

# Published Audio Capabilities Service (PACS)

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

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# 1 Identification of the implementation

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## 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: X.Y Versions**

Item	Version	Reference	Status
1	Published Audio Capabilities Service v1.0	[1] 2	M

**Table 1: X.Y.Z Versions**

Item	Version	Reference	Status
1	Published Audio Capabilities Service v1.0.1	[1] 2	O

## 1.3 Transports

**Table 2: 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.1

C.1: Mandatory to support at least one.

## 1.4 Service requirements

### 1.4.1 Published Audio Capabilities Service

**Table 3: Published Audio Capabilities Service**

Item	Characteristic	Reference	Status
1	Sink PAC Characteristic	[1] 3.1.1	C.1
2	Sink Audio Locations Characteristic	[1] 3.2.1	C.2
3	Source PAC Characteristic	[1] 3.3.1	C.1
4	Source Audio Locations Characteristic	[1] 3.4.1	C.3
5	Available Audio Contexts Characteristic	[1] 3.5.1	M
6	Supported Audio Contexts Characteristic	[1] 3.6.1	M

C.1: Mandatory to support at least one.

C.2: Optional IF PACS 3/1 “Sink PAC Characteristic”, otherwise Excluded.

C.3: Optional IF PACS 3/3 “Source PAC Characteristic”, otherwise Excluded.

**Table 4: Service Requirements**

Item	Feature	Reference	Status
1	Changeable Sink PAC Characteristic	[1] 3.1.1	C.1
2	Notifiable Sink PAC Characteristic	[1] 3.1.1	C.2
3	Changeable Sink Audio Locations Characteristic	[1] 3.2.1	C.3
4	Autonomous Sink Audio Locations Changes	[1] 3.2.1	C.4
5	Writable Sink Audio Locations Characteristic	[1] 3.2.1	C.4

Item	Feature	Reference	Status
6	Notifiable Sink Audio Locations Characteristic	[1] 3.2.1	C.5
7	Changeable Source PAC Characteristic	[1] 3.3.1	C.6
8	Notifiable Source PAC Characteristic	[1] 3.3.1	C.7
9	Changeable Source Audio Locations Characteristic	[1] 3.4.1	C.8
10	Autonomous Source Audio Locations Changes	[1] 3.4.1	C.9
11	Writable Source Audio Locations Characteristic	[1] 3.4.1	C.9
12	Notifiable Source Audio Locations Characteristic	[1] 3.4.1	C.10
13	Changeable Available Audio Contexts Characteristic	[1] 3.5.1	M
14	Notifiable Available Audio Contexts Characteristic	[1] 3.5.1	M
15	Changeable Supported Audio Contexts Characteristic	[1] 3.6.1	C.11
16	Notifiable Supported Audio Contexts Characteristic	[1] 3.6.1	C.12

- C.1: Optional IF PACS 3/1 “Sink PAC Characteristic”, otherwise Excluded.
- C.2: Mandatory IF PACS 4/1 “Changeable Sink PAC Characteristic”, otherwise Excluded.
- C.3: Optional IF PACS 3/2 “Sink Audio Locations Characteristic”, otherwise Excluded.
- C.4: Optional IF PACS 4/3 “Changeable Sink Audio Locations Characteristic”, otherwise Excluded.
- C.5: Mandatory IF PACS 4/3 “Changeable Sink Audio Locations Characteristic”, otherwise Excluded.
- C.6: Optional IF PACS 3/3 “Source PAC Characteristic”, otherwise Excluded.
- C.7: Mandatory IF PACS 4/7 “Changeable Source PAC Characteristic”, otherwise Excluded.
- C.8: Optional IF PACS 3/4 “Source Audio Locations Characteristic”, otherwise Excluded.
- C.9: Optional IF PACS 4/9 “Changeable Source Audio Locations Characteristic”, otherwise Excluded.
- C.10: Mandatory IF PACS 4/9 “Changeable Source Audio Locations Characteristic”, otherwise Excluded.
- C.11: Optional IF PACS 3/6 “Supported Audio Contexts Characteristic”, otherwise Excluded.
- C.12: Mandatory IF PACS 4/15 “Changeable Supported Audio Contexts Characteristic”, otherwise Excluded.

## 1.5 GAP requirements

**Table 5: GAP Requirements**

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Bondable mode (LE)	[1] 3	C.1	[2] GAP 24/2 or GAP 34/2
2	Bondable mode (BR/EDR)	[1] 3	C.2	[2] GAP 1/7

- C.1: Optional IF PACS 2/2 “Service supported over LE”, otherwise not defined.
- C.2: Optional IF PACS 2/1 “Service supported over BR/EDR”, otherwise not defined.

## 1.6 GATT requirements

**Table 6: GATT Requirements**

Item	Feature	Reference	Status	Inter-Layer Dependency
1	Read Characteristic Descriptors	[1] 1.4	M	[4] GATT 4/19
2	Write Characteristic Descriptors	[1] 1.4	M	[4] GATT 4/21
3	Notifications	[1] 1.4	M	[4] GATT 4/17
4	Write Characteristic Value	[1] 1.4	M	[4] GATT 4/14
5	Enhanced ATT bearer (BR/EDR or LE)	[1] 1.4	O	[4] GATT 2/3a or GATT 2/3b

## 1.7 SDP requirements

**Table 7: SDP Requirements**

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

Item	Feature	Reference	Status	Inter-Layer Dependency
1	Server	[1] 4	M	[3] SDP 1b/1
2	ServiceClassIDList	[1] 4	M	[3] SDP 9/19
3	ProtocolDescriptorList	[1] 4	M	[3] SDP 9/2
4	AdditionalProtocolDescriptorList	[1] 4	C.1	[3] SDP 9/17
5	BrowseGroupList	[1] 4	M	[3] SDP 9/5

C.1: Mandatory IF PACS 6/5 “Enhanced ATT bearer (BR/EDR or LE)”, otherwise not defined.

## 2 References

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- [1] Published Audio Capabilities Service (PACS), Version 1.0 or later
- [2] ICS Proforma for Generic Access Profile (GAP)
- [3] ICS Proforma for Service Discovery Protocol (SDP)
- [4] ICS Proforma for Generic Attribute Profile (GATT)



### 3 Revision history and acknowledgments

#### Revision History

Publication Number	Revision Number	Date	Comments
0	p0	2021-09-21	Approved by BTI on 2021-08-19. Published Audio Capabilities Service (PACS) v1.0 adopted by the BoD on 2021-09-14. Prepared for initial publication.
	p1r00	2022-05-23	TSE 18998 (rating 1): Modified Versions tables globally to account for v1.0.1 and associated deprecation and withdrawal. Affected tables are: Tables 0 and 1. Updated C.1 of Table 2 to specify the defined transports. Updated PACS reference with "or later". Editorials to align the document with the latest ICS template and conventions, including capitalization in section headings and removing "is supported" from conditionals. Aligned copyright page with v2 of the DNMD.
1	p1	2022-06-28	Approved by BTI on 2022-06-20. PACS v1.0.1 adopted by the BoD on 2022-06-21. Prepared for TCRL 2022-1 publication.
	p1ed2r00	2022-08-04	TSE 19317 (rating 1): Removed D&W information that was prematurely added during the .Z release until the dates are formally approved by the BoD. Editorials, including removing the draft revision history entries to align with current conventions.
	p1 edition 2	2022-08-22	Approved by BTI on 2022-08-22. Prepared for edition 2 publication.
	p1ed3r00	2023-02-15	TSE 22640 (rating 1): Replaced ILD references to GATT 2/3 with GATT 2/3a or GATT 2/3b in Table 6. Editorials to align the document with the latest ICS template.
	p1 edition 3	2023-03-15	Approved by BTI on 2023-03-13. Prepared for edition 3 publication.

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