

Weight Scale Profile (WSP)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

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Contents

1	Identification of the implementation	4
1.1	Implementation Under Test (IUT) identification	4
1.2	Version Requirements	5
1.3	Profile Roles	5
1.4	Transport Requirements	5
1.5	Weight Scale Role	5
1.5.1	Services – Weight Scale Role	5
1.5.2	Features – Weight Scale Role	6
1.5.3	GAP Requirements – Weight Scale Role	6
1.5.4	SM Requirements – Weight Scale Role	7
1.5.5	DIS Requirements – Weight Scale Role	7
1.6	Collector Role	7
1.6.1	Service Support – Collector Role	7
1.6.2	Discover Services and Characteristics – Collector Role	7
1.6.3	Features – Collector Role	8
1.6.4	GATT Requirements – Collector Role	10
1.6.5	GAP Requirements – Collector Role	11
1.6.6	Security Requirements – Collector Role	11
2	References	12
3	Revision history and acknowledgments	13

1 Identification of the implementation

1.1 Implementation Under Test (IUT) identification

Identification of the Implementation Under Test (IUT) is to be filled in to provide as much detail as possible regarding version numbers and configuration options.

An ICS contact person to respond to queries regarding information supplied in this ICS proforma is named in the Declaration of Compliance: Summary of Selected Specifications in Implementation.

1.2 Version Requirements

Table 0: Versions

Item	Version	Reference	Status
1	WSP 1.0	[1]	M

Table 1: No Longer Used

1.3 Profile Roles

Table 2: Profile Roles

Item	Role	Reference	Status
1	Weight Scale	[1] 2.1	C.1
2	Collector	[1] 2.1	C.1

C.1: Mandatory to support at least one of WSP 2/1 “Weight Scale” OR WSP 2/2 “Collector”.

1.4 Transport Requirements

Table 3: Transport Requirements

Item	Transport	Reference	Status
1	Profile supported over BR/EDR	[1] 2.5	C.1
2	Profile supported over LE	[1] 2.5	C.1

C.1: Mandatory to support at least one of WSP 3/1 “Profile supported over BR/EDR” OR WSP 3/2 “Profile supported over LE”.

1.5 Weight Scale Role

1.5.1 Services – Weight Scale Role

Table 4: Service Requirements – Weight Scale Role

Prerequisite: WSP 2/1 “Weight Scale”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Weight Scale Service	[1] 3	M	[2] WSS
2	Weight Scale Service UUID in AD Type field of Advertising Data	[1] 3.1.1	C.1	N/A
3	Local Name included in Advertising Data	[1] 3.1.2	C.2	N/A
4	Local Name included in Scan Response Data	[1] 3.1.2	C.2	N/A
5	Appearance included in Advertising Data	[1] 3.1.4	C.3	N/A
6	Appearance included in Scan Response Data	[1] 3.1.4	C.3	N/A
7	Service Data in Advertising Data Feature	[1] 3.1.5, 5.1.4	C.1	N/A
8	Device Information Service	[1] 3, 3.4	M	[8] DIS
9	Battery Service	[1] 3	O	[10] BAS
10	Body Composition Service	[1] 3, 3.3	O	[3] BCS
11	Current Time Service	[1] 3	O	[11] CTS
12	User Data Service	[1] 3, 3.5	C.4	[8] UDS

Item	Capability	Reference	Status	Inter-Layer Dependency
13	Low Duty Cycle Directed Advertising	[1] 5.1.2	C.1	N/A
14	LE Privacy Feature	[1] 3.1.2	O	N/A
15	Writable Device Name	[1] 3.1.3	O	N/A

C.1: Optional IF WSP 3/2 “Profile supported over LE”, otherwise Excluded.

C.2: Optional to support one and only one of WSP 4/3 “Local Name included in Advertising Data” OR WSP 4/4 “Local Name included in Scan Response Data”, IF WSP 3/2 “Profile supported over LE”, otherwise Excluded.

C.3: Optional to support one and only one of WSP 4/5 “Appearance included in Advertising Data” OR WSP 4/6 “Appearance included in Scan Response Data”, IF WSP 3/2 “Profile supported over LE”, otherwise Excluded.

C.4: Mandatory IF WSP 5/2 “Multiple Users Supported”, otherwise Optional.

1.5.2 Features – Weight Scale Role

Table 5: Feature Requirements

Prerequisite: WSP 2/1 “Weight Scale”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Stored Measurements	[1] 3	O	[2] WSS 3/1
2	Multiple Users Supported	[1] 3	O	[2] WSS 3/2
2a	Multiple Users – Concurrent Access	[1] 3.3	C.1	N/A
3	Time Stamp Feature	[1] 3.2.1	O	N/A

C.1: Optional IF WSP 5/2 “Multiple Users Supported”, otherwise Excluded.

1.5.3 GAP Requirements – Weight Scale Role

Table 6: GAP Requirements – Weight Scale Role

Prerequisite: WSP 2/1 “Weight Scale”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Peripheral	[1] 2.4	M	[5] GAP 5/3 or GAP 38/3
2	LE security mode 1	[1] 6.1	C.1	[5] GAP 25/1
3	General discoverable mode (BR/EDR)	[1] 7.1	C.2	[5] GAP 1/3
4	Limited discoverable mode (BR/EDR)	[1] 7.1	C.2	[5] GAP 1/2
5	Bondable mode (LE)	[1] 3.2, 3.3, 5.1	C.3	[5] GAP 24/2
6	Bonding procedure	[1] 3.2, 3.3, 5.1	O	[5] GAP 24/3
7	Bondable mode (BR/EDR)	[1] 3.2, 3.3, 5.1, 7.1	O	[5] GAP 1/7

C.1: Mandatory IF WSP 3/2 “Profile supported over LE”, otherwise not defined.

C.2: Mandatory to support at least one of WSP 6/3 “General discoverable mode (BR/EDR)” OR WSP 6/4 “Limited discoverable mode (BR/EDR)” IF WSP 3/1 “Profile supported over BR/EDR”, otherwise not defined.

C.3: Mandatory IF WSP 6/6 “Bonding procedure”, otherwise Optional.

1.5.4 SM Requirements – Weight Scale Role

Table 7: SM Requirements – Weight Scale Role

Prerequisite: WSP 2/1 “Weight Scale” AND WSP 3/2 “Profile supported over LE”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Unauthenticated no MITM protection	[1] 6.1	C.1	[6] SM 2/2
2	Authenticated MITM protection	[1] 6.1	C.1	[6] SM 2/1

C.1: Mandatory to support at least one of WSP 7/1 “Unauthenticated no MITM protection” OR WSP 7/2 “Authenticated MITM protection”.

1.5.5 DIS Requirements – Weight Scale Role

Table 8: DIS Requirements – Weight Scale Role

Prerequisite: WSP 2/1 “Weight Scale”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Manufacturer Name String Characteristic	[1] 3.4	M	[9] DIS 2/2
2	Model Number String Characteristic	[1] 3.4	M	[9] DIS 2/3
3	System ID Characteristic	[1] 3.4	C.1	[9] DIS 2/8
4	Compliance with IEEE 11073-20601	[1] 3.4	O	N/A

C.1: Mandatory IF WSP 8/4 “Compliance with IEEE 11073-20601”, otherwise Optional.

1.6 Collector Role

1.6.1 Service Support – Collector Role

Table 9: Service Support – Collector Role

Prerequisite: WSP 2/2 “Collector”

Item	Capability	Reference	Status
1	Weight Scale Service	[1] 4	M
2	Device Information Service	[1] 4	O
3	Battery Service	[1] 4	O
4	Body Composition Service	[1] 4, 4.2	O
5	Current Time Service	[1] 4	O
6	User Data Service	[1] 4	M
7	Service Data in Advertising Data Feature	[1] 5.1.4, 5.2.2	O

1.6.2 Discover Services and Characteristics – Collector Role

Table 10: Discover Weight Scale Service and Characteristics – Collector Role

Prerequisite: WSP 2/2 “Collector”

Item	Capability	Reference	Status
1	Discover Weight Measurement characteristic	[1] 4.3.1, 4.4.2	M
2	Discover Weight Measurement characteristic – Client Configuration Characteristic Descriptor	[1] 4.3.1, 4.4.2	M
3	Discover Weight Scale Feature characteristic	[1] 4.3.1, 4.4.1	M



Table 11: Discover Body Composition Service and Characteristics – Collector Role*Prerequisite: WSP 2/2 “Collector” AND WSP 9/4 “Body Composition Service”*

Item	Capability	Reference	Status
1	Discover Body Composition Measurement characteristic	[1] 4.3.2, 4.5.2	M
2	Discover Body Composition Measurement characteristic – Client Configuration Characteristic Descriptor	[1] 4.3.2, 4.5.2	M
3	Discover Body Composition Feature characteristic	[1] 4.3.2, 4.5.1	M

Table 12: Discover User Data Service and Characteristics – Collector Role*Prerequisite: WSP 2/2 “Collector”*

Item	Capability	Reference	Status
1	Discover User Index characteristic	[1] 4.3.3, 4.6.1	M
2	Discover Database Change Increment characteristic	[1] 4.3.3, 4.6.2	C.1
3	Discover Database Change Increment characteristic – Client Configuration Characteristic Descriptor	[1] 4.3.3, 4.6.2	C.1
4	Discover User Data Control Point characteristic	[1] 4.3.3, 4.6.3	M
5	Discover User Data Control Point characteristic – Client Configuration Characteristic Descriptor	[1] 4.3.3, 4.6.3	M
6	Discover Other UDS Characteristics	[1] 4.3.3, 4.6.4	C.2

C.1: Mandatory IF WSP 15/1 “Writing of UDS Characteristic values”, otherwise Optional.

C.2: Mandatory IF WSP 15/10 “Read UDS Characteristics” OR WSP 15/1 “Writing of UDS Characteristic values”, otherwise Optional.

1.6.3 Features – Collector Role

Table 13: Weight Scale Service Procedure Requirements – Collector Role*Prerequisite: WSP 2/2 “Collector”*

Item	Capability	Reference	Status
1	Read Weight Scale Feature characteristic	[1] 4.4.1	M
2	Read Weight Measurement characteristic	[1] 4.4.2	M
3	Configure Weight Measurement characteristic - Client Characteristic Configuration Descriptor	[1] 4.4.2	M
4	Receive Weight Measurement characteristic indications	[1] 4.4.2	M

Table 14: Body Composition Service Procedure Requirements – Collector Role*Prerequisite: WSP 2/2 “Collector” AND WSP 9/4 “Body Composition Service”*

Item	Capability	Reference	Status
1	Read Body Composition Feature characteristic	[1] 4.5.1	M
2	Read Body Composition Measurement characteristic	[1] 4.5.2	M

Item	Capability	Reference	Status
3	Configure Body Composition Measurement characteristic - Client Characteristic Configuration Descriptor	[1] 4.5.2	M
4	Receive Body Composition Measurement characteristic indications	[1] 4.5.2	M
5	Receive Continuation Packet indications	[1] 4.5.2	M

Table 15: User Data Service Procedure Requirements – Collector Role*Prerequisite: WSP 2/2 “Collector”*

Item	Capability	Reference	Status
1	Writing of UDS Characteristic values	[1] 4.3.3, 4.6, 4.6.4	O
2	Configure Database Change Increment - Client Characteristic Configuration Descriptor	[1] 4.6.2	C.1
3	Receive Database Change Increment notifications	[1] 4.6.2	C.1
4	Read Database Change Increment characteristic	[1] 4.6.2	C.1
5	Write Database Change Increment characteristic	[1] 4.6.2	C.1
6	User Data Synchronization Feature	[1] 4.6.2	C.2
7	User Control Point	[1] 4.6.3	M
8	User Index	[1] 4.6.1	M
9	Caching of Consent Code	[1] 4.6.3.2.1	O
10	Read UDS Characteristics	[1] 4.6.4	O
11	Read Long UDS Characteristics	[1] 4.6.4	O
12	Write Long UDS Characteristics	[1] 4.6.4	O

C.1: Mandatory IF WSP 15/6 “User Data Synchronization Feature”, otherwise Optional.

C.2: Mandatory IF WSP 15/1 “Writing of UDS Characteristic values”, otherwise Optional.

Table 16: Battery Service Procedure Requirements – Collector Role*Prerequisite: WSP 2/2 “Collector” AND WSP 9/3 “Battery Service”*

Item	Capability	Reference	Status
1	Read Battery Level characteristic	[1] 4.8	O
2	Receive Battery Level characteristic notifications	[1] 4.8	O

Table 17: Current Time Service Procedure Requirements – Collector Role*Prerequisite: WSP 2/2 “Collector” AND WSP 9/5 “Current Time Service”*

Item	Capability	Reference	Status
1	Read Current Time characteristic	[1] 4.9	O
2	Write Current Time characteristic	[1] 4.9	O
3	Configure Current Time Characteristic - Client Characteristic Configuration Descriptor	[1] 4.9	O
4	Receive Current Time characteristic notifications	[1] 4.9	O

1.6.4 GATT Requirements – Collector Role

Table 18: GATT Requirements – Collector Role

Prerequisite: WSP 2/2 “Collector”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Generic Attribute Profile (GATT) Client	[1] 2.1	M	[4] GATT 1/1
2	Attribute Protocol Supported over BR/EDR (L2CAP fixed channel support)	[1] 4.2	C.1	[4] GATT 2/1
3	Attribute Protocol Supported over LE	[1] 4.2	C.2	[4] GATT 2/2
4	Discover All Primary Services	[1] 4.2	C.3	[4] GATT 3/2
5	Discover Primary Services by Service UUID	[1] 4.2	C.3	[4] GATT 3/3
6	Discover All characteristics of a Service	[1] 4.3	C.4	[4] GATT 3/5
7	Discover Characteristics by UUID	[1] 4.3	C.4	[4] GATT 3/6
8	Discover All Characteristic Descriptors	[1] 4.3	M	[4] GATT 3/7
9	Read Characteristic Value	[1] 4.1	M	[4] GATT 3/8
10	Notifications	[1] 4.8	C.5	[4] GATT 3/17
11	Write Characteristic Value	[1] 4.1	M	[4] GATT 3/14
12	Read Characteristic Descriptors	[1] 4.1, 4.4.2, 4.5.2, 4.6.3, 4.8, 4.9	M	[4] GATT 3/19
13	Write Characteristic Descriptors	[1] 4.1, 4.4.2, 4.5.2, 4.6.3, 4.8, 4.9	M	[4] GATT 3/21
14	Find Included Services	[1] 4.1, 4.2	C.6	[4] GATT 3/4
15	Indications	[1] 4.4.2, 4.5.2, 4.6.3	M	[4] GATT 3/18
16	Read Long Characteristic Values	[1] 4.1	C.7	[4] GATT 3/10
17	Write Long Characteristic Values	[1] 4.1	C.8	[4] GATT 3/15

C.1: Mandatory IF WSP 3/1 “Profile supported over BR/EDR”, otherwise Optional.

C.2: Mandatory IF WSP 3/2 “Profile supported over LE”, otherwise Optional.

C.3: Mandatory to support at least one of WSP 18/4 “Discover All Primary Services” OR WSP 18/5 “Discover Primary Services by Service UUID”.

C.4: Mandatory to support at least one of WSP 18/6 “Discover All characteristics of a Service” OR WSP 18/7 “Discover Characteristics by UUID”.

C.5: Mandatory IF WSP 16/2 “Receive Battery Level characteristic notifications” OR WSP 17/4 “Receive Current Time characteristic notifications” OR WSP 15/3 “Receive Database Change Increment notifications”, otherwise Optional.

C.6: Mandatory IF WSP 9/4 “Body Composition Service”, otherwise Optional.

C.7: Mandatory IF WSP 15/11 “Read Long UDS Characteristics”, otherwise Optional.

C.8: Mandatory IF WSP 15/12 “Write Long UDS Characteristics”, otherwise Optional.

1.6.5 GAP Requirements – Collector Role

Table 19: GAP Requirements – Collector Role

Prerequisite: WSP 2/2 “Collector”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Central	[1] 2.4	M	[5] GAP 5/4 or GAP 38/4
2	LE security mode 1	[1] 6.2	C.1	[5] GAP 35/1
3	Initiation of general inquiry	[1] 7.2	C.2	[5] GAP 3/1
4	Bondable mode (LE)	[1] 6.2	C.1	[5] GAP 34/2
5	Bonding procedure	[1] 6.2, 7.1	C.1	[5] GAP 34/3
6	Bondable mode (BR/EDR)	[1] 6.2, 7.1	C.2	[5] GAP 1/7

C.1: Mandatory IF WSP 3/2 “Profile supported over LE”, otherwise not defined.

C.2: Mandatory IF WSP 3/1 “Profile supported over BR/EDR”, otherwise not defined.

1.6.6 Security Requirements – Collector Role

Table 20: Security Requirements – Collector Role

Prerequisite: WSP 2/2 “Collector”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Unauthenticated no MITM protection	[1] 6.2	C.1	[6] SM 2/2
2	Authenticated MITM protection	[1] 6.2	C.1	[6] SM 2/1
3	Security mode 4 (BR/EDR)	[1] 6.3	C.2	[5] GAP 2/7

C.1: Mandatory IF WSP 3/2 “Profile supported over LE”, otherwise not defined.

C.2: Mandatory IF WSP 3/1 “Profile supported over BR/EDR”, otherwise not defined.

2 References

- [1] Weight Scale Profile Specification, Version 1.0
- [2] ICS Proforma for Weight Scale Service (WSS.ICS)
- [3] ICS Proforma for Body Composition Service (BCS.ICS)
- [4] ICS Proforma for Generic Attribute Profile (GATT.ICS)
- [5] ICS Proforma for Generic Access Profile (GAP.ICS)
- [6] ICS Proforma for Security Manager (SM.ICS)
- [7] Bluetooth Core Specification, Version 4.0 or later
- [8] ICS Proforma for User Data Service (UDS.ICS)
- [9] ICS Proforma for Device Information Service (DIS.ICS)
- [10] ICS Proforma for Battery Service (BAS.ICS)
- [11] ICS Proforma for Current Time Service (CTS.ICS)
- [12] Weight Scale Service Specification, Version 1.0
- [13] Device Information Service Specification, Version 1.1

3 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
	D0.9.0	2013-11-25	First draft.
	D0.9.1	2014-05-14	Updated to complete the content and to align with recent changes to the draft Weight Scale Profile v0.9.
	D0.9.2	2014-05-14	Resolving working group review comments from Robert Hughes and Guillaume Schatz.
	D0.9.3	2014-05-30	Incorporated feedback from BTI review.
	D1.0.0	2014-08-04	Rolled revision to D1.0 following approval of IOP test results. Removed UDS Characteristics from Table 16.
	D1.0.0r01	2014-08-04	Accepted all changes.
	D1.0.0r02	2014-08-28	Minor editorial updates as part of BTI review. Deleted rows marked Excluded from Table 7 and Table 22.
	D1.0.0r03	2014-09-10	Renumbered tables starting at Table 9. Added GAP references to Table 3.
	D1.0.0r04	2014-09-18	Deleted unused row 2 from Table 16.
0	1.0.0	2014-10-21	Publication
	1.0.1r00	2015-05-10	TSE 6324: Corrected status of item 15/2 from M to C.1.
	1.0.1r01	2015-06-04	Deleted Section 1.2 (Global Statement of Conformance) per current ICS template standards.
	1.0.1r02	2015-06-07	Reviewed by Alicia Courtney. Converted to current document template.
1	1.0.1	2015-07-14	Prepared for TCRL 2015-1 publication
	1.0.2r00	2015-10-01	TSE 6482: Corrected C.5 conditional in Table 18, Section 1.6.4.
2	1.0.2	2015-12-22	Prepared for TCRL 2015-2 publication.
	1.0.3r00	2017-04-26	TSE 8394: Updated Table 5: Feature Requirements with item 2 reference update, row added for item 2a, and added C.1 conditional.
3	1.0.3	2017-06-26	Approved by BTI. Prepared for TCRL 2017-1 publication.
	p4r00	2021-08-11	TSE 17321 (rating 2): Updated rules for Table 4, C.2 and C.3; added item 4 to Table 8; added ILD entry to Table 5, item 2; corrected references in C.2 of Table 12 and C.7 and C.8 of Table 18; corrected reference to nonexistent GAP item in item 4 of Table 19. Template-related and consistency checker editorials. Updated copyright page to align with v2 of the DNMD.
4	p4	2022-01-25	Approved by BTI on 2022-01-06. Prepared for TCRL 2021-2 publication.
	p5r00–r01	2022-03-16 – 2022-05-05	TSE 18727 (rating 1): Editorials to align the document with the latest ICS template in anticipation of a future .Z release.

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