Transport Discovery Service (TDS)

Bluetooth® Test Suite

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1 Scope

This Bluetooth document contains the Test Suite Structure (TSS) and Test Cases (TC) to test the Transport Discovery Service Specification.

The objective of this test suite is to provide a basis for interoperability for Bluetooth devices giving a high probability of air interface interoperability between different manufacturers' Bluetooth devices.
2 References, Definitions, and Abbreviations

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

[1] Bluetooth Test Strategy and Terminology Overview
[2] Bluetooth Core Specification, Version 4.0 or later
[5] GATT Test Suite, GATT.TS
[6] Characteristic and Descriptor descriptions and fixed Protocol Service Multiplexer (PSM) values are accessible via the Bluetooth SIG Assigned Numbers.
[7] Transport Discovery Service Implementation eXtra Information for Test, IXIT.

2.2 Definitions
For the purpose of this Bluetooth document, the definitions from [1], [2], and [3] apply.

2.3 Abbreviations
For the purpose of this Bluetooth document, the abbreviations from [1], [2], and [3] apply.
3 Test Suite Structure (TSS)

3.1 Overview

The Transport Discovery Service requires the presence of L2CAP, GAP, SM (for LE), SDP (for BR/EDR), ATT and GATT. This is illustrated in Figure 3.1.

![Figure 3.1: Transport Discovery Service Test Model]

3.2 Test Strategy

The test objectives are to verify functionality of the Transport Discovery Service within a Bluetooth Host and enable interoperability between Bluetooth Hosts on different devices. The testing approach is to cover mandatory and optional requirements in the service specification and to match these to the support of the IUT as described in the ICS Proforma.

The test equipment shall provide an implementation of the Radio Controller and the parts of the Host needed to perform the test cases defined in the Transport Discovery Service Test Suite. 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, or another interface supported by the IUT.

The Transport Discovery Service 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:

- Service Definition
  - Verify the service definition.

- Transport Discovery Advertising Data
  - Verify the format of the Transport Discovery Data AD Type.

- Characteristic Declaration
  - Verify the presence and contents of characteristic declarations.

- Characteristic Descriptors
  - Verify the presence and contents of characteristic descriptors.

- Configure Indication
  - Verify that characteristics can be configured for indication.

- Service Procedures – TDS Control Point (CP)
  - Verify that the IUT handles properly the CP procedures.
  - Verify that the IUT generates the correct CP error responses when error conditions are presented to the IUT when using the TDS Control Point.
4  Test Cases (TC)

4.1  Introduction

4.1.1  Test Case Identification Conventions

Test cases shall be assigned unique identifiers per the conventions in [1]. The convention used here is `<spec abbreviation>/<IUT role>/<class>/<feat>/<func>/<subfunc>/<cap>/<xx>-<nn>-<y>`. Bolded ID parts shall appear in the order prescribed. Non-bolded ID parts (if applicable) shall appear between the bolded parts. The order of the non-bolded parts may vary from test suite to test suite, but shall be consistent within each individual test suite.

<table>
<thead>
<tr>
<th>Identifier Abbreviation</th>
<th>Spec Identifier &lt;spec abbreviation&gt;</th>
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</thead>
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<tr>
<td>TDS</td>
<td>Transport Discovery Service</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Identifier Abbreviation</th>
<th>Role Identifier &lt;IUT role&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR</td>
<td>Server Role</td>
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<table>
<thead>
<tr>
<th>Identifier Abbreviation</th>
<th>Feature Identifier &lt;feat&gt;</th>
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<td>CON</td>
<td>Configure Indication</td>
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<td>DEC</td>
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<td>SP</td>
<td>Service Procedures – TDS Control Point (CP)</td>
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<tr>
<td>SPE</td>
<td>CP Service Procedure – Error Handling</td>
</tr>
<tr>
<td>TDADV</td>
<td>Transport Discovery Advertising Data</td>
</tr>
</tbody>
</table>

*Table 4.1: Transport Discovery Service TC Feature Naming Convention*

4.1.2  Conformance

When conformance is claimed, all capabilities indicated as mandatory for this test suite shall be supported in the specified manner (process-mandatory). This also applies for all optional and conditional capabilities for which support is indicated. All mandatory capabilities, and optional and conditional capabilities for which support is indicated, are subject to verification as part of the Bluetooth Qualification Program.

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 that is not excluded by the Specification, OR
- That capabilities enabled by the implementations are sustained over durations expected by the use case, OR
- That the implementation gracefully handles any quantity of data expected by the use case, OR
- That in cases where more than one valid interpretation of the Specification exist, the implementation complies with at least one interpretation and gracefully handles other interpretations, OR
- That the implementation is immune to attempted security exploits.

A single execution of each of the required tests is required in order to constitute a pass verdict. However, it is noted that in order 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 Generator, 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 errata request such that the issue may be addressed.

### 4.1.3 Pass/Fail Verdict Conventions

Each test case has an Expected Outcome section, which outlines all the detailed pass criteria conditions that shall be met by the IUT to merit a Pass Verdict.

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 one of the pass criteria conditions cannot be met. If this occurs the outcome of the test shall be the Fail Verdict.

### 4.2 Setup Preambles and Generic Test Sequences

The procedures defined in this section are provided for information, as they are used by test equipment in achieving the initial conditions in certain tests.

#### 4.2.1 ATT Bearer

If LE is specified, the setup procedure defined in Section 4.2.1.1 is executed.

If BR/EDR is specified, the setup procedure defined in Section 4.2.1.2 is executed.

##### 4.2.1.1 On LE Transport

Follow the preamble procedure described in [5] Section 4.2.1.2.

##### 4.2.1.2 On BR/EDR Transport

Follow the preamble procedure described in [5] Section 4.2.1.1.

#### 4.2.2 Initial TDS Control Point Configuration

Follow this preamble procedure to enable the IUT for use with the TDS Control Point.

1. Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1.
2. The handle of the TDS Control Point has been previously discovered by the Lower Tester as described in the test procedure of GATT test case GATT/SR/GAD/BV-04-C or GATT/SR/GAD/BV-05-C in [5] or are known to the Lower Tester by other means.

3. The handle of the Client Characteristic Configuration descriptor of the TDS Control Point has been previously discovered by the Lower Tester as described in the test procedure of GATT test case GATT/SR/GAD/BV-06-C in [5] using the handle range of the characteristic or is known to the Lower Tester by other means.

4. If the IUT requires bonding, then the Lower Tester performs a bonding procedure.

5. The Lower Tester configures the TDS Control Point characteristic for indications by writing the value 0x0002 to the Client Characteristic Configuration descriptor of the characteristic as described in the test procedure of GATT test case GATT/SR/GAW/BV-08-C in [5].

4.3 Service Definition

Verify the service definition.

4.3.1 TDS/SR/SD/BV-01-C [Service Definition over LE]

- Test Purpose
  Verify that the IUT has one and only one instantiation of the Transport Discovery Service as a primary service. This test case applies only when using the LE transport.

- Reference
  [3] 2

- Initial Condition
  Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1.1.

- Test Procedure
  1. The Lower Tester attempts to either:
     a. Discover the service as a primary service by executing the test procedure included in GATT test case GATT/SR/GAD/BV-02-C [Discover Primary Services by Service UUID - from server] in [5] with Attribute Type parameter set to the UUID for «Primary Service» and the Attribute Value set to «Transport Discovery Service», Starting Handle set to 0x0001 and Ending Handle set to 0xFFFF. Or
     b. Discover the service as a primary service by executing the test procedure included in GATT test case GATT/SR/GAD/BV-01-C [Discover All Primary Services - from Server] in [5] with Attribute Type parameter set to the UUID for «Primary Service», Starting Handle set to 0x0001 and Ending Handle set to 0xFFFF.
     c. Verify that a single Transport Discovery Service has been discovered.

- Expected Outcome
  Pass verdict

  Only one attribute handle range is returned for the Transport Discovery Service as a primary service, containing the starting handle and the ending handle of the service definition.

  Only a single instance of the Transport Discovery Service is discovered.
4.3.2 TDS/SR/SD/BV-02-C [SDP Record]

- **Test Purpose**
  Verify the SDP Record for the Transport Discovery Service. This test case applies only when using the BR/EDR transport.

- **Reference**
  [3] 2, 5

- **Initial Condition**
  An ACL connection over BR/EDR is established between the Lower Tester and IUT as described in Section 4.2.1.2.

- **Test Procedure**
  1. The Lower Tester establishes an SDP connection to the IUT.
  2. The Lower Tester sends SDP requests to retrieve all attributes of the SDP record for the Transport Discovery Service.

- **Expected Outcome**
  Pass verdict
  The SDP record for the service is found.
  All attributes, which are mandatory for the service, are present in the SDP record.
  The values of all attributes in the SDP record meet the requirements of the service.

4.4 Transport Discovery Advertising Data

This test group contains test cases to verify that the format of the Advertising Data is compliant with the requirements of the Transport Discovery Service. Where, the Transport Discovery Data AD Type contains multiple Transport Blocks, this verification is performed one block at a time.

4.4.1 TDS/SR/TDADV/BV-01-C [Transport Discovery Data AD Type Format]

- **Test Purpose**
  Verify the IUT sends valid Transport Discovery Data AD Type data in the advertising packet.

- **Reference**
  [3] 3.1.1, 3.1.2

- **Initial Condition**
  The Lower Tester is GAP Observer or Central.
  The contents of the Transport Discovery Data AD Type to be transmitted are known from the IXIT [7].

- **Test Procedure**
  1. The Upper Tester orders the IUT to broadcast an advertising packet containing the Transport Discovery Data AD Type.
2. The IUT begins advertising using the Transport Discovery Data AD Type.

• Expected Outcome
  Pass verdict

  The advertising data from the IUT includes the Transport Discovery Data AD type as indicated by the use of Type Code «Transport Discovery Data».

  The format and value meets the requirements of the service.

  The value received is consistent with the value that is known from the IXIT.

  The Organization ID field is included in the Transport Block with a valid 1 octet Organization ID value from the Assigned Numbers.

  The TDS Flags field is included in the Transport Block with a valid 1 octet value that represents the role of the device and information about its state and supported features and with all RFU bits set to 0, and Role bits set to an appropriate value for the Transport Block, and the Transport Data Incomplete bit to an appropriate value for the Transport Block, and the Transport State bits set to an appropriate value for the Transport Block.

  The Transport Data Length field is included in the Transport Block with a valid 1 octet length value in accordance with the optional Transport Data field.

  If ICS 3/1 (Transport Data field in Transport Discovery Data AD Type) [4] is not supported, then verify that the Transport Data Length field is zero (testing the contents of this data is beyond the scope of this test suite).

4.4.2 TDS/SR/TDADV/BV-02-C [Transport Discovery Data AD Type Format]

• Test Purpose
  Verify the IUT sends valid Transport Discovery Data AD Type data in the advertising packet that contains multiple Transport Blocks.

• Reference
  [3] 3.1.2.5

• Initial Condition
  The Lower Tester is GAP Observer or Central.

  The contents of at least the first two blocks Transport Discovery Data AD Type to be transmitted are known from the IXIT [7].

• Test Procedure
  1. The Upper Tester orders the IUT to broadcast an advertising packet containing the Transport Discovery Data AD Type.

  2. The IUT begins advertising using the Transport Discovery Data AD Type.
• Expected Outcome
  Pass verdict

  The Transport Discovery Data AD type contains more than one Transport Block.
  The format and value of each Transport Block meets the requirements of the service.
  The values of the first two Transport Blocks received are consistent with the values that are known from the IXIT.

4.5 Characteristic Declaration
This test group contains test cases to verify that a characteristic can be discovered and the property field of the characteristic declaration meets the requirements of the service.

4.5.1 TDS/SR/DEC/BV-01-C [Characteristic Declarations - TDS Control Point]
• Test Purpose
  Verify the TDS Control Point characteristic is discovered and the characteristic properties field of the characteristic declaration meets the requirements of the service.

• Reference
  [3] 4.1

• Initial Condition
  The handle range of the service has been previously discovered by the Lower Tester in test case TDS/SR/SD/BV-01-C [Service Definition over LE] if using an LE transport or TDS/SR/SD/BV-02-C [SDP Record] if using a BR/EDR transport.
  Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1.

• Test Procedure
  1. Discover the characteristic by executing the test procedure of GATT test case GATT/SR/GAD/BV-04-C or GATT/SR/GAD/BV-05-C in [5].
  2. For a discovered TDS Control Point characteristic, Verify that the characteristic properties field of the characteristic declaration meets the requirements of the service.

• Expected Outcome
  Pass verdict

  The TDS Control Point characteristic is discovered and the characteristic properties field of the characteristic declaration has a value of 0x28.
4.6  Characteristic Descriptors

This test group contains test cases to verify that a characteristic descriptor can be discovered and meet the requirements of the service.

4.6.1  TDS/SR/DES/BV-01-C [CP - Client Characteristic Configuration Descriptor]

- Test Purpose
  Verify the Client Characteristic Configuration descriptor of the TDS Control Point characteristic is discovered and meets the requirements of the service.

- Reference
  [3] 4.1

- Initial Condition
  The handle range of the TDS Control Point characteristic has been previously discovered by the Lower Tester during the test procedure in TDS/SR/DEC/BV-01-C [Characteristic Declarations - TDS Control Point] or is known to the Lower Tester by other means.

  Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1.

- Test Procedure
  1. Discover all characteristic descriptors of the characteristic by executing the test procedure of GATT test case GATT/SR/GAD/BV-06-C in [5] using the handle range of the characteristic. The IUT returns at least one handle-UUID pair.
  2. If the UUID in a handle-UUID pair is for the characteristic descriptor, read the characteristic descriptor by executing the test procedure of GATT test case GATT/SR/GAR/BV-06-C in [5].
  3. Verify that the value of the characteristic descriptor meets the requirements of the service.

- Expected Outcome
  Pass verdict

  The Client Characteristic Configuration descriptor of the TDS Control Point characteristic is discovered, the characteristic descriptor is read, and the value of the characteristic descriptor is either 0x0000 or 0x0002.
4.7 Configure Indication

This test group contains test cases to Verify compliant operation in response to disabling and enabling characteristic indication.

4.7.1 TDS/SR/CON/BV-01-C [Configure Indication – CP]

- Test Purpose
  Verify the Client Characteristic Configuration descriptor of the TDS Control Point characteristic can be disabled and enabled.

- Reference
  [3] 4.1

- Initial Condition
  The handle of the TDS Control Point characteristic has been previously discovered by the Lower Tester during the test procedure in TDS/SR/DEC/BV-01-C [Characteristic Declarations - TDS Control Point] or is known to the Lower Tester by other means.

  The handle of the client characteristic configuration descriptor of the TDS Control Point characteristic has been previously discovered by the Lower Tester during the test procedure in TDS/SR/DES/BV-01-C [CP - Client Characteristic Configuration Descriptor] or is known to the Lower Tester by other means.

  If IUT permissions for the characteristic descriptor require a specific security mode or security level, establish a connection meeting those requirements.

  Establish an ATT Bearer connection between the Lower Tester and IUT as described in Section 4.2.1.

- Test Procedure
  1. Disable indication by writing value 0x0000 to the Client Characteristic Configuration descriptor of the characteristic using the test procedure of GATT test case GATT/SR/GAW/BV-08-C in [5].
  2. The Lower Tester reads the value of the Client Characteristic Configuration descriptor.
  3. Enable indication by writing value 0x0002 to the Client Characteristic Configuration descriptor of the characteristic using the test procedure of GATT test case GATT/SR/GAW/BV-08-C in [5].
  4. The Lower Tester reads the value of the Client Characteristic Configuration descriptor.

- Expected Outcome
  Pass verdict

  The characteristic descriptor is successfully written and the value returned when read in steps #2 and #4 is consistent with the value written.
4.8 Service Procedures – TDS Control Point

This test group contains test cases to Verify compliant operation of the TDS Control Point procedures.

4.8.1 TDS/SR/SP/BV-01-C [CP - Activate Transport]

• Test Purpose
  Verify that the IUT can perform the CP Activate Transport procedure. Note that the actual activation of the alternate transport is beyond the scope of the Transport Discovery Service.

• Reference
  [3] 4.1.3

• Initial Condition
  Perform the preamble described in Section 4.2.2.

  The supported parameter value for the TDS Control Point request and the supported Organization ID are known from the IXIT [7].

• Test Procedure
  1. The Lower Tester writes the Activate Transport Op Code (0x01) to the TDS Control Point with a supported Organization ID and a Parameter value that is known from the IXIT.
  2. The IUT, after sending a Write Response to acknowledge the write to the TDS Control Point, sends an indication of the TDS Control Point characteristic.
  3. The Lower Tester receives an `ATT_Handle_Value_Indication` from the IUT containing the TDS Control Point characteristic handle and value.
  4. The Lower Tester sends an `ATT_Handle_Value_Confirmation` to the IUT.

• Expected Outcome
  Pass verdict

  The IUT sends an indication of the TDS Control Point characteristic containing the Requested Op Code (0x01) followed by the Result Code for ‘Success’ (0x00) and, optionally, a Parameter value.

4.9 Service Procedures – TDS Control Point Error Handling

This test group contains test cases to Verify compliant operation when the Lower Tester uses the TDS Control Point procedure and an error results.

4.9.1 TDS/SR/SPE/BI-01-C [CP - Op Code Not Supported]

• Test Purpose
  Verify that the IUT responds appropriately when a Client writes an unsupported Op Code to the TDS Control Point.

• Reference
  [3] 4.1.4.2.1

• Initial Condition
  Perform the preamble described in Section 4.2.2.
• Test Procedure

1. The Lower Tester writes an Op Code Value of 0x00 to the TDS Control Point with a Parameter Value to be determined by the Lower Tester.
2. The IUT, after sending a Write Response to acknowledge the write to the TDS Control Point, sends an indication of the TDS Control Point characteristic.
3. The Lower Tester receives an ATT_Handle_Value_Indication from the IUT containing the TDS Control Point characteristic handle and value.
4. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.
5. The Lower Tester writes an Op Code value from the Reserved for Future Use (RFU) range other than 0x00 to the TDS Control Point with a Parameter Value to be determined by the Lower Tester.
6. The IUT, after sending a Write Response to acknowledge the write to the TDS Control Point, sends an indication of the TDS Control Point characteristic.
7. The Lower Tester receives an ATT_Handle_Value_Indication from the IUT containing the TDS Control Point characteristic handle and value.
8. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.
9. Verify that the IUT indication meets the requirements of the service.

• Expected Outcome

Pass verdict

In Step #2, the IUT sends an indication of the TDS Control Point characteristic with the Requested Op Code (0x00), followed by the Result Code for 'Op Code not supported' (0x01) and, optionally, a Parameter value.

In Step #6, the IUT sends an indication of the TDS Control Point characteristic with the Requested Op Code (i.e., the RFU value written in Step #5), followed by the Result Code for 'Op Code not supported' (0x01) and, optionally, a Parameter value.

The IUT continues to perform normal operations.

4.9.2  TDS/SR/SPE/BI-02-C [CP - Client Characteristic Configuration Descriptor Improperly Configured]

• Test Purpose

Verify that the IUT responds appropriately when a Client attempts to perform a TDS Control Point procedure with a Client Characteristic Configuration descriptor that is improperly configured.

• Reference

[3] 4.1.4.1

• Initial Condition

Perform the preamble described in Section 4.2.2.

• Test Procedure

1. The Lower Tester resets the value of the Client Characteristic Configuration descriptor of the TDS Control Point characteristic to 0x0000.
2. The Lower Tester writes a valid Op Code to the TDS Control Point that is supported by the IUT.
3. Verify that the IUT response meets the requirements of the service.
• Expected Outcome

Pass verdict

The IUT rejects the Write Request by sending an Error Response with an Attribute Protocol Error Code set to “Client Characteristic Configuration Descriptor Improperly Configured” (0xFD).

The IUT continues to perform normal operations.

4.9.3 TDS/SR/SPE/BI-03-C [CP – Invalid Parameter]

• Test Purpose

Verify that the IUT responds appropriately when a Client requests a CP procedure with an Op Code that requires a parameter and the parameter is invalid.

• Reference

[3] 4.1.4.2.2

• Initial Condition

Perform the preamble described in Section 4.2.2.

A parameter value for the TDS Control Point request that is invalid for the implementation and the supported Organization ID are known from the IXIT [7].

• Test Procedure

1. The Lower Tester writes the Activate Transport Op Code to the TDS Control Point with a supported Organization ID and an invalid Parameter Value that is known from the IXIT.

2. The IUT, after sending a Write Response to acknowledge the write to the TDS Control Point, sends an indication of the TDS Control Point characteristic.

3. The Lower Tester receives an ATT_Handle_Value_Indication from the IUT containing the TDS Control Point characteristic handle and value.

4. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.

• Expected Outcome

Pass verdict

The IUT sends an indication of the TDS Control Point characteristic containing the Requested Op Code (0x01) followed by the Result Code for ‘Invalid Parameter’ (0x02) and, optionally, a Parameter value.

4.9.4 TDS/SR/SPE/BI-04-C [CP – Unsupported Organization ID]

• Test Purpose

Verify that the IUT responds appropriately when a Client requests the Activate Transport Op Code with an unsupported Organization ID value.

• Reference

[3] 4.1.4.2.3
• Initial Condition

Perform the preamble described in Section 4.2.2.

A parameter value for the TDS Control Point request that is invalid for the implementation and an unsupported Organization ID are known from the IXIT [7].

• Test Procedure

1. The Lower Tester writes the Activate Transport Op Code to the TDS Control Point with an unsupported Organization ID and a Parameter value that is known from the IXIT.
2. The IUT, after sending a Write Response to acknowledge the write to the TDS Control Point, sends an indication of the TDS Control Point characteristic.
3. The Lower Tester receives an ATT_Handle_Value_Indication from the IUT containing the TDS Control Point characteristic handle and value.
4. The Lower Tester sends an ATT_Handle_Value_Confirmation to the IUT.

• Expected Outcome

Pass verdict

The IUT sends an indication of the TDS Control Point characteristic containing the Requested Op Code (0x01) followed by the Result Code for ‘Unsupported Organization ID’ (0x03) and, optionally, a Parameter value.
5 Test Case Mapping

The Test Case Mapping Table (TCMT) maps test cases to specific capabilities in the ICS. Profiles, protocols and services may define multiple roles, and it is possible that a product may implement more than one role. The product shall 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 y/x reference, where y corresponds to the table number and x corresponds to the feature number as defined in the ICS Proforma for Transport Discovery Service (TDS) [4]. If the item is defined with Protocol, Profile or Service abbreviation before y/x, the table and feature number referenced are defined in the abbreviated ICS proforma document.

**Feature:** recommended to be the primary feature defined in the ICS being tested or may be the test case name.

**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.

For purpose and structure of the ICS/IXIT proforma and instructions for completing the ICS/IXIT proforma refer to the Bluetooth ICS and IXIT proforma document.

<table>
<thead>
<tr>
<th>Item</th>
<th>Feature</th>
<th>Test Case(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDS 2/1 AND TDS 8/2</td>
<td>GATT Service Definition over LE</td>
<td>TDS/SR/SD/BV-01-C</td>
</tr>
<tr>
<td>TDS 2/2</td>
<td>SDP Record</td>
<td>TDS/SR/SD/BV-02-C</td>
</tr>
<tr>
<td>TDS 0/1</td>
<td>Transport Discovery Data AD Type Format</td>
<td>TDS/SR/TDADV/BV-01-C</td>
</tr>
<tr>
<td>TDS 3/2</td>
<td>Multiple Transport Blocks</td>
<td>TDS/SR/TDADV/BV-02-C</td>
</tr>
</tbody>
</table>

*Table 5.1: Test Case Mapping*
6 Revision History and Contributors

Revision History

<table>
<thead>
<tr>
<th>Revision History</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0.0</td>
<td>2015-11-17</td>
<td>Spec adopted by BoD. Prepared for publication.</td>
</tr>
<tr>
<td>1.0.1r00</td>
<td>2016-01-15</td>
<td>Converted test case IDs to new conventions as outlined in TSTO v4.1</td>
</tr>
<tr>
<td>1.0.1r01</td>
<td>2016-02-23</td>
<td>Updated ID conventions following BTI review.</td>
</tr>
<tr>
<td>1.0.1r02</td>
<td>2016-06-01</td>
<td>Review by Miles Smith</td>
</tr>
<tr>
<td>1.0.1</td>
<td>2016-07-14</td>
<td>Prepared for TCRL 2016-1 publication.</td>
</tr>
<tr>
<td>1.0.1 edition 2r00</td>
<td>2018-11-29</td>
<td>Editorial changes only. Template updated. Revision History and contributors moved to the end of the document.</td>
</tr>
<tr>
<td>1.0.1 edition 2</td>
<td>2020-01-10</td>
<td>Updated copyright page and confidentiality markings to support new Documentation Marking Requirements, performed minor formatting updates, and accepted all tracked changes to prepare for edition 2 publication.</td>
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</tbody>
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Contributors

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
</tr>
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<td>Robert D. Hughes</td>
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</table>