Body Composition Service (BCS)

***Bluetooth*® Implementation Conformance Statement (ICS) Proforma**

- **Revision:** BCS.ICS.p5
- **Revision Date:** 2025-07-08
- **Prepared By:** BTI
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Contents

1 General principles

1.1 Implementation Under Test (IUT) identification

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

1.2 Enforcement of inter-layer dependencies

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

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

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

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

2 ICS declarations

2.1 Versions

Table 0: X.Y Versions

Item	Version	Reference	Status
1	BCS v1.0	[1] BCS 1.0	M

Table 1: X.Y.Z Versions

Item	Version	Reference	Status
1	BCS v1.0.1	[3] BCS 1.0.1	C.1

C.1: Optional IF BCS 0/1 “BCS v1.0”, otherwise Excluded.

2.2 Transports

Table 2: Transport Requirements

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.

2.3 Service and feature requirements

Table 3: Feature Requirements

Item	Capability	Reference	Status
1	Stored Measurements	[1] 3.4	O
2	Multiple Users Supported	[1] 3.2.1.4	O
3	Multiple Packet Measurement Supported	[1] 3.2.1.5	O

Table 4: Service Requirements

Item	Capability	Reference	Status
1	Body Composition Feature Characteristic	[1] 3.1	M
2	Body Composition Measurement Characteristic	[1] 3.2	M
3	Time Stamp field of Body Composition Measurement Characteristic	[1] 3.2.1.3	C.1
4	User ID field of Body Composition Measurement Characteristic	[1] 3.2.1.4	C.2
5	Basal Metabolism field of Body Composition Measurement Characteristic	[1] 3.2.1.5	O
6	Muscle Percentage field of Body Composition Measurement Characteristic	[1] 3.2.1.6	O

Item	Capability	Reference	Status
7	Muscle Mass field of Body Composition Measurement Characteristic	[1] 3.2.1.7	O
8	Fat Free Mass field of Body Composition Measurement Characteristic	[1] 3.2.1.8	O
9	Soft Lean Mass field of Body Composition Measurement Characteristic	[1] 3.2.1.9	O
10	Body Water Mass field of Body Composition Measurement Characteristic	[1] 3.2.1.10	O
11	Impedance field of Body Composition Measurement Characteristic	[1] 3.2.1.11	O
12	Weight field of Body Composition Measurement Characteristic	[1] 3.2.1.12	O
13	Height field of Body Composition Measurement Characteristic	[1] 3.2.1.13	O
14	Indications for changes of supported features	[3] 3, 3.1.1	C.3

C.1: Mandatory IF BCS 3/1 “Stored Measurements”, otherwise Optional.

C.2: Mandatory IF BCS 3/2 “Multiple Users Supported”, otherwise Excluded.

C.3: Optional IF BCS 0/1 “BCS v1.0” AND NOT BCS 1/1 “BCS v1.0.1”, otherwise Mandatory.

Table 4a: Indications for Changes of Supported Features

Prerequisite: BCS 4/14 “Indications for changes of supported features”

Item	Capability	Reference	Status
1	Changeable Body Composition Feature	[3] 3	O
2	Body Composition Feature characteristic indication	[3] 3.1.1	C.1

C.1: Mandatory IF BCS 4a/1 “Changeable Body Composition Feature” AND (BCS 7/1 “Bondable mode (BR/EDR)” OR BCS 7/2 “Bondable mode (LE)”), otherwise Excluded.

2.4 GATT requirements

Table 5: GATT Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
1a	GATT Server over BR/EDR	[1] 1.4	C.1	[2] GATT 1a/4
1b	GATT Server over LE	[1] 1.4	C.2	[2] GATT 1a/3
2	Indications	[1] 1.4	M	[2] GATT 4/18
3	Read Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/19
4	Write Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/21

C.1: Mandatory IF BCS 2/1 “Service supported over BR/EDR”, otherwise not defined.

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

2.5 SDP requirements

Table 6: SDP Requirements

Prerequisite: BCS 2/1 "Service supported over BR/EDR"

Item	Capability	Reference	Status
1	SDP record present for BCS	N/A	M
2–3	No longer used	N/A	N/A

2.6 GAP requirements

Table 7: GAP Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Bondable mode (BR/EDR)	[1] 3	O	[4] GAP 1/7
2	Bondable mode (LE)	[1] 3	O	[4] GAP 24/2
3	Bonding procedure	[1] 3	C.1	[4] GAP 24/3

C.1: Mandatory IF BCS 7/2 "Bondable mode (LE)", otherwise not defined.

3 References

[1] Body Composition Service Specification, Version 1.0 or later

[2] ICS Proforma for Generic Attribute Profile (GATT)

[3] Body Composition Service Specification, Version 1.0.1

[4] ICS Proforma for Generic Access Profile (GAP.ICS)

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2014-10-21	Publication
	1.0.1r00	2016-11-01	TSE 8016: Updated References and template.
1	1.0.1	2016-12-13	Approved by BTI. Prepared for TCRL 2016-2 publication.
	1.0.2r00	2017-05-16	TSE 9355: Template conversion.
2	1.0.2	2017-11-28	Approved by BTI. Prepared for TCRL 2017-2 publication.
	p3r00–r02	2022-03-16 – 2022-04-13	TSE 18616 (rating 1): Removed Table 1 because it is no longer needed. TSE 18707 (rating 1): Editorials to align the document with the latest ICS template in anticipation of a future .Z release. Assigned publication number 2 to previous v1.0.2 and aligned copyright page with v2 of the DNMD. Made consistency check update.
3	p3	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.
	p4r00–r05	2023-08-23 – 2023-11-02	TSE 16705 (rating 4): Added Table 1 for BCS v1.0.1 and new conditional C.1 in Table 0 for BCS v1.0. Added Table 7 for GAP inter-layer dependencies. Added new Item 4/14 and Table 4a per E16256. Added a reference for Body Composition Service Specification, Version 1.0.1. Updated the Acknowledgments. TSE 23644 (rating 2): Updated the section headings for the Versions and Transports sections, the title of Table 0, and the transport requirement names and C.1 in Table 2. In Table 5, marked Item 1 as no longer used, added Items 1a and 1b, and added C.1 and C.2. In Table 6, updated the capability for Item 1 and marked Items 2 and 3 as no longer used. Updated the references list. Removed D&W language and cleaned up conditionals in Tables 0 and 1. Editorials to align the document with the latest ICS template. Deleted draft revision history comments prior to p0.
4	p4	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p5r00	2025-04-28	TSE 27315 (rating 1): Updated the Status value for BCS 2/1 and BCS 2/2. In Table 2, added conditions C.1 and C.2 and renumbered C.1 as C.3. Incorporated editorials to align the document with the latest ICS template, including updates to Section 1 and the addition of a section heading for the ICS declarations section.

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5	p5	2025-07-08	Approved by BTI on 2025-06-15. Prepared for TCRL pkg100 publication.

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