Insulin Delivery Service (IDS)

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

- **Revision:** IDS.ICS.p5
- **Revision Date:** 2026-06-23
- **Prepared By:** Medical Devices Working Group
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Contents

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	IDS v1.0	[1]	C.1, C.2

C.1: Mandatory for this Service.

C.2: Can only be supported with an active X.Y.Z version after Deprecation or Withdrawal. Deprecated 2023-02-01. Withdrawn 2025-02-01.

Table 0a: X.Y.Z Versions

Item	Version	Reference	Status
1	IDS v1.0.1	[4]	C.1, C.2
2	IDS v1.0.2	[5]	C.1

C.1: Mandatory to support one and only one.

C.2: Excluded after Deprecation or Withdrawal. Deprecated 2028-02-01. Withdrawn 2030-02-01.

2.2 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.2, C.3

C.1: Excluded for this Service.

C.2: Excluded for this Service IF CORE 41/1 “BR/EDR Core Configuration” OR CORE 40/1 “Core-Controller”.

C.3: Mandatory for this Service.

2.3 Service requirements

Table 2: Service Requirements

Item	Capability	Reference	Status
1	Insulin Delivery Service	[1] 2	M
2	IDD Status Changed	[1] 3, 3.2, 4.1	M
3	IDD Status	[1] 3, 3.3, 4.2	M
4	IDD Annunciation Status	[1] 3, 3.4, 4.3	M
5	IDD Features	[1] 3, 3.5, 4.4	M
6	IDD Status Reader Control Point	[1] 3, 3.6, 4.5	M
7	IDD Command Control Point	[1] 3, 3.7, 4.6	O
8	IDD Command Data	[1] 3, 3.8, 4.7	C.1
9	IDD Record Access Control Point	[1] 3, 3.9, 4.8	O
10	IDD History Data	[1] 3, 3.10, 4.9	C.2

Item	Capability	Reference	Status
11	E2E-Counter and E2E-CRC	[1] 3.1.1, 3.1.2	C.3
12	E2E-CRC in IDD History Data	[1] 3.10.4.5, 4.9	C.3

C.1: Mandatory IF IDS 2/7 “IDD Command Control Point”, otherwise Excluded.

C.2: Mandatory IF IDS 2/9 “IDD Record Access Control Point”, otherwise Excluded.

C.3: Mandatory IF IDS 3/1 “E2E-Protection”, otherwise Excluded.

2.4 Feature requirements

Table 3: Feature Requirements

Item	Capability	Reference	Status
1	E2E-Protection	[1] 3.5.1.3, 1.8	O
2	Basal Rate	[1] 3.5.1.3, 4.4.2	O
3	TBR Absolute	[1] 3.5.1.3, 4.4.2	O
4	TBR Relative	[1] 3.5.1.3, 4.4.2	O
5	TBR Template	[1] 3.5.1.3, 4.4.2	O
6	Fast Bolus	[1] 3.5.1.3, 4.4.2	O
7	Extended Bolus	[1] 3.5.1.3, 4.4.2	O
8	Multiwave Bolus	[1] 3.5.1.3, 4.4.2	O
9	Bolus Delay Time	[1] 3.5.1.3, 4.4.2	O
10	Bolus Template	[1] 3.5.1.3, 4.4.2	O
11	Bolus Activation Type	[1] 3.5.1.3, 4.4.2	O
12	Multiple Bond	[1] 3.5.1.3, 4.4.2	O
13	ISF Profile Template	[1] 3.5.1.3, 4.4.2	O
14	I2CHO Ratio Profile Template	[1] 3.5.1.3, 4.4.2	O
15	Target Glucose Range Profile Template	[1] 3.5.1.3, 4.4.2	O
16	Insulin On Board	[1] 3.5.1.3, 4.4.2	O
17	Indications for changes of supported features	[4] 3, 3.5.1	C.1

C.1: Mandatory IF IDS 3a/1 “Changeable IDD Features”, otherwise Excluded.

Table 3a: Indications for changes of supported features

Item	Capability	Reference	Status
1	Changeable IDD Features	[4] 3	O
2	IDD Features characteristic indication	[4] 3, 3.5.1	C.1

C.1: Mandatory IF IDS 3a/1 “Changeable IDD Features” AND IDS 10/1 “Bondable mode”, otherwise Excluded.

2.4.1 IDD Annunciation Status

Table 4: IDD Annunciation Status

Prerequisite: IDS 2/4 "IDD Annunciation Status"

Item	Capability	Reference	Status
1	IDD Annunciation Status Flags	[1] 3.4.1.1, 4.3.1	M
2	Annunciation Instance ID	[1] 3.4.1.2, 4.3.2	O
3	Annunciation Type	[1] 3.4.1.3, 4.3.3	O
4	Annunciation Status	[1] 3.4.1.4, 4.3.4	O
5	AuxInfo	[1] 3.4.1.5, 4.3.6	O

2.4.2 IDD Status Reader Control Point

Table 5: IDD Status Reader Control Point

Prerequisite: IDS 2/6 "IDD Status Reader Control Point"

Item	Capability	Reference	Status
1	Reset Status	[1] 3.6.1, 3.6.2.1, 4.5.2.2	M
2	Get Active Bolus IDs	[1] 3.6.1, 3.6.2.2, 4.5.2.3	C.1
3	Get Active Bolus Delivery	[1] 3.6.1, 3.6.2.3, 4.5.2.5	C.1
4	Get Active Basal Rate Delivery	[1] 3.6.1, 3.6.2.4, 4.5.2.7	C.2
5	Get Total Daily Insulin Status	[1] 3.6.1, 3.6.2.5, 4.5.2.9	M
6	Get Counter	[1] 3.6.1, 3.6.2.6, 4.5.2.11	O
7	Get Delivered Insulin	[1] 3.6.1, 3.6.2.7, 4.5.2.13	O
8	Get Insulin On Board	[1] 3.6.1, 3.6.2.8, 4.5.2.15	C.3

C.1: Mandatory IF IDS 3/6 "Fast Bolus" OR IDS 3/7 "Extended Bolus" OR IDS 3/8 "Multiwave Bolus", otherwise Excluded.

C.2: Mandatory IF IDS 3/2 "Basal Rate", otherwise Excluded.

C.3: Mandatory IF IDS 3/16 "Insulin On Board", otherwise Excluded.

2.4.3 IDD Command Control Point

Table 6: IDD Command Control Point

Prerequisite: IDS 2/7 "IDD Command Control Point"

Item	Capability	Reference	Status
1	Set Therapy Control State	[1] 3.7.1, 3.7.2.2, 4.6.2.2	M
2	Set Flight Mode	[1] 3.7.1, 3.7.2.3, 4.6.2.3	M
3	Snooze Annunciation	[1] 3.7.1, 3.7.2.4, 4.6.2.4	M
4	Confirm Annunciation	[1] 3.7.1, 3.7.2.5, 4.6.2.6	M
5	Read Basal Rate Profile Template	[1] 3.7.1, 3.7.2.6, 3.8.1.4, 4.6.2.8	C.1
6	Write Basal Rate Profile Template	[1] 3.7.1, 3.7.2.7, 4.6.2.10	C.1
7	Set TBR Adjustment	[1] 3.7.1, 3.7.2.8, 4.6.2.12	C.2
8	Cancel TBR Adjustment	[1] 3.7.1, 3.7.2.9, 4.6.2.13	C.2

Item	Capability	Reference	Status
9	Get TBR Template	[1] 3.7.1, 3.7.2.10, 4.6.2.14	C.3
10	Set TBR Template	[1] 3.7.1, 3.7.2.11, 4.6.2.16	C.3
11	Set Bolus	[1] 3.7.1, 3.7.2.12, 4.6.2.18	C.4
12	Cancel Bolus	[1] 3.7.1, 3.7.2.13, 4.6.2.20	C.4
13	Get Available Boluses	[1] 3.7.1, 3.7.2.14, 4.6.2.22	C.4
14	Get Bolus Template	[1] 3.7.1, 3.7.2.15, 4.6.2.24	C.5
15	Set Bolus Template	[1] 3.7.1, 3.7.2.16, 4.6.2.26	C.5
16	Get Template Status and Details	[1] 3.7.1, 3.7.2.17, 3.8.1.8, 4.6.2.28	C.6
17	Reset Template Status	[1] 3.7.1, 3.7.2.18, 4.6.2.30	C.6
18	Activate Profile Templates	[1] 3.7.1, 3.7.2.19, 4.6.2.32	C.7
19	Get Activated Profile Templates	[1] 3.7.1, 3.7.2.20, 4.6.2.34	C.7
20	Start Priming	[1] 3.7.1, 3.7.2.21, 4.6.2.36	O
21	Stop Priming	[1] 3.7.1, 3.7.2.22, 4.6.2.37	C.8
22	Set Initial Reservoir Fill Level	[1] 3.7.1, 3.7.2.23, 4.6.2.38	O
23	Reset Reservoir Insulin Operation Time	[1] 3.6.1, 3.6.2.24, 4.6.2.39	O
24	Read ISF Profile Template	[1] 3.7.1, 3.7.2.25, 3.8.1.5, 4.6.2.40	C.9
25	Write ISF Profile Template	[1] 3.7.1, 3.7.2.26, 4.6.2.42	C.9
26	Read I2CHO Ratio Profile Template	[1] 3.7.1, 3.7.2.27, 3.8.1.6, 4.6.2.44	C.10
27	Write I2CHO Ratio Profile Template	[1] 3.7.1, 3.7.2.28, 4.6.2.46	C.10
28	Read Target Glucose Range Profile Template	[1] 3.7.1, 3.7.2.29, 3.8.1.7, 4.6.2.48	C.11
29	Write Target Glucose Range Profile Template	[1] 3.7.1, 3.7.2.30, 4.6.2.50	C.11
30	Get Max Bolus Amount	[1] 3.7.1, 3.7.2.31, 4.6.2.52	O
31	Set Max Bolus Amount	[1] 3.7.1, 3.7.2.32, 4.6.2.54	O

C.1: Mandatory IF IDS 3/2 “Basal Rate”, otherwise Excluded.

C.2: Mandatory IF IDS 3/3 “TBR Absolute” OR IDS 3/4 “TBR Relative”, otherwise Excluded.

C.3: Mandatory IF IDS 3/5 “TBR Template”, otherwise Excluded.

C.4: Mandatory IF IDS 3/6 “Fast Bolus” OR IDS 3/7 “Extended Bolus” OR IDS 3/8 “Multiwave Bolus”, otherwise Excluded.

C.5: Mandatory IF IDS 3/10 “Bolus Template”, otherwise Excluded.

C.6: Mandatory IF IDS 3/2 “Basal Rate” OR IDS 3/5 “TBR Template” OR IDS 3/10 “Bolus Template” OR IDS 3/13 “ISF Profile Template” OR IDS 3/14 “I2CHO Ratio Profile Template” OR IDS 3/15 “Target Glucose Range Profile Template”, otherwise Excluded.

C.7: Mandatory IF IDS 3/2 “Basal Rate” OR IDS 3/13 “ISF Profile Template” OR IDS 3/14 “I2CHO Ratio Profile Template” OR IDS 3/15 “Target Glucose Range Profile Template”, otherwise Excluded.

C.8: Mandatory IF IDS 6/20 “Start Priming”, otherwise Excluded.

C.9: Mandatory IF IDS 3/13 “ISF Profile Template”, otherwise Excluded.

C.10: Mandatory IF IDS 3/14 “I2CHO Ratio Profile Template”, otherwise Excluded.

C.11: Mandatory IF IDS 3/15 “Target Glucose Range Profile Template”, otherwise Excluded.

2.4.4 IDD Record Access Control Point

Table 7: IDD Record Access Control Point

Prerequisite: IDS 2/9 "IDD Record Access Control Point"

Item	Capability	Reference	Status
1	Report Number of Stored Records	[1] 3.9.3, 3.9.4.2	M
2	Delete Stored Records	[1] 3.9.3, 3.9.4.3	O
3	Report Stored Records	[1] 3.9.3, 3.9.4.4	M
4	Abort Operation	[1] 3.9.3, 3.9.4.5	M

2.4.5 IDD History Data

Table 8: Event Types in IDD History Data

Prerequisite: IDS 2/10 "IDD History Data"

Item	Capability	Reference	Status
1	Reference Time	[1] 3.10.2, 4.9.4.1	C.1
2	Reference Time Base Offset	[1] 3.10.2, 4.9.4.2	C.1
3	Bolus Calculated	[1] 3.10.2, 4.9.4.3, 4.9.4.4	O
4	Bolus Programmed	[1] 3.10.2, 4.9.4.5, 4.9.4.6	O
5	Bolus Delivered	[1] 3.10.2, 4.9.4.7, 4.9.4.8	O
6	Delivered Basal Rate Changed	[1] 3.10.2, 4.9.4.9	O
7	TBR Adjustment Started	[1] 3.10.2, 4.9.4.10	O
8	TBR Adjustment Ended	[1] 3.10.2, 4.9.4.11	O
9	TBR Adjustment Changed	[1] 3.10.2, 4.9.4.12	O
10	Profile Template Activated	[1] 3.10.2, 4.9.4.13	O
11	Basal Rate Profile Template Time Block Changed	[1] 3.10.2, 3.10.3, 4.9.4.14	C.2
12	Total Daily Insulin Delivery	[1] 3.10.2, 4.9.4.15	O
13	Therapy Control State Changed	[1] 3.10.2, 4.9.4.16	O
14	Operational State Changed	[1] 3.10.2, 4.9.4.17	O
15	Reservoir Remaining Amount Changed	[1] 3.10.2, 4.9.4.18	O
16	Annunciation Status Changed	[1] 3.10.2, 4.9.4.19, 4.9.4.20	O
17	ISF Profile Template Time Block Changed	[1] 3.10.2, 3.10.3, 4.9.4.21	C.3
18	I2CHO Ratio Profile Template Time Block Changed	[1] 3.10.2, 3.10.3, 4.9.4.22	C.4
19	Target Glucose Range Profile Template Time Block Changed	[1] 3.10.2, 3.10.3, 4.9.4.23	C.5
20	Priming Started	[1] 3.10.2, 4.9.4.24	O
21	Priming Done	[1] 3.10.2, 4.9.4.25	O
22	Data Corruption	[1] 3.10.2, 4.9.4.26	O
23	Pointer Event	[1] 3.10.2, 4.9.4.27	O
24	Bolus Template Changed	[1] 3.10.2, 4.9.4.28, 4.9.4.29	O

Item	Capability	Reference	Status
25	TBR Template Changed	[1] 3.10.2, 4.9.4.30	O
26	Max Bolus Amount Changed	[1] 3.10.2, 4.9.4.31	O

C.1: Mandatory to support one and only one.

C.2: Mandatory IF IDS 6/6 “Write Basal Rate Profile Template”, otherwise Excluded.

C.3: Mandatory IF IDS 6/25 “Write ISF Profile Template”, otherwise Excluded.

C.4: Mandatory IF IDS 6/27 “Write I2CHO Ratio Profile Template”, otherwise Excluded.

C.5: Mandatory IF IDS 6/29 “Write Target Glucose Range Profile Template”, otherwise Excluded.

2.5 GATT requirements

Table 9: GATT Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
2	GATT Server over LE	[1] 1.5	M	[2] GATT 1a/3
3	Read Characteristic Value	[1] 1.4	M	[2] GATT 4/8
4	Write Characteristic Value	[1] 1.4	M	[2] GATT 4/14
5	Single Notification	[1] 1.4	M	[2] GATT 4/17
6	Indication	[1] 1.4	M	[2] GATT 4/18
7	Read Characteristic Descriptor	[1] 1.4	M	[2] GATT 4/19
8	Write Characteristic Descriptor	[1] 1.4	M	[2] GATT 4/21

2.6 GAP requirements

Table 10: GAP Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Bondable mode	[1] 3.5	C.1	[3] GAP 24/2
2	No longer used	N/A	N/A	N/A

C.1: Mandatory IF IDS 3/12 "Multiple Bond", otherwise Optional.

3 References

[1] Insulin Delivery Service Specification, Version 1.0 or later

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

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

[4] Insulin Delivery Service Specification, Version 1.0.1

[5] Insulin Delivery Service Specification, Version 1.0.2

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.0.0	2018-06-20	Approved by BTI. Prepared for publication.
	p1r00–r05	2021-05-11 – 2021-12-23	TSE 16861 (rating 4): Updated C.1 in Table 0. Added new Table 0a, Table 3a, Table 10, new item IDS 3/17 and C.1. Added reference for IDS Specification v1.0.1 (E16246). Removed reference to Bluetooth Core Specification as it is not used. Updated to the latest ICS template and made editorial changes, including aligning the copyright page with v2 of the DNMD.
1	p1	2022-01-25	Approved by BTI on 2022-01-06. Prepared for TCRL 2021-2 publication.
	p2r00–r01	2023-09-27 – 2023-12-08	TSE 23669 (rating 2): Resolved GATT inter-layer dependencies. In Table 0, added new conditional C.1 and updated the existing C.1 (now C.2). Updated C.1 for Table 0a. In Table 3, updated the Status value for Item 17 and deleted C.1. Updated C.1 for Table 8. In Table 9, marked Item 1 as no longer used and updated the Capability and ILD values for Item 2. Made editorial edits to align the document with the latest ICS template, including removal of “is supported” language. Deleted draft revision history comments prior to p0.
2	p2	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p3r00–r01	2024-08-07 – 2024-08-08	TSE 24990 (rating 2): Per E24597, added new X.Y.Z version as part of the .Z release. Added a reference to Insulin Delivery Service Specification, Version 1.0.2. TSE 25569 (rating 1): Per E11382, E11383, E11395, E11396, E23827, E24597, E24853, E24854, E24909, E25077, E25230, added new X.Y.Z version as part of the .Z release. Added a reference to Insulin Delivery Service Specification, Version 1.0.2.
3	p3	2024-10-08	Approved by BTI on 2024-09-11. IDS v1.0.2 adopted by the BoD on 2024-10-01. Prepared for TCRL 2024-2-addition publication.
	p3ed2r00	2025-07-10	TSE 27301 (rating 1): Updated the language in C.2 of Table 0. Updated the Status for IDS 1/2, added conditions C.2 and C.3, and updated the Capability in IDS 9/5.
	p3 edition 2	2025-08-05	Approved by BTI on 2025-08-05. Prepared for edition 2 publication.
	p4r00	2025-12-04 – 2026-01-09	TSE 28169 (rating 1): Updated the conditions in the transport table to make sure the layer is excluded when the design is an implementation of the Core-Controller Configuration by adding "OR CORE 40/1 “Core-Controller”" to an already excluded transport based on Core Configuration support.

Publication Number	Revision Number	Date	Comments
4	p4	2026-02-17	Approved by BTI on 2026-01-21. Prepared for TCRL pkg102 publication.
	p5r00–r02	2026-03-16 – 2026-04-14	TSE 28362 (rating 2): Aligned ICS Table 10 to the latest GAP.ICS by replacing Item 10/2 "Bonding procedure" with "No longer used" (since this item is covered by GAP 24/2 ILD). Also updated condition 3a/C.1 to remove 10/2 "Bonding procedure" and replace it with 10/1 "Bondable mode". "Otherwise" condition of C.1 changed from "not defined" to "Optional". TSE 28522 (rating 1): In Table 3, changed status from "M" to "C.1" and added condition C.1. Removed the prerequisite from Table 3a. TSE 28661 (rating 1): Applied 2024 Annual Non-Core D&W decision to IDS v1.0.1. Changed status of 0a/1 from just "C.1" to "C.1, C.2" and added new C.2 condition to reflect IDS v1.0.1 D&W status. TSE 28940 (rating 1): Simplified capability names in 2/11, 2/12, and 4/1 to 4/5.
5	p5	2026-06-23	Approved by BTI on 2026-05-28. Prepared for TCRL pkg104 publication.

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