

Running Speed and Cadence Service (RSCS)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

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- **Group Prepared By:** BTI



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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 Versions

Table 0: Versions

Item	Version	Reference	Status
1	RSCS v1.0	[2]	M

1.3 Transport requirements

Table 1: Transport Requirements

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

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

1.4 Service requirements

Table 2: Feature Requirements

Item	Capability	Reference	Status
1	Instantaneous Stride Length Measurement Supported	[2] 3.2.1	O
2	Total Distance Measurement Supported	[2] 3.2.1	O
3	Walking or Running Status Supported	[2] 3.2.1	O
4	Sensor Calibration Procedure Supported	[2] 3.2.1	O
5	Multiple Sensor Locations Supported	[2] 3.2.1	O

Table 3: Service Requirements

Item	Capability	Reference	Status
1	Running Speed and Cadence Service	[2] 2	M
2	RSC Measurement Characteristic	[2] 3.1	M
3	Instantaneous Speed field of RSC Measurement Characteristic	[2] 3.1.1.2	M
4	Instantaneous Cadence field of RSC Measurement Characteristic	[2] 3.1.1.3	M
5	Instantaneous Stride Length field of RSC Measurement Characteristic	[2] 3.1.1.4	C.1
6	Total Distance field of RSC Measurement Characteristic	[2] 3.1.1.5	C.2
7	RSC Feature Characteristic	[2] 3.2	M
8	Sensor Location Characteristic	[2] 3.3	C.3
9	SC Control Point Characteristic	[2] 3.4	C.4
10	Set Cumulative Value Procedure – Set to zero	[2] 3.4.1, 3.4.2.1	C.5
11	Set Cumulative Value Procedure – Set to non-zero	[2] 3.4.1, 3.4.2.1	C.2
12	Start Calibration Procedure	[2] 3.4.1, 3.4.2.2	C.6

Item	Capability	Reference	Status
13	Update Sensor Location Procedure	[2] 3.4.1, 3.4.2.3	C.7
14	Request Supported Sensor Location Procedure	[2] 3.4.1, 3.4.2.4	C.7
15	SDP Record Support	[2] 4	C.8

C.1: Optional IF RSCS 2/1 “Instantaneous Stride Length Measurement Supported”, otherwise Excluded.

C.2: Optional IF RSCS 2/2 “Total Distance Measurement Supported”, otherwise Excluded.

C.3: Mandatory IF RSCS 2/5 “Multiple Sensor Locations Supported”, otherwise Optional.

C.4: Mandatory IF RSCS 2/2 “Total Distance Measurement Supported” OR RSCS 2/4 “Sensor Calibration Procedure Supported” OR RSCS 2/5 “Multiple Sensor Locations Supported”, otherwise Excluded.

C.5: Mandatory IF RSCS 2/2 “Total Distance Measurement Supported”, otherwise Excluded.

C.6: Mandatory IF RSCS 2/4 “Sensor Calibration Procedure Supported”, otherwise Excluded.

C.7: Mandatory IF RSCS 2/5 “Multiple Sensor Locations Supported”, otherwise Excluded.

C.8: Mandatory IF RSCS 1/1 “Service supported over BR/EDR”, otherwise Excluded.

1.5 GATT requirements

Table 4: GATT Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Generic Attribute Profile (GATT) Server	[2] 1.4	M	[3] GATT 1/2
2	Write Characteristic Value	[2] 1.4	C.1	[3] GATT 4/14
3	Notifications	[2] 1.4	M	[3] GATT 4/17
4	Indications	[2] 1.4	C.1	[3] GATT 4/18
5	Read Characteristic Descriptors	[2] 1.4	M	[3] GATT 4/19
6	Write Characteristic Descriptors	[2] 1.4	M	[3] GATT 4/21

C.1: Mandatory IF RSCS 3/9 “SC Control Point Characteristic”, otherwise not defined.

1.6 SDP requirements

Table 5: SDP Requirements

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

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Support for Server role	N/A	M	[5] SDP 1b/1
2	ProtocolDescriptorList	N/A	M	[5] SDP 9/2
3	BrowseGroupList	N/A	M	[5] SDP 9/5

2 References

- [1] Bluetooth Core Specification, Version 4.0 or later
- [2] Running Speed and Cadence Service Specification, Version 1.0
- [3] ICS Proforma for Generic Attribute Profile (GATT)
- [4] ICS Proforma for Generic Access Profile (GAP)
- [5] ICS Proforma for Service Discovery Protocol (SDP)

3 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2012-08-07	Adopted by the Bluetooth SIG Board of Directors.
	1.0.1r00	2016-10-05	TSE 7547: New Table 0 added for version RSCS v1.0; In Table 1, "Reference" entries for "Service supported over BR/EDR" and "Service supported over LE," GAP entries added; "C.1" footnote to Table 1 updated to generalize mandatory support to "the defined transports" rather than "1/1 or 1/2"; Table 3 footnotes updated to identify "Capacity" entries for column references and uppercase Boolean operators; Version 4.0.n support updated in "References"
1	1.0.1	2016-12-13	Approved by BTI. Prepared for TCRL 2016-2 publication.
	1.0.1 edition 2r00	2018-11-26	Editorial changes only. Template updated. Revision History and contributors moved to the end of the document.
	1.0.1 edition 2	2020-01-09	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.
	p2r00–r02	2022-03-23 – 2022-05-05	TSE 18601 (rating 2): Add C.1 to Table 4. TSE 18725 (rating 1): Editorials to align the document with the latest ICS template in anticipation of a future .Z release. Editorials, including assigning publication number 1 to previous v1.0.1, consistency checker updates, and aligning the copyright page with v2 of the DNMD.
2	p2	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.

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