

# Running Speed and Cadence Service (RSCS)

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

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# 1 Identification of the implementation

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## 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: X.Y Versions**

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

**Table 0a: X.Y.Z Versions**

Item	Version	Reference	Status
1	RSCS v1.0.1	[3]	O

## 1.3 Transports

**Table 1: Transport Requirements**

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

C.1: Mandatory to support at least one.

## 1.4 Service requirements

**Table 2: Feature Requirements**

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

**Table 3: Service Requirements**

Item	Capability	Reference	Status
1	Running Speed and Cadence Service	[1] 2	M
2	RSC Measurement Characteristic	[1] 3.1	M
3	Instantaneous Speed field of RSC Measurement Characteristic	[1] 3.1.1.2	M
4	Instantaneous Cadence field of RSC Measurement Characteristic	[1] 3.1.1.3	M
5	Instantaneous Stride Length field of RSC Measurement Characteristic	[1] 3.1.1.4	C.1
6	Total Distance field of RSC Measurement Characteristic	[1] 3.1.1.5	C.2
7	RSC Feature Characteristic	[1] 3.2	M

Item	Capability	Reference	Status
8	Sensor Location Characteristic	[1] 3.3	C.3
9	SC Control Point Characteristic	[1] 3.4	C.4
10	Set Cumulative Value Procedure – Set to zero	[1] 3.4.1, 3.4.2.1	C.5
11	Set Cumulative Value Procedure – Set to non-zero	[1] 3.4.1, 3.4.2.1	C.2
12	Start Calibration Procedure	[1] 3.4.1, 3.4.2.2	C.6
13	Update Sensor Location Procedure	[1] 3.4.1, 3.4.2.3	C.7
14	Request Supported Sensor Location Procedure	[1] 3.4.1, 3.4.2.4	C.7
15	SDP Record Support	[1] 4	C.8
16	Indications for changes of supported features	[3] 3, 3.2.1	C.9

- 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.
- C.9: Optional IF RSCS 0/1 “RSCS v1.0” AND NOT RSCS 0a/1 “RSCS v1.0.1”, otherwise Mandatory.

**Table 3a: Indications for Changes of Supported Features**

*Prerequisite: RSCS 3/16 “Indications for changes of supported features”*

Item	Capability	Reference	Status
1	Changeable RSC Feature	[3] 3	O
2	RSC Feature characteristic indication	[3] 3.2.1	C.1

- C.1: Mandatory IF RSCS 3a/1 “Changeable RSC Feature” AND (RSCS 6/1 “Bondable mode (BR/EDR)” OR RSCS 6/2 “Bondable mode (LE)” ), otherwise Excluded.

## 1.5 GATT requirements

**Table 4: 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.2	[2] GATT 1a/4
1b	GATT Server over LE	[1] 1.4	C.3	[2] GATT 1a/3
2	Write Characteristic Value	[1] 1.4	C.1	[2] GATT 4/14
3	Notifications	[1] 1.4	M	[2] GATT 4/17
4	Indications	[1] 1.4	C.1	[2] GATT 4/18

Item	Capability	Reference	Status	Inter-Layer Dependency
5	Read Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/19
6	Write Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/21

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

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

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

## 1.6 SDP requirements

**Table 5: SDP Requirements**

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

Item	Capability	Reference	Status
1	SDP record present for RSCS	[1] 4	M
2–3	No longer used	N/A	N/A

## 1.7 GAP requirements

**Table 6: 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 RSCS 6/2 “Bondable mode (LE)”, otherwise not defined.

## 2 References

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- [1] Running Speed and Cadence Service Specification, Version 1.0 or later
- [2] ICS Proforma for Generic Attribute Profile (GATT)
- [3] Running Speed and Cadence Service Specification, Version 1.0.1
- [4] ICS Proforma for Generic Access Profile (GAP)



### 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.
	p3r00	2023-10-10	TSE 23678 (rating 2): Resolved GATT and SDP inter-layer dependencies. Updated C.1 for Table 1. In Table 4, marked Item 1 as no longer used, added Items 1a and 1b, and added conditionals C.2 and C.3. In Table 5, deleted the ILD column, updated the Capability and Reference values for Item 1, and marked Items 2 and 3 as no longer used. Updated the references. Made editorial edits to align the document with the latest ICS template, including updates to section and table titles.
3	p3	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.

Publication Number	Revision Number	Date	Comments
	p4r00–r02	2024-08-01 – 2024-08-26	TSE 17245 (rating 4): Per E16650, added new Tables 0a, 3a, and 6. Added Item 3/16 and conditional C.9 to Table 3. Updated the references list. TSE 25594 (rating 1): Per E16642, E16650, and E18757, added a version table for RSCS v1.0.1 as part of the .Z release. Updated the references list.
4	p4	2024-10-08	Approved by BTI on 2024-09-11. RSCS v1.0.1 adopted by the BoD on 2024-10-01. Prepared for TCRL 2024-2-addition publication.

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