend by SNK	VDP/SRC/SUS/BV-02-I
VDP 4/11	Suspend by SNK	VDP/SNK/SUS/BV-02-I
VDP 5/2	Decode H.263 baseline	VDP/SNK/HC/BV-01-C
VDP 3/2	Encode H.263 baseline	VDP/SRC/HC/BV-02-C

Item	Feature	Test Case(s)
VDP 4/13	Delay Reporting with VDP video playback	VDP/SNK/SYN/BV-01-I
VDP 4/13	Delay Value	VDP/SNK/SYN/BV-01-C

Table 5.1: Test case mapping

6 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
	D05r00	May 2002	Release to Associates
	D05r01	2002-05-17	Section 5.6: H.263 baseline Conformance test modified Appendix A: Test case mapping modified
	D07r00	2002-05-31	SIG List added in page 2 Test Cases Mapping modified
	D07r01	2002-07-01	The item number of Test Cases Mapping modified In 5.6 a description of applicable cases of conformance test for SNK device is added reflecting the discussion result in Bochum F2F
	D09r00	2002-08-08	First Release Candidate to Associates and Early Adopters
	D09r01	2002-12-27	BTI and BQRB feedback reflected
	D09r02	2003-01-09	Cosmetic updates
	D09r03	2003-07-22	Revised codec implementation requirement according to update in VDP profile spec v.0.95RC7
	D09r04	2003-10-09	BQRB feedback reflected
	V09r00	2003-10-10	Test base mapping table updated to show a single expression for each test descriptor.
	V09r01	2003-11-11	Corrected typo on cover page.
	V09r02	2004-04-16	Updated Disclaimer and Copyright Notice and Revision History. Prepared for Prototyping Specification
0	D10r00	2004-08-11	Clarification amended in section 4.6.1.1.
1	1.0.1r1	2006-02-28	Editorial Updates
2	1.2.0	2006-05-31	Update document number, prepare for publication
	1.1.0r1	2011-03-01	Update after AV F2F
	1.1.0r2	2011-11-01	Incorporated changes from Core Spec 2.1+EDR updates
	1.1.0r3	2012-04-01	BTI comment resolution
	1.1.0r4	2012-04-15	Removed redundant references from Section 2.1
	1.1.0r5	2012-05-01	Changed the TCMT to align with the revised PICS
	1.1.0r6	2012-06-01	Added a Conformance section with the current text to 4.2.1. Miscellaneous editing of bulleting in test cases.
	1.1.0r7	2012-07-01	Added reference to A/V synchronization test video and referred to this from test case VDP/SNK/SYN/BV-01-I (legacy test case ID TP/SYN/BV-01-I).
3	1.1.0	2012-07-24	Prepare for publication.
	1.1.1r00	2016-08-03	Converted to new Test Case ID conventions as defined in TSTO v4.1.
	1.1.1r01	2016-11-06	Converted test specification template.

Publication Number	Revision Number	Date	Comments
4	1.1.1	2016-12-13	Approved by BTI. Prepared for TCRL 2016-2 publication.
	p5r00	2022-02-25 – 2022-02-28	TSE 17931 (rating 2): Updated the TCMT to reflect the renumbered VDP Sink features and codecs tables to align with Launch Studio. Template-related editorials, including aligning the copyright page with v2 of the DNMD and assigning publication number 4 to previous v1.1.1.
5	p5	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.

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