Fitness Machine Service (FTMS)

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

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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	FTMS v1.0	[1]	M

Table 0a: No longer used

Table 0b: X.Y.Z Versions

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

Table 1: No longer used

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 requirements

Table 3: Feature Requirements

Item	Feature	Reference	Status
1	Average Speed Supported	[1] 4.3.1.1	O
2	Cadence Supported	[1] 4.3.1.1	O
3	Total Distance Supported	[1] 4.3.1.1	O
4	Inclination Supported	[1] 4.3.1.1	O
5	Elevation Gain Supported	[1] 4.3.1.1	O
6	Pace Supported	[1] 4.3.1.1	O
7	Step Count Supported	[1] 4.3.1.1	O
8	Resistance Level Supported	[1] 4.3.1.1	O
9	Stride Count Supported	[1] 4.3.1.1	O
10	Expended Energy Supported	[1] 4.3.1.1	O

Item	Feature	Reference	Status
11	Heart Rate Measurement Supported	[1] 4.3.1.1	O
12	Metabolic Equivalent Supported	[1] 4.3.1.1	O
13	Elapsed Time Supported	[1] 4.3.1.1	O
14	Remaining Time Supported	[1] 4.3.1.1	O
15	Power Measurement Supported	[1] 4.3.1.1	O
16	Force on Belt and Power Output Supported	[1] 4.3.1.1	O
17	User Data Retention Supported	[1] 4.3.1.1	O
18	Speed Target Setting Supported	[1] 4.3.1.2	O
19	Inclination Target Setting Supported	[1] 4.3.1.2	O
20	Resistance Target Setting Supported	[1] 4.3.1.2	O
21	Power Target Setting Supported	[1] 4.3.1.2	O
22	Heart Rate Target Setting Supported	[1] 4.3.1.2	O
23	Targeted Expended Energy Configuration Supported	[1] 4.3.1.2	O
24	Targeted Step Number Configuration Supported	[1] 4.3.1.2	O
25	Targeted Stride Number Configuration Supported	[1] 4.3.1.2	O
26	Targeted Distance Configuration supported	[1] 4.3.1.2	O
27	Targeted Training Time Configuration supported	[1] 4.3.1.2	O
28	Targeted Time In Two Heart Rate Zones Configuration supported	[1] 4.3.1.2	O
29	Targeted Time In Three Heart Rate Zones Configuration supported	[1] 4.3.1.2	O
30	Targeted Time In Five Heart Rate Zones Configuration supported	[1] 4.3.1.2	O
31	Indoor Bike Simulation Parameters Supported	[1] 4.3.1.2	O
32	Wheel Circumference Configuration Supported	[1] 4.3.1.2	O
33	Spin Down Control Supported	[1] 4.3.1.2	O
34	Targeted Cadence Configuration Supported	[1] 4.3.1.2	O

Table 4: Service Requirements

Item	Feature	Reference	Status
1	Fitness Machine Features	[1] 4.3.1.1	M
2	Target Setting Features	[1] 4.3.1.2	M
3	Treadmill Data Characteristic	[1] 4.4	O
4	Cross Trainer Data Characteristic	[1] 4.5	O
5	Step Climber Data Characteristic	[1] 4.6	O
6	Stair Climber Data Characteristic	[1] 4.7	O
7	Rower Data Characteristic	[1] 4.8	O
8	Indoor Bike Data Characteristic	[1] 4.9	O
9	Training Status	[1] 4.10	O
10	Supported Speed Range	[1] 4.11	C.1
11	Supported Inclination Range	[1] 4.12	C.2

Item	Feature	Reference	Status
12	Supported Resistance Level Range	[1] 4.13	C.3
13	Supported Power Range	[1] 4.14	C.4
14	Supported Heart Rate Range	[1] 4.15	C.5
15	Fitness Machine Control Point	[1] 4.16	O
16	Fitness Machine Status	[1] 4.17	C.6
17	FTM Status – Reset	[1] 4.17	C.6
18	FTM Status – Fitness Machine Stopped or Paused by the User	[1] 4.17	C.6
19	FTM Status – Fitness Machine Stopped by Safety Key	[1] 4.17	C.25
20	FTM Status – Fitness Machine Started or Resumed by the User	[1] 4.17	C.6
21	FTM Status – Target Speed Changed	[1] 4.17	C.10
22	FTM Status – Target Incline Changed	[1] 4.17	C.11
23	FTM Status – Target Resistance Level Changed	[1] 4.17	C.12
24	FTM Status – Target Power Changed	[1] 4.17	C.13
25	FTM Status – Target Heart Rate Changed	[1] 4.17	C.14
26	FTM Status – Targeted Expended Energy Changed	[1] 4.17	C.15
27	FTM Status – Targeted Number of Steps Changed	[1] 4.17	C.16
28	FTM Status – Targeted Number of Strides Changed	[1] 4.17	C.17
29	FTM Status – Targeted Distance Changed	[1] 4.17	C.18
30	FTM Status – Targeted Training Time Changed	[1] 4.17	C.19
31	FTM Status – Targeted Time in Two Heart Rate Zones Changed	[1] 4.17	C.20
32	FTM Status - Targeted Time in Three Heart Rate Zones Changed	[1] 4.17	C.21
33	FTM Status - Targeted Time in Five Heart Rate Zones Changed	[1] 4.17	C.22
34	FTM Status – Indoor Bike Simulation Parameters Changed	[1] 4.17	C.7
35	FTM Status – Wheel Circumference Changed	[1] 4.17	C.23
36	FTM Status – Spin Down Status	[1] 4.17	C.24
37	FTM Status – Control Permission Lost	[1] 4.17	C.6
38	SDP Record Support	[1] 5	C.8
39	Requirement for Time Sensitive Data	[1] 4.18	O
40	Transmission of a Data Record	[1] 4.19	O
41	FTM Status – Targeted Cadence Changed	[1] 4.17	C.9
42	FTM Status - Server Supports Connections to Multiple Clients	[1] 4.17.1	O
43	FTM Status – Control Permission Revoked by UI or Other Means	[1] 4.17	C.6
44	Indications for changes of supported features	[3] 4, 4.3.1	C.26

C.1: Mandatory IF FTMS 3/18 “Speed Target Setting Supported”, otherwise Excluded.

C.2: Mandatory IF FTMS 3/19 “Inclination Target Setting Supported”, otherwise Excluded.

C.3: Mandatory IF FTMS 3/20 “Resistance Target Setting Supported”, otherwise Excluded.

C.4: Mandatory IF FTMS 3/21 “Power Target Setting Supported”, otherwise Excluded.

C.5: Mandatory IF FTMS 3/22 “Heart Rate Target Setting Supported”, otherwise Excluded.

C.6: Mandatory IF FTMS 4/15 “Fitness Machine Control Point”, otherwise Excluded.

C.7: Mandatory IF FTMS 3/31 “Indoor Bike Simulation Parameters Supported”, otherwise Excluded.

C.8: Mandatory IF FTMS 2/1 “Service supported over BR/EDR”, otherwise Excluded.

C.9: Mandatory IF FTMS 3/34 “Targeted Cadence Configuration Supported”, otherwise Excluded.

C.10: Mandatory IF FTMS 3/18 “Speed Target Setting Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.11: Mandatory IF FTMS 3/19 “Inclination Target Setting Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.12: Mandatory IF FTMS 3/20 “Resistance Target Setting Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.13: Mandatory IF FTMS 3/21 “Power Target Setting Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.14: Mandatory IF FTMS 3/22 “Heart Rate Target Setting Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.15: Mandatory IF FTMS 3/23 “Targeted Expended Energy Configuration Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.16: Mandatory IF FTMS 3/24 “Targeted Step Number Configuration Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.17: Mandatory IF FTMS 3/25 “Targeted Stride Number Configuration Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.18: Mandatory IF FTMS 3/26 “Targeted Distance Configuration supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.19: Mandatory IF FTMS 3/27 “Targeted Training Time Configuration supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.20: Mandatory IF FTMS 3/28 “Targeted Time In Two Heart Rate Zones Configuration supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.21: Mandatory IF FTMS 3/29 “Targeted Time In Three Heart Rate Zones Configuration supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.22: Mandatory IF FTMS 3/30 “Targeted Time In Five Heart Rate Zones Configuration supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.23: Mandatory IF FTMS 3/32 “Wheel Circumference Configuration Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.24: Mandatory IF FTMS 3/33 “Spin Down Control Supported” AND FTMS 4/16 “Fitness Machine Status”, otherwise Excluded.

C.25: Optional IF FTMS 4/15 “Fitness Machine Control Point”, otherwise Excluded.

C.26: Optional IF FTMS 0/1 “FTMS v1.0” AND NOT FTMS 0b/1 “FTMS v1.0.1”, otherwise Mandatory.

Table 4a: Indications for changes of supported features

Prerequisite: FTMS 4/44 “Indications for changes of supported features”

Item	Feature	Reference	Status
1	Changeable Fitness Machine Feature	[3] 4	O
2	Fitness Machine Feature characteristic indication	[3] 4.3.1	C.1

C.1: Mandatory IF FTMS 4a/1 “Changeable Fitness Machine Feature” AND (FTMS 15/1 “Bondable mode (BR/EDR)” OR FTMS 15/2 “Bondable mode (LE)”), otherwise Excluded.

Table 5: Treadmill Data Characteristic

Prerequisite: FTMS 4/3 "Treadmill Data Characteristic"

Item	Feature	Reference	Status
1	Average Speed	[1] 4.4.1.3	C.1
2	Total Distance	[1] 4.4.1.4	C.2
3	Inclination	[1] 4.4.1.5	C.3
4	Ramp Angle Setting	[1] 4.4.1.6	C.3
5	Positive Elevation Gain and Negative Elevation Gain	[1] 4.4.1.7	C.4
6	Instantaneous Pace	[1] 4.4.1.8	C.5
7	Average Pace	[1] 4.4.1.9	C.5
8	Total Energy	[1] 4.4.1.10	C.6
9	Energy per Hour	[1] 4.4.1.11	C.6
10	Energy per Minute	[1] 4.4.1.12	C.6
11	Heart Rate	[1] 4.4.1.13	C.7
12	Metabolic Equivalent	[1] 4.4.1.14	C.8
13	Elapsed Time	[1] 4.4.1.15	C.9
14	Remaining Time	[1] 4.4.1.16	C.10
15	Force on Belt	[1] 4.4.1.17	C.11
16	Power Output	[1] 4.4.1.18	C.11

C.1: Optional IF FTMS 3/1 "Average Speed Supported", otherwise Excluded.
C.2: Optional IF FTMS 3/3 "Total Distance Supported", otherwise Excluded.
C.3: Optional IF FTMS 3/4 "Inclination Supported", otherwise Excluded.
C.4: Optional IF FTMS 3/5 "Elevation Gain Supported", otherwise Excluded.
C.5: Optional IF FTMS 3/6 "Pace Supported", otherwise Excluded.
C.6: Optional IF FTMS 3/10 "Expended Energy Supported", otherwise Excluded.
C.7: Optional IF FTMS 3/11 "Heart Rate Measurement Supported", otherwise Excluded.
C.8: Optional IF FTMS 3/12 "Metabolic Equivalent Supported", otherwise Excluded.
C.9: Optional IF FTMS 3/13 "Elapsed Time Supported", otherwise Excluded.
C.10: Optional IF FTMS 3/14 "Remaining Time Supported", otherwise Excluded.
C.11: Optional IF FTMS 3/16 "Force on Belt and Power Output Supported", otherwise Excluded.

Table 6: Cross Trainer Data Characteristics

Prerequisite: FTMS 4/4 "Cross Trainer Data Characteristic"

Item	Feature	Reference	Status
1	Average Speed	[1] 4.5.1.3	C.1
2	Total Distance	[1] 4.5.1.4	C.2
3	Step Per Minute	[1] 4.5.1.5	C.3
4	Average Step Rate	[1] 4.5.1.6	C.3
5	Stride Count	[1] 4.5.1.7	C.4
6	Positive Elevation Gain and Negative Elevation Gain	[1] 4.5.1.8	C.5
7	Inclination	[1] 4.5.1.9	C.6

Item	Feature	Reference	Status
8	Ramp Angle Setting	[1] 4.5.1.10	C.6
9	Resistance Level	[1] 4.5.1.11	C.7
10	Instantaneous Power	[1] 4.5.1.12	C.8
11	Average Power	[1] 4.5.1.13	C.8
12	Total Energy	[1] 4.5.1.14	C.9
13	Energy per Hour	[1] 4.5.1.15	C.9
14	Energy per Minute	[1] 4.5.1.16	C.9
15	Heart Rate	[1] 4.5.1.17	C.10
16	Metabolic Equivalent	[1] 4.5.1.18	C.11
17	Elapsed Time	[1] 4.5.1.19	C.12
18	Remaining Time	[1] 4.5.1.20	C.13

C.1: Optional IF FTMS 3/1 “Average Speed Supported”, otherwise Excluded.
C.2: Optional IF FTMS 3/3 “Total Distance Supported”, otherwise Excluded.
C.3: Optional IF FTMS 3/7 “Step Count Supported”, otherwise Excluded.
C.4: Optional IF FTMS 3/9 “Stride Count Supported”, otherwise Excluded.
C.5: Optional IF FTMS 3/5 “Elevation Gain Supported”, otherwise Excluded.
C.6: Optional IF FTMS 3/4 “Inclination Supported”, otherwise Excluded.
C.7: Optional IF FTMS 3/8 “Resistance Level Supported”, otherwise Excluded.
C.8: Optional IF FTMS 3/15 “Power Measurement Supported”, otherwise Excluded.
C.9: Optional IF FTMS 3/10 “Expended Energy Supported”, otherwise Excluded.
C.10: Optional IF FTMS 3/11 “Heart Rate Measurement Supported”, otherwise Excluded.
C.11: Optional IF FTMS 3/12 “Metabolic Equivalent Supported”, otherwise Excluded.
C.12: Optional IF FTMS 3/13 “Elapsed Time Supported”, otherwise Excluded.
C.13: Optional IF FTMS 3/14 “Remaining Time Supported”, otherwise Excluded.

Table 7: Step Climber Data Characteristic

Prerequisite: FTMS 4/5 “Step Climber Data Characteristic”

Item	Feature	Reference	Status
1	Step per Minute	[1] 4.6.1.4	C.1
2	Average Step Rate	[1] 4.6.1.5	C.1
3	Positive Elevation Gain	[1] 4.6.1.6	C.2
4	Total Energy Field	[1] 4.6.1.7	C.3
5	Energy per Hour	[1] 4.6.1.8	C.3
6	Energy per Minute	[1] 4.6.1.9	C.3
7	Heart Rate	[1] 4.6.1.10	C.4
8	Metabolic Equivalent	[1] 4.6.1.11	C.5
9	Elapsed Time	[1] 4.6.1.12	C.6
10	Remaining Time	[1] 4.6.1.13	C.7

C.1: Optional IF FTMS 3/7 “Step Count Supported”, otherwise Excluded.
C.2: Optional IF FTMS 3/5 “Elevation Gain Supported”, otherwise Excluded.
C.3: Optional IF FTMS 3/10 “Expended Energy Supported”, otherwise Excluded.

C.4: Optional IF FTMS 3/11 “Heart Rate Measurement Supported”, otherwise Excluded.
C.5: Optional IF FTMS 3/12 “Metabolic Equivalent Supported”, otherwise Excluded.
C.6: Optional IF FTMS 3/13 “Elapsed Time Supported”, otherwise Excluded.
C.7: Optional IF FTMS 3/14 “Remaining Time Supported”, otherwise Excluded.

Table 8: Stair Climber Data Characteristic

Prerequisite: FTMS 4/6 “Stair Climber Data Characteristic”

Item	Feature	Reference	Status
1	Step per Minute	[1] 4.7.1.3	C.1
2	Average Step Rate	[1] 4.7.1.4	C.1
3	Positive Elevation Gain	[1] 4.7.1.5	C.2
4	Stride Count	[1] 4.7.1.6	C.3
5	Total Energy	[1] 4.7.1.7	C.4
6	Energy per Hour	[1] 4.7.1.8	C.4
7	Energy per Minute	[1] 4.7.1.9	C.4
8	Heart Rate	[1] 4.7.1.10	C.5
9	Metabolic Equivalent	[1] 4.7.1.11	C.6
10	Elapsed Time	[1] 4.7.1.12	C.7
11	Remaining Time	[1] 4.7.1.13	C.8

C.1: Optional IF FTMS 3/7 “Step Count Supported”, otherwise Excluded.
C.2: Optional IF FTMS 3/5 “Elevation Gain Supported”, otherwise Excluded.
C.3: Optional IF FTMS 3/9 “Stride Count Supported”, otherwise Excluded.
C.4: Optional IF FTMS 3/10 “Expended Energy Supported”, otherwise Excluded.
C.5: Optional IF FTMS 3/11 “Heart Rate Measurement Supported”, otherwise Excluded.
C.6: Optional IF FTMS 3/12 “Metabolic Equivalent Supported”, otherwise Excluded.
C.7: Optional IF FTMS 3/13 “Elapsed Time Supported”, otherwise Excluded.
C.8: Optional IF FTMS 3/14 “Remaining Time Supported”, otherwise Excluded.

Table 9: Rower Data Characteristic

Prerequisite: FTMS 4/7 “Rower Data Characteristic”

Item	Feature	Reference	Status
1	Average Stroke Rate	[1] 4.8.1.4	C.1
2	Total Distance	[1] 4.8.1.5	C.2
3	Instantaneous Pace	[1] 4.8.1.6	C.3
4	Average Pace	[1] 4.8.1.7	C.3
5	Instantaneous Power	[1] 4.8.1.8	C.4
6	Average Power	[1] 4.8.1.9	C.4
7	Resistance Level	[1] 4.8.1.10	C.5
8	Total Energy	[1] 4.8.1.11	C.6
9	Energy per Hour	[1] 4.8.1.12	C.6
10	Energy per Minute	[1] 4.8.1.13	C.6

Item	Feature	Reference	Status
11	Heart Rate	[1] 4.8.1.14	C.7
12	Metabolic Equivalent	[1] 4.8.1.15	C.8
13	Elapsed Time	[1] 4.8.1.16	C.9
14	Remaining Time	[1] 4.8.1.17	C.10

C.1: Optional IF FTMS 3/2 “Cadence Supported”, otherwise Excluded.
C.2: Optional IF FTMS 3/3 “Total Distance Supported”, otherwise Excluded.
C.3: Optional IF FTMS 3/6 “Pace Supported”, otherwise Excluded.
C.4: Optional IF FTMS 3/15 “Power Measurement Supported”, otherwise Excluded.
C.5: Optional IF FTMS 3/8 “Resistance Level Supported”, otherwise Excluded.
C.6: Optional IF FTMS 3/10 “Expended Energy Supported”, otherwise Excluded.
C.7: Optional IF FTMS 3/11 “Heart Rate Measurement Supported”, otherwise Excluded.
C.8: Optional IF FTMS 3/12 “Metabolic Equivalent Supported”, otherwise Excluded.
C.9: Optional IF FTMS 3/13 “Elapsed Time Supported”, otherwise Excluded.
C.10: Optional IF FTMS 3/14 “Remaining Time Supported”, otherwise Excluded.

Table 10: Indoor Bike Data Characteristic

Prerequisite: FTMS 4/8 “Indoor Bike Data Characteristic”

Item	Feature	Reference	Status
1	Average Speed	[1] 4.9.1.3	C.1
2	Instantaneous Cadence	[1] 4.9.1.4	C.2
3	Average Cadence	[1] 4.9.1.5	C.2
4	Total Distance	[1] 4.9.1.6	C.3
5	Resistance Level	[1] 4.9.1.7	C.4
6	Instantaneous Power	[1] 4.9.1.8	C.5
7	Average Power	[1] 4.9.1.9	C.5
8	Total Energy	[1] 4.9.1.10	C.6
9	Energy per Hour	[1] 4.9.1.11	C.6
10	Energy per Minute	[1] 4.9.1.12	C.6
11	Heart Rate	[1] 4.9.1.13	C.7
12	Metabolic Equivalent	[1] 4.9.1.14	C.8
13	Elapsed Time	[1] 4.9.1.15	C.9
14	Remaining Time	[1] 4.9.1.16	C.10

C.1: Optional IF FTMS 3/1 “Average Speed Supported”, otherwise Excluded.
C.2: Optional IF FTMS 3/2 “Cadence Supported”, otherwise Excluded.
C.3: Optional IF FTMS 3/3 “Total Distance Supported”, otherwise Excluded.
C.4: Optional IF FTMS 3/8 “Resistance Level Supported”, otherwise Excluded.
C.5: Optional IF FTMS 3/15 “Power Measurement Supported”, otherwise Excluded.
C.6: Optional IF FTMS 3/10 “Expended Energy Supported”, otherwise Excluded.
C.7: Optional IF FTMS 3/11 “Heart Rate Measurement Supported”, otherwise Excluded.
C.8: Optional IF FTMS 3/12 “Metabolic Equivalent Supported”, otherwise Excluded.

C.9: Optional IF FTMS 3/13 “Elapsed Time Supported”, otherwise Excluded.

C.10: Optional IF FTMS 3/14 “Remaining Time Supported”, otherwise Excluded.

Table 11: Training Status Characteristic

Prerequisite: FTMS 4/9 “Training Status”

Item	Feature	Reference	Status
1	Training Status String	[1] 4.10.1.1	O
2	Training Status Extended String	[1] 4.10.1.1	O

Table 12: Fitness Machine Control Point Characteristic

Prerequisite: FTMS 4/15 “Fitness Machine Control Point”

Item	Feature	Reference	Status
1	Request Control	[1] 4.16.2.1	M
2	Reset Procedure	[1] 4.16.2.2	M
3	Set Target Speed Procedure	[1] 4.16.2.3	C.1
4	Set Target Inclination Procedure	[1] 4.16.2.4	C.2
5	Set Target Resistance Level Procedure	[1] 4.16.2.5	C.3
6	Set Target Power Procedure	[1] 4.16.2.6	C.4
7	Set Target Heart Rate Procedure	[1] 4.16.2.7	C.5
8	Start or Resume Procedure	[1] 4.16.2.8	M
9	Stop Procedure	[1] 4.16.2.9	M
10	Pause Procedure	[1] 4.16.2.9	M
11	Set Targeted Expended Energy Procedure	[1] 4.16.2.10	C.6
12	Set Targeted Number of Steps Procedure	[1] 4.16.2.11	C.7
13	Set Targeted Number of Strides Procedure	[1] 4.16.2.12	C.8
14	Set Targeted Distance Procedure	[1] 4.16.2.13	C.9
15	Set Targeted Training Time Procedure	[1] 4.16.2.14	C.10
16	Set Targeted Time in Two Heart Rate Zones Procedure	[1] 4.16.2.15	C.11
17	Set Targeted Time in Three Heart Rate Zones Procedure	[1] 4.16.2.16	C.12
18	Set Targeted Time in Five Heart Rate Zones Procedure	[1] 4.16.2.17	C.13
19	Set Indoor Bike Simulation Parameters	[1] 4.16.2.18	C.14
20	Set Wheel Circumference	[1] 4.16.2.19	O
21	Spin Down Control	[1] 4.16.2.20	C.16
22	Targeted Cadence	[1] 4.16.2.21	C.15
23	Procedure Complete	[1] 4.16.2.22	M

C.1: Mandatory IF FTMS 3/18 “Speed Target Setting Supported”, otherwise Excluded.

C.2: Mandatory IF FTMS 3/19 “Inclination Target Setting Supported”, otherwise Excluded.

C.3: Mandatory IF FTMS 3/20 “Resistance Target Setting Supported”, otherwise Excluded.

C.4: Mandatory IF FTMS 3/21 “Power Target Setting Supported”, otherwise Excluded.

C.5: Mandatory IF FTMS 3/22 “Heart Rate Target Setting Supported”, otherwise Excluded.

C.6: Mandatory IF FTMS 3/23 “Targeted Expended Energy Configuration Supported”, otherwise Excluded.

C.7: Mandatory IF FTMS 3/24 “Targeted Step Number Configuration Supported”, otherwise Excluded.

C.8: Mandatory IF FTMS 3/25 “Targeted Stride Number Configuration Supported”, otherwise Excluded.

C.9: Mandatory IF FTMS 3/26 “Targeted Distance Configuration supported”, otherwise Excluded.

C.10: Mandatory IF FTMS 3/27 “Targeted Training Time Configuration supported”, otherwise Excluded.

C.11: Mandatory IF FTMS 3/28 “Targeted Time In Two Heart Rate Zones Configuration supported”, otherwise Excluded.

C.12: Mandatory IF FTMS 3/29 “Targeted Time In Three Heart Rate Zones Configuration supported”, otherwise Excluded.

C.13: Mandatory IF FTMS 3/30 “Targeted Time In Five Heart Rate Zones Configuration supported”, otherwise Excluded.

C.14: Mandatory IF FTMS 3/31 “Indoor Bike Simulation Parameters Supported”, otherwise Excluded.

C.15: Mandatory IF FTMS 3/34 “Targeted Cadence Configuration Supported”, otherwise Excluded.

C.16: Mandatory IF FTMS 3/33 “Spin Down Control Supported”, otherwise Excluded.

2.4 GATT requirements

Table 13: GATT Requirements

Item	Feature	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	M	[2] GATT 4/14
3	Read Long Characteristic Values	[1] 1.4	O	[2] GATT 4/10
4	Single Notification	[1] 1.4	M	[2] GATT 4/17
5	Indications	[1] 1.4	C.1	[2] GATT 4/18
6	Read Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/19
7	Write Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/21

C.1: Mandatory IF FTMS 4/15 “Fitness Machine Control Point”, otherwise not defined.

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

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

2.5 SDP requirements

Table 14: SDP Requirements

Prerequisite: FTMS 2/1 “Service supported over BR/EDR”

Item	Feature	Reference	Status
1	SDP record present for FTMS	N/A	M

2.6 GAP requirements

Table 15: GAP Requirements

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

C.1: Mandatory IF FTMS 15/2 “Bondable mode (LE)”, otherwise not defined.

3 References

[1] Fitness Machine Service Specification, Version 1.0 or later

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

[3] Fitness Machine Service Specification, Version 1.0.1

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

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2017-02-17	Prepared for publication by Bluetooth SIG staff.
	1.0.1r00	2018-04-26	TSE 10622 (rating 1): Changed 3/33 to 3/34 in C.15 of Table 12: Fitness Machine Control Point Characteristic. TSE 10624 (rating 2): Changed status of item 4/42 from M to O.
1	1.0.1	2018-06-27	Approved by BTI. Prepared for TCRL 2018-1 publication.
	1.0.2r00	2018-10-02	TSE 10705 (rating 4): For Table 12, modified status for Item 21 and added conditional note C.16. TSE 10834 (rating 2): For Table 4, modified status for Items 19, 21–33, 35, and 36; and added conditional notes C.10–C.25.
2	1.0.2	2018-11-21	Approved by BTI. Prepared for TCRL 2018-2 publication.
	p3r00–r03	2022-03-18 – 2022-04-28	TSE 18594 (rating 2): Removed Table 1 and made corrections to Table 6's C.6 and Table 14's prerequisite. TSE 18672 (rating 1): Removed Table 0a. TSE 18719 (rating 1): Editorials to align the document with the latest ICS template in anticipation of a .Z release. Assigned publication number 2 to previous v1.0.2 and aligned copyright page with v2 of the DNMD. Consistency checker editorials.
3	p3	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.
	p4r00–r02	2023-09-26 – 2023-10-04	TSE 23355 (rating 2): Resolved GATT and SDP inter-layer dependencies. In Table 13 (GATT Requirements), marked Item 1 as no longer used and added Items 1a and 1b and conditionals C.2 and C.3. In Table 14 (SDP Requirements), deleted the ILD column, updated the Feature value for Item 1, and deleted Items 2 and 3. Updated the references. Made editorial edits 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.

Publication Number	Revision Number	Date	Comments
	p5r00–r05	2024-07-26 – 2024-08-29	TSE 16708 (rating 4): Per E16264, added new Tables 1a, 4a, and 15. Added a new Section 1.6 for GAP requirements and renumbered sections accordingly. Added new item 44 and conditional C.26 for Table 4. Added a reference for FTMS Specification v1.0.1 and for the GAP ICS Proforma and updated reference numbering. TSE 22632 (rating 4): Per E10194, added new X.Y.Z version as part of the .Z release, as Table 0b. TSE 25578 (rating 1): Per E16264, E16265, E18751, added new X.Y.Z version as part of the .Z release. Added a reference for FTMS Specification v1.0.1. Made template-related and consistency checker editorial updates.
5	p5	2024-10-08	Approved by BTI on 2024-09-11. FTMS v1.0.1 adopted by the BoD on 2024-10-01. Prepared for TCRL 2024-2-addition publication.
	p5ed2r00	2025-07-09	TSE 27326 (rating 1): Updated the Status for FTMS 2/1 and FTMS 2/2, added conditions C.1 and C.2, and renumbered the previous C.1 as C.3. Updated Feature for FTMS 13/4.
	p5 edition 2	2025-08-05	Approved by BTI on 2025-08-05. Prepared for edition 2 publication.

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