Elapsed Time Service (ETS)

***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	ETS v1.0	[1]	M

Table 1: X.Y.Z Versions

Table number reserved but not yet in use.

2.2 Transports

Table 2: Transport Requirements

Item	Transport	Reference	Status
1	Service supported over BR/EDR	[1] 2.3	C.1, C.3
2	Service supported over LE	[1] 2.3	C.2, C.3

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

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

C.3: Mandatory to support at least one.

2.3 Features

Table 3: Features

Item	Capability	Reference	Status
1	Time is UTC	[1] 3.1.2.1	C.1
2	Time is Local time	[1] 3.1.2.1	C.1
3	Time is a Tick counter	[1] 3.1.2.1	C.1
4	TZ/DST offset	[1] 3.1.2.1	O
5	Server Supports Connections to Multiple Clients	[1] 3.1.2.2	O
6	Server Supports Time Source Quality Too Low error responses	[1] 3.1.2.3	O
7	Update Time Value Via UI	[1] 3.1.1.2	O

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

2.4 Service requirements

Table 4: Elapsed Time Service

Item	Capability	Reference	Status
1	Current Elapsed Time characteristic	[1] 3, 3.1	M
2	Current Elapsed Time characteristic with write	[1] 3, 3.1	O

2.5 GATT requirements

Table 5: 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] 2.5	C.2	[2] GATT 1a/4
1b	GATT Server over LE	[1] 2.5	C.3	[2] GATT 1a/3
2	Indication	[1] 2.5	M	[2] GATT 4/18
3	Read Characteristic Descriptor	[1] 2.5	M	[2] GATT 4/19
4	Write Characteristic Descriptor	[1] 2.5	M	[2] GATT 4/21
5	Write Characteristic Value	[1] 2.5	C.1	[2] GATT 4/14

C.1: Mandatory IF ETS 4/2 “Current Elapsed Time characteristic with write”, otherwise not defined.

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

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

2.6 SDP requirements

Table 6: SDP Requirements

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

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

3 References

[1] Elapsed Time Service Specification, Version 1.0

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

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	p0	2023-06-13	Approved by BTI on 2022-12-05. ETS v1.0 adopted by the BoD on 2023-06-13. Prepared for initial publication.
	p1r00–r01	2025-01-27 – 2025-02-18	TSE 26832 (rating 2): Deleted the heading “1.5.1 Elapsed Time Service”. Marked item 1 for Table 5 as no longer used. Added items 1a and 1b and conditionals C.2 and C.3 to Table 5. Updated item 1, marked items 2 and 3 as no longer used, and deleted the “Inter-Layer Dependency” column for Table 6. Deleted reference [3]. Updated headings to match current template. TSE 27074 (rating 1): Updated status values and conditional C.1 and added conditionals C.2 and C.3 for Table 2.
1	p1	2025-07-08	Approved by BTI on 2025-06-15. Prepared for TCRL pkg100 publication.
	p2r00–r01	2025-12-04 – 2025-12-31	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.
2	p2	2026-02-17	Approved by BTI on 2026-01-21. Prepared for TCRL pkg102 publication.

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