

Telephone Bearer Service (TBS)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

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1 General principles

1.1 Implementation Under Test (IUT) identification

Using the Bluetooth SIG qualification tool, the implementer is expected to declare details about what will be implemented.

1.2 Enforcement of inter-layer dependencies

This ICS includes one or more tables with inter-layer dependencies (ILDs). ILDs are used for specification requirements that are dependent on other supporting specifications. ILDs can refer to an individual ICS item in a separate layer (individual ILD), or it can refer to the full layer (full-layer ILD).

ILDs residing in an X2Core layer will be enforced from the Bluetooth SIG qualification tool in the following conditions, depending on where the referred ILD is residing:

Referred ILD resides in	Individual ILD	Full-layer ILD
Controller layer	Core-Complete configuration, or Referred layer is supported	N/A
Lower HCI layer	HCI is supported	N/A
Upper HCI layer	Core-Host configuration, or UHCI is supported	N/A
Host layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	N/A
X2Core layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	Core-Host configuration, or Core-Complete configuration

Table 1.1: Enforcement of an ILD within the Bluetooth SIG qualification tool

2 ICS declarations

2.1 Service support

Table 0b: Service Requirements

Item	Service	Reference	Status
1	Telephone Bearer Service	[1] 2.1	C.1
2	Generic Telephone Bearer Service	[1] 2.1	C.1

C.1: Mandatory to support at least one.

3 Telephone Bearer Service (TBS)

3.1 TBS Versions

Table 0: X.Y Versions

Prerequisite: TBS 0b/1 "Telephone Bearer Service"

Item	Version	Reference	Status
1	TBS v1.0	[1] 2.3.1	M

3.2 TBS Transports

Table 1: Transport Requirements

Prerequisite: TBS 0b/1 "Telephone Bearer Service"

Item	Transport	Reference	Status
1	Service supported over BR/EDR	[1] 1.5	C.1, C.3
2	Service supported over LE	[1] 1.5	C.2, C.3

C.1: Excluded for this Service IF CORE 41/2 "LE Core Configuration".

C.2: Excluded for this Service IF CORE 41/1 "BR/EDR Core Configuration".

C.3: Mandatory to support at least one.

3.3 TBS Service requirements

Table 2: Telephone Bearer Service Requirements

Prerequisite: TBS 0b/1 "Telephone Bearer Service"

Item	Feature	Reference	Status
1	Telephone Bearer Service	[1] 2.3.1	M
2	Bearer Provider Name Characteristic	[1] 3.1	M
3	Bearer Provider Name Read Long Support	[1] 3.1	O
4	Bearer UCI Characteristic	[1] 3.2	M
5	Bearer Technology Characteristic	[1] 3.3	M
6	Bearer URI Schemes Supported List Characteristic	[1] 3.4	M
7	Bearer URI Schemes Supported List Notification	[1] 3.4	O
8	Bearer URI Schemes Supported List Read Long Support	[1] 3.4	C.1
9	Bearer Signal Strength Characteristic	[1] 3.5	O
10	Bearer Signal Strength Reporting Interval Characteristic	[1] 3.6	C.2
11	Bearer List Current Calls Characteristic	[1] 3.7	M
12	Bearer List Current Calls Read Long Support	[1] 3.7	O
13	Content Control ID Characteristic	[1] 3.8	M
14	Status Flags Characteristic	[1] 3.9	M
15	Incoming Call Target Bearer URI Characteristic	[1] 3.10	O
16	Incoming Call Target Bearer URI Read Long Support	[1] 3.10	C.3
17	Call State Characteristic	[1] 3.11	M

Item	Feature	Reference	Status
18	Call State Read Long Support	[1] 3.11	O
19	Call Control Point Characteristic	[1] 3.12	M
20	Call Control Point Optional Opcodes Characteristic	[1] 3.13	M
21	Termination Reason Characteristic	[1] 3.14	M
22	Incoming Call Characteristic	[1] 3.15	M
23	Incoming Call Read Long Support	[1] 3.15	O
24	Call Friendly Name Characteristic	[1] 3.16	O
25	Call Friendly Name Read Long Support	[1] 3.16	C.4
26	Server-side Call States	[1] 2.3.1	O

C.1: Optional IF TBS 2/6 “Bearer URI Schemes Supported List Characteristic”, otherwise Excluded.

C.2: Mandatory IF TBS 2/9 “Bearer Signal Strength Characteristic”, otherwise Excluded.

C.3: Optional IF TBS 2/15 “Incoming Call Target Bearer URI Characteristic”, otherwise Excluded.

C.4: Optional IF TBS 2/24 “Call Friendly Name Characteristic”, otherwise Excluded.

Table 3: Call Control Point Opcode Requirements

Prerequisite: TBS 2/19 “Call Control Point Characteristic”

Item	Opcode	Reference	Status
1	Accept	[1] 3.12.1.1	M
2	Terminate	[1] 3.12.1.2	M
3	Local Hold	[1] 3.12.1.3	C.1
4	Local Retrieve	[1] 3.12.1.4	C.1
5	Originate	[1] 3.12.1.5	M
6	Join	[1] 3.12.1.6	O

C.1: Mandatory to support none or all.

3.4 TBS GATT requirements

Table 4: GATT Requirements

Prerequisite: TBS 0b/1 “Telephone Bearer Service”

Item	Feature	Reference	Status	Inter-Layer Dependency
1	Write Characteristic Value	[1] 1.4	M	[2] GATT 4/14
2	Write without Response	[1] 1.4	M	[2] GATT 4/12
3	Single Notification	[1] 1.4	M	[2] GATT 4/17
4	Read Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/19
5	Write Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/21
6	GATT Server over BR/EDR	[1] 1.4	C.1	[2] GATT 1a/4
7	GATT Server over LE	[1] 1.4	C.2	[2] GATT 1a/3

C.1: Mandatory IF TBS 1/1 “Service supported over BR/EDR”, otherwise not defined.

C.2: Mandatory IF TBS 1/2 “Service supported over LE”, otherwise not defined.

3.5 TBS SDP requirements

Table 5: SDP Requirements

Prerequisite: TBS 1/1 “Service supported over BR/EDR”

Item	Feature	Reference	Status
1	SDP record present for TBS	[1] 4	M
2–4	No longer used	N/A	N/A

4 Generic Telephone Bearer Service

4.1 GTBS Versions

Table 20: X.Y Versions

Prerequisite: TBS 0b/2 "Generic Telephone Bearer Service"

Item	Version	Reference	Status
1	GTBS v1.0	[1] 2.3.1	M

4.2 GTBS Transports

Table 21: Transport Requirements

Prerequisite: TBS 0b/2 "Generic Telephone Bearer Service"

Item	Transport	Reference	Status
1	Service supported over BR/EDR	[1] 1.5	C.1, C.3
2	Service supported over LE	[1] 1.5	C.2, C.3

C.1: Excluded for this Service IF CORE 41/2 "LE Core Configuration".

C.2: Excluded for this Service IF CORE 41/1 "BR/EDR Core Configuration".

C.3: Mandatory to support at least one.

4.3 GTBS Service requirements

Table 22: Generic Telephone Bearer Service Requirements

Prerequisite: TBS 0b/2 "Generic Telephone Bearer Service"

Item	Feature	Reference	Status
1	Generic Telephone Bearer Service	[1] 2.3.1	M
2	Bearer Provider Name Characteristic	[1] 3.1	M
3	Bearer Provider Name Read Long Support	[1] 3.1	O
4	Bearer UCI Characteristic	[1] 3.2	M
5	Bearer Technology Characteristic	[1] 3.3	M
6	Bearer URI Schemes Supported List Characteristic	[1] 3.4	M
7	Bearer URI Schemes Supported List Notification	[1] 3.4	O
8	Bearer URI Schemes Supported List Read Long Support	[1] 3.4	C.1
9	Bearer Signal Strength Characteristic	[1] 3.5	O
10	Bearer Signal Strength Reporting Interval Characteristic	[1] 3.6	C.2
11	Bearer List Current Calls Characteristic	[1] 3.7	M
12	Bearer List Current Calls Read Long Support	[1] 3.7	O
13	Content Control ID Characteristic	[1] 3.8	M
14	Status Flags Characteristic	[1] 3.9	M
15	Incoming Call Target Bearer URI Characteristic	[1] 3.10	O
16	Incoming Call Target Bearer URI Read Long Support	[1] 3.10	C.3

Item	Feature	Reference	Status
17	Call State Characteristic	[1] 3.11	M
18	Call State Read Long Support	[1] 3.11	O
19	Call Control Point Characteristic	[1] 3.12	M
20	Call Control Point Optional Opcodes Characteristic	[1] 3.13	M
21	Termination Reason Characteristic	[1] 3.14	M
22	Incoming Call Characteristic	[1] 3.15	M
23	Incoming Call Read Long Support	[1] 3.15	O
24	Call Friendly Name Characteristic	[1] 3.16	O
25	Call Friendly Name Read Long Support	[1] 3.16	C.4
26	Server-side Call states	[1] 2.3.2	O

C.1: Optional IF TBS 22/6 “Bearer URI Schemes Supported List Characteristic”, otherwise Excluded.

C.2: Mandatory IF TBS 22/9 “Bearer Signal Strength Characteristic”, otherwise Excluded.

C.3: Optional IF TBS 22/15 “Incoming Call Target Bearer URI Characteristic”, otherwise Excluded.

C.4: Optional IF TBS 22/24 “Call Friendly Name Characteristic”, otherwise Excluded.

Table 23: Call Control Point Opcode Requirements

Prerequisite: TBS 22/19 “Call Control Point Characteristic”

Item	Opcode	Reference	Status
1	Accept	[1] 3.12.1.1	M
2	Terminate	[1] 3.12.1.2	M
3	Local Hold	[1] 3.12.1.3	C.1
4	Local Retrieve	[1] 3.12.1.4	C.1
5	Originate	[1] 3.12.1.5	M
6	Join	[1] 3.12.1.6	O

C.1: Mandatory to support none or all.

4.4 GTBS GATT requirements

Table 24: GATT Requirements

Item	Feature	Reference	Status	Inter-Layer Dependency
1	Write Characteristic Value	[1] 1.4	M	[2] GATT 4/14
2	Write without Response	[1] 1.4	M	[2] GATT 4/12
3	Single Notification	[1] 1.4	M	[2] GATT 4/17
4	Read Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/19
5	Write Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/21
6	GATT Server over BR/EDR	[1] 1.4	C.1	[2] GATT 1a/4
7	GATT Server over LE	[1] 1.4	C.2	[2] GATT 1a/3

C.1: Mandatory IF TBS 21/1 “Service supported over BR/EDR”, otherwise not defined.

C.2: Mandatory IF TBS 21/2 “Service supported over LE”, otherwise not defined.

4.5 GTBS SDP requirements

Table 25: SDP Requirements

Prerequisite: TBS 21/1 “Service supported over BR/EDR”

Item	Feature	Reference	Status
1	SDP record present for GTBS	[1] 4	M

5 References

- [1] Telephone Bearer Service Specification, Version 1.0
- [2] ICS Proforma for Generic Attribute Profile (GATT)

6 Bridge mapping between TBS ICS and prior GTBS ICS (informational)

TSE 24008 was deleted the GTBS ICS document and merged the ICS from GTBS into TBS ICS.

Table 6.1 provides the mapping between the merged TBS ICS and the prior GTBS ICS and TBS ICS items. If an implementation previously supported one of the prior capabilities, then it now supports the corresponding TBS ICS capability.

GTBS.ICS.p0 in TCRL 2023-1 was the last version before the merge.

TBS ICS	Description	Mapping
TBS 20/1	Generic Telephone Bearer Service 1.0	GTBS 0/1 "Generic Telephone Bearer Service 1.0"
TBS 21/1	Service Supported over BR/EDR	GTBS 1/1 "Service Supported over BR/EDR"
TBS 21/2	Service supported over LE	GTBS 1/2 "Service supported over LE"
TBS 22/1	Generic Telephone Bearer Service	GTBS 2/1 "Generic Telephone Bearer Service"
TBS 22/2	Bearer Provider Name Characteristic	GTBS 2/2 "Bearer Provider Name Characteristic"
TBS 22/3	Bearer Provider Name Read Long Support	GTBS 2/3 "Bearer Provider Name Read Long Support"
TBS 22/4	Bearer UCI Characteristic	GTBS 2/4 "Bearer UCI Characteristic"
TBS 22/5	Bearer Technology Characteristic	GTBS 2/5 "Bearer Technology Characteristic"
TBS 22/6	Bearer URI Schemes Supported List Characteristic	GTBS 2/6 "Bearer URI Schemes Supported List Characteristic"
TBS 22/7	Bearer URI Schemes Supported List Notification	GTBS 2/7 "Bearer URI Schemes Supported List Notification"
TBS 22/8	Bearer URI Schemes Supported List Read Long Support	GTBS 2/8 "Bearer URI Schemes Supported List Read Long Support"
TBS 22/9	Bearer Signal Strength Characteristic	GTBS 2/9 "Bearer Signal Strength Characteristic"
TBS 22/10	Bearer Signal Strength Reporting Interval Characteristic	GTBS 2/10 "Bearer Signal Strength Reporting Interval Characteristic"
TBS 22/11	Bearer List Current Calls Characteristic	GTBS 2/11 "Bearer List Current Calls Characteristic"
TBS 22/12	Bearer List Current Calls Read Long Support	GTBS 2/12 "Bearer List Current Calls Read Long Support"
TBS 22/13	Content Control ID Characteristic	GTBS 2/13 "Content Control ID Characteristic"
TBS 22/14	Status Flags Characteristic	GTBS 2/14 "Status Flags Characteristic"
TBS 22/15	Incoming Call Target Bearer URI Characteristic	GTBS 2/15 "Incoming Call Target Bearer URI Characteristic"
TBS 22/16	Incoming Call Target Bearer URI Read Long Support	GTBS 2/16 "Incoming Call Target Bearer URI Read Long Support"
TBS 22/17	Call State Characteristic	GTBS 2/17 "Call State Characteristic"

TBS ICS	Description	Mapping
TBS 22/18	Call State Read Long Support	GTBS 2/18 "Call State Read Long Support"
TBS 22/19	Call Control Point Characteristic	GTBS 2/19 "Call Control Point Characteristic"
TBS 22/20	Call Control Point Optional Opcodes Characteristic	GTBS 2/20 "Call Control Point Optional Opcodes Characteristic"
TBS 22/21	Termination Reason Characteristic	GTBS 2/21 "Termination Reason Characteristic"
TBS 22/22	Incoming Call Characteristic	GTBS 2/22 "Incoming Call Characteristic"
TBS 22/23	Incoming Call Read Long Support	GTBS 2/23 "Incoming Call Read Long Support"
TBS 22/24	Call Friendly Name Characteristic	GTBS 2/24 "Call Friendly Name Characteristic"
TBS 22/25	Call Friendly Name Read Long Support	GTBS 2/25 "Call Friendly Name Read Long Support"
TBS 23/1	Accept	GTBS 3/1 "Accept"
TBS 23/2	Terminate	GTBS 3/2 "Terminate"
TBS 23/3	Local Hold	GTBS 3/3 "Local Hold"
TBS 23/4	Local Retrieve	GTBS 3/4 "Local Retrieve"
TBS 23/5	Originate	GTBS 3/5 "Originate"
TBS 23/6	Join	GTBS 3/6 "Join"
TBS 24/1	Write Characteristic Value	GTBS 4/1 "Write Characteristic Value"
TBS 24/2	Write without Response	GTBS 4/2 "Write without Response"
TBS 24/3	Notifications	GTBS 4/3 "Notifications"
TBS 24/4	Read Characteristic Descriptors	GTBS 4/4 "Read Characteristic Descriptors"
TBS 24/5	Write Characteristic Descriptors	GTBS 4/5 "Write Characteristic Descriptors"
TBS 24/6	GATT Server over BR/EDR	GTBS 1/1 "Service Supported over BR/EDR"
TBS 24/7	GATT Server over LE	GTBS 1/2 "Service supported over LE"
TBS 25/1	SDP record present for GTBS	GTBS 5/1 "Support for Server role"

Table 6.1: Bridge mapping between GTBS ICS and TBS ICS for QDIDs

7 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	p0	2021-03-16	Approved by BTI on 2021-02-15. TBS v1.0 adopted by the BoD on 2021-03-09. Prepared for publication.
	p1r00–r02	2023-08-16 – 2023-11-28	<p>TSE 23666 (rating 2): Removed the GAP and SDP ICSs from the References section. Added 4/6 and 4/7 and associated conditionals C.1 and C.2. Updated Table 5 by removing the ILD column, revising the Feature description for 5/1, and deleting 5/2, 5/3, and 5/4. Editorials throughout to align the document with the latest ICS conventions.</p> <p>TSE 23679 (rating 2): Removed GAP and SDP ICSs from the References section. Added 4/6 and 4/7 and associated conditionals C.1 and C.2. Updated Table 5 by removing the ILD column, revising the Feature description for 5/1, and deleting 5/2, 5/3, and 5/4. Editorials throughout to align the document with the latest ICS conventions.</p> <p>TSE 24008 (rating 2): Merged the GTBS ICS document into the TBS ICS, starting the GTBS ICS numbering at Table 20. Added Table 0b.</p>
1	p1	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p2r00–r01	2024-11-08 – 2024-12-06	TSE 26483 (rating 1): Added a section providing bridge mapping between TBS ICS and prior GTBS ICS.
2	p2	2025-02-18	Approved by BTI on 2025-02-09. Prepared for TCRL 2025-1 publication.
	p3r00–r01	2025-04-18 – 2025-04-23	<p>TSE 25534 (rating 2): Added TBS 2/26 and 22/26. Updated the status value for TBS 3/3, 3/4, 23/3, and 23/4. Added condition C.1 to Tables 3 and 23.</p> <p>TSE 27337 (rating 1): Updated the status value for TBS 1/1 and 1/2 and GTBS 21/1 and 21/2. Added conditions C.1. and C.2, and renumbered C.1 as C.3 to Table 1 and Table 21.</p>
3	p3	2025-07-08	Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication.

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