Cycling Speed and Cadence Service (CSCS)

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

- ▪ **Revision:** CSCS.ICS.p4
- ▪ **Revision Date:** 2022-06-28
- ▪ **Group Prepared By:** BTI

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Contents

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	CSCS 1.0	[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 CSCS 1/1 "Service Supported over BR/EDR" OR CSCS 1/2 "Service Supported over LE".

1.4 Service requirements

Table 2: Service Requirements

Item	Capability	Reference	Status
1	Wheel Revolution Data Supported	[2] 3.2.1	C.1
2	Crank Revolution Data Supported	[2] 3.2.1	C.1
3	Multiple Sensor Locations Supported	[2] 3.2.1	O

C.1: Mandatory to support at least one of CSCS 2/1 "Wheel Revolution Data Supported" OR CSCS 2/2 "Crank Revolution Data Supported".

Table 3: Service Requirements

Item	Capability	Reference	Status
1	Cycling Speed and Cadence Service	[2] 2	M
2	CSC Measurement Characteristic	[2] 3.1	M
3	Cumulative Wheel Revolutions and Last Wheel Event Time fields of CSC Measurement Characteristic	[2] 3.1.1.2	C.1
4	Cumulative Crank Revolutions and Last Crank Event Time fields of CSC Measurement Characteristic	[2] 3.1.1.3	C.2
5	Cumulative Wheel Revolutions value can count in reverse	[2] 3.1.1.2	C.3
6	CSC Feature Characteristic	[2] 3.2	M
7	Sensor Location Characteristic	[2] 3.3	C.4
8	SC Control Point Characteristic	[2] 3.4	C.5
9	Set Cumulative Value Procedure – Set to zero	[2] 3.4.1, 3.4.2.1	C.1
10	Set Cumulative Value Procedure – Set to non-zero	[2] 3.4.1, 3.4.2.1	C.3
11	Update Sensor Location Procedure	[2] 3.4.1, 3.4.2.2	C.6

Item	Capability	Reference	Status
12	Request Supported Sensor Location Procedure	[2] 3.4.1, 3.4.3.3	C.6
13	SDP Record Support	[2] 4	C.7

C.1: Mandatory IF CSCS 2/1 "Wheel Revolution Data Supported", otherwise Excluded.

C.2: Mandatory IF CSCS 2/2 "Crank Revolution Data Supported", otherwise Excluded.

C.3: Optional IF CSCS 2/1 "Wheel Revolution Data Supported", otherwise Excluded.

C.4: Mandatory IF CSCS 2/3 "Multiple Sensor Locations Supported", otherwise Optional.

C.5: Mandatory IF CSCS 2/1 "Wheel Revolution Data Supported" OR CSCS 2/3 "Multiple Sensor Locations Supported", otherwise Excluded.

C.6: Mandatory IF CSCS 2/3 "Multiple Sensor Locations Supported", otherwise Excluded.

C.7: Mandatory IF CSCS 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 CSCS 3/8 "SC Control Point Characteristic", otherwise not defined.

1.6 SDP requirements

Table 5: SDP Requirements

Prerequisite: CSCS 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]   Cycling Speed and Cadence Service Specification, Version 1.0

[3]   ICS Proforma for Generic Attribute Profile (GATT.ICS)

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

[5]   ICS Proforma for Service Discovery Protocol (SDP.ICS)

3   Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
	D0.9.0	2012-04-03	First draft based on Running Speed and Cadence Service ICS
	D0.9.1	2012-04-03	Accepted all changes.
	D0.9.2	2012-04-11	Accepted all changes and aligned with the latest changes of the Running Speed and Cadence test specifications.
	D0.9.3	2012-04-11	Accepted all changes. Submitted to BTI for review.
	D1.0.0r1	2012-07-25	Revision changed to draft 1.0.0
	D1.0.0r2	2012-07-25	Accepted all changes. Submitted to BTI for review.
0	1.0.0	2012-08-21	Adopted by the Bluetooth SIG Board of Directors
	1.0.1r00	2016-07-29	TSE 7386: In Table 3, deleted redundant conditionals C.6 and C.7 and renumbered remaining conditionals.
1	1.0.1	2016-12-13	Approved by BTI. Prepared for TCRL 2016-2 publication.
	1.0.2r00	2018-02-07	TSE 9949 (rating 1): Converted ICS template. Added Table 0 for versions.
2	1.0.2	2018-06-27	Approved by BTI. Prepared for TCRL 2018-1 publication.
	1.0.3r00	2018-10-02	TSE 10858 (rating 1): Corrected capability names in Table 2
3	1.0.3	2018-11-21	Approved by BTI. Prepared for TCRL 2018-2 publication.
	p4r00–r02	2022-03-18 – 2022-05-13	TSE 18714 (rating 1): Editorials to align the document with the latest ICS template in anticipation of a future .Z release. Assigned publication number 3 to previous v1.0.3 and aligned copyright page with v2 of the DNMD. Consistency checker update.
4	p4	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.

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