

# Isochronous Adaptation Layer (IAL)

## **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

### 1.3 Supported features

**Table 1: Supported Features**

Item	Capability	Reference	Status
1	Segmentable Framed Data Traffic	[1] 2.2	M
2	Unframed Data Traffic	[1] 2.1	M
3	Connected Isochronous Stream Adaptation	[1] 2	O
4	Broadcast Isochronous Stream Adaptation	[1] 2	O
5	Synchronized Receiver Adaptation	[1] 2	O
6	Unsegmented Framed Data Traffic	[2] 2.2	O

### 1.4 LL requirements

**Table 2: LL Requirements**

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Connected Isochronous Stream - Central	[1] 2	C.1	[3] LL 9/31
2	Connected Isochronous Stream - Peripheral	[1] 2	C.1	[3] LL 9/32
3	Isochronous Broadcaster	[1] 2	C.2	[3] LL 9/33
4	Synchronized Receiver	[1] 2	C.3	[3] LL 9/34
5	Unsegmented Framed Mode	[1] 2.2	C.4	[3] LL 9/53

- C.1: Mandatory to support at least one IF IAL 1/3 “Connected Isochronous Stream Adaptation”, otherwise not defined.
- C.2: Mandatory IF IAL 1/4 “Broadcast Isochronous Stream Adaptation”, otherwise not defined.
- C.3: Mandatory IF IAL 1/5 “Synchronized Receiver Adaptation”, otherwise not defined.
- C.4: Mandatory IF IAL 1/6 “Unsegmented Framed Data Traffic”, otherwise not defined.

## 2 References

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- [1] Specification of the Bluetooth System, Volume 6, Part G (Isochronous Adaptation Layer), Version 5.2 or later
- [2] Specification for the Bluetooth System, Volume 6, Part G (Isochronous Adaptation Layer), Version 6.0 or later
- [3] ICS Proforma for Link Layer (LL)

## 3 Revision history and acknowledgments

### Revision History

Publication Number	Revision Number	Date	Comments
0	p0	2020-01-07	Approved by BTI on 2019-12-22. Prepared for TCRL 2019-2 publication.
	p1r00–r04	2020-02-21 – 2021-06-11	TSE 13553 (rating 1): Updated Table 1 C.1 conditional to properly reference LL feature Connected Isochronous Stream Slave as LL 9/32. TSE 15449 (rating 1): Updated instances of “Master” to “Central” and “Slave” to “Peripheral”. Template-related and consistency checker editorials.
1	p1	2021-07-13	Approved by BTI on 2021-06-27. Prepared for TCRL 2021-1 publication.
	p2r00–r04	2024-05-20 – 2024-07-31	Incorporated changes from Enhancements_for_ISOAL_TEST_CR_r12: In Table 1, updated the Capability for Item 1 and added Item 6 and C.4. Updated the list of references. Incorporated integration review feedback and made template-related and consistency checker editorial updates.
2	p2	2024-09-04	Approved by BTI on 2024-08-14. Prepared for TCRL 2024-2 publication.
	p3r00	2025-01-30	TSE 26827 (rating 2): Updated 1/3–1/6 to Optional and removed all conditionals. Added new Table 2 to cover LL ICS items through ILDs. Added a reference to the LL ICS to the references list.
3	p3	2025-05-06	Approved by BTI on 2025-04-16. Prepared for TCRL 2025-2 publication.

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