

# Coordinated Set Identification Profile (CSIP)

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

---

- **Revision:** CSIP.ICS.p5
- **Revision Date:** 2025-07-08
- **Prepared By:** Generic Audio Working Group
- **Published during TCRL:** TCRL.pkg100



This document, regardless of its title or content, is not a Bluetooth Specification as defined in the Bluetooth Patent/Copyright License Agreement (“PCLA”) and Bluetooth Trademark License Agreement. Use of this document by members of Bluetooth SIG is governed by the membership and other related agreements between Bluetooth SIG Inc. (“Bluetooth SIG”) and its members, including the PCLA and other agreements posted on Bluetooth SIG’s website located at [www.bluetooth.com](http://www.bluetooth.com).

THIS DOCUMENT IS PROVIDED “AS IS” AND BLUETOOTH SIG, ITS MEMBERS, AND THEIR AFFILIATES MAKE NO REPRESENTATIONS OR WARRANTIES AND DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY, TITLE, NON-INFRINGEMENT, FITNESS FOR ANY PARTICULAR PURPOSE, THAT THE CONTENT OF THIS DOCUMENT IS FREE OF ERRORS.

TO THE EXTENT NOT PROHIBITED BY LAW, BLUETOOTH SIG, ITS MEMBERS, AND THEIR AFFILIATES DISCLAIM ALL LIABILITY ARISING OUT OF OR RELATING TO USE OF THIS DOCUMENT AND ANY INFORMATION CONTAINED IN THIS DOCUMENT, INCLUDING LOST REVENUE, PROFITS, DATA OR PROGRAMS, OR BUSINESS INTERRUPTION, OR FOR SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL OR PUNITIVE DAMAGES, HOWEVER CAUSED AND REGARDLESS OF THE THEORY OF LIABILITY, AND EVEN IF BLUETOOTH SIG, ITS MEMBERS, OR THEIR AFFILIATES HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This document is proprietary to Bluetooth SIG. This document may contain or cover subject matter that is intellectual property of Bluetooth SIG and its members. The furnishing of this document does not grant any license to any intellectual property of Bluetooth SIG or its members.

This document is subject to change without notice.

Copyright © 2019–2025 by Bluetooth SIG, Inc. The Bluetooth word mark and logos are owned by Bluetooth SIG, Inc. Other third-party brands and names are the property of their respective owners.



# Contents

<b>1</b>	<b>General principles .....</b>	<b>4</b>
1.1	Implementation Under Test (IUT) identification .....	4
1.2	Enforcement of inter-layer dependencies .....	4
<b>2</b>	<b>ICS declarations.....</b>	<b>5</b>
2.1	Roles .....	5
2.2	Transports.....	5
2.3	Set Member role .....	5
2.3.1	Services – Set Member role.....	6
2.3.2	GAP requirements .....	6
2.4	Set Coordinator role.....	7
2.4.1	Services Support – Set Coordinator role.....	7
2.4.2	GATT requirements .....	8
2.4.3	GAP requirements .....	9
<b>3</b>	<b>References .....</b>	<b>10</b>
<b>4</b>	<b>Revision history and acknowledgments .....</b>	<b>11</b>

# 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 Roles

**Table 1: Role Requirements**

Item	Role	Reference	Status
1	Set Member	[1] 2.1	C.1
2	Set Coordinator	[1] 2.1	C.1

C.1: Mandatory to support at least one.

### 2.2 Transports

**Table 2: Transport Requirements**

Item	Transport	Reference	Status
1	Profile supported over BR/EDR	[1] 2.5	C.1, C.3
2	Profile supported over LE	[1] 2.5	C.2, C.3

C.1: Excluded for this Profile IF CORE 41/2 “LE Core Configuration”.

C.2: Excluded for this Profile IF CORE 41/1 “BR/EDR Core Configuration”.

C.3: Mandatory to support at least one.

### 2.3 Set Member role

**Table 3: Set Member, X.Y Versions**

*Prerequisite: CSIP 1/1 “Set Member”*

Item	Version	Reference	Status
1	CSIP v1.0	[1]	C.1, C.2

C.1: Mandatory.

C.2: Can only be supported with an active X.Y.Z version after Deprecation or Withdrawal. Deprecated 2025-02-01. Withdrawn 2027-02-01.

**Table 4: Set Member, X.Y.Z Versions**

*Prerequisite: CSIP 1/1 “Set Member”*

Item	Version	Reference	Status
1	No longer used	N/A	N/A
2	CSIP v1.0.1	[1]	C.1

C.1: Mandatory IF CSIP 3/1 “CSIP v1.0”, otherwise Excluded.

### 2.3.1 Services – Set Member role

**Table 5: Services Requirements**

*Prerequisite: CSIP 1/1 “Set Member”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Coordinated Set Identification Service	[1] 3	M	[4] CSIS
2	PSRI AD Type field over LE	[1] 3.1.1	C.1	N/A
3	PSRI AD Type over BR/EDR	[1] 3.1.1	C.2	N/A
4	Encrypted SIRK	[1] 4.6.1	C.3	[4] CSIS 2/5
5	Plaintext SIRK	[1] 4.6.1	C.3	[4] CSIS 2/6
6	OOB SIRK Only	[1] 4.6.1	C.3	[4] CSIS 2/7

C.1: Mandatory IF CSIP 2/2 “Profile supported over LE”, otherwise Excluded.

C.2: Mandatory IF CSIP 2/1 “Profile supported over BR/EDR”, otherwise Excluded.

C.3: Mandatory to support at least one.

### 2.3.2 GAP requirements

**Table 6: GAP Requirements – Set Member Role**

*Prerequisite: CSIP 1/1 “Set Member”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	LE security mode 1	[1] 6.1	C.1	[3] GAP 25/1
2	Peripheral	[1] 2.4.1	C.1	[3] GAP 5/3 OR GAP 38/3
3	Bondable mode (LE)	[1] 7.1	C.7	[3] GAP 24/2
4	Privacy feature	[1] 6.1	C.7	[3] GAP 26/1
5	Bondable mode (BR/EDR)	[1] 7.1	C.8	[3] GAP 1/7
6	Unauthenticated Pairing (LE security mode 1 level 2) with LE Secure Connections Pairing only	[1] 6	C.5	[3] GAP 25/11
7	Authenticated Pairing (LE security mode 1 level 3) with LE Secure Connections Pairing only	[1] 6	C.5	[3] GAP 25/12
8	LE security mode 1 level 4	[1] 6	C.5	[3] GAP 25/9
9	Minimum 128 Bit entropy key (LE)	[1] 6.1	C.6	[3] GAP 25/13
10	Derivation of LE LTK from BR/EDR Link Key	[1] 6.1	C.9	[3] GAP 43/2b
11	Security mode 4, level 2	[1] 6.2	C.2	[3] GAP 2/7c
12	128-bit encryption key size capable (BR/EDR)	[1] 6.2	C.2	[3] GAP 2/13
13	Derivation of BR/EDR Link Key from LE LTK	[1] 6.2	C.10	[3] GAP 43/2a
14	BR/EDR Secure Connections	[1] 6.2	C.10	N/A
15	LE Secure Connections (Peripheral)	[1] 6.1	C.9	[3] GAP 27b/5

Item	Capability	Reference	Status	Inter-Layer Dependency
16	Out of Band (Peripheral)	[1] 6.1	C.9	[3] GAP 27b/9
17	Out-of-Band (BR/EDR)	[1] 6.2	C.10	[3] GAP 2/14

C.1: Mandatory IF CSIP 2/2 “Profile supported over LE”, otherwise not defined.

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

C.3–C.4: No longer used.

C.5: Mandatory to support at least one IF CSIP 2/2 “Profile supported over LE”, otherwise not defined.

C.6: Mandatory IF CSIP 6/6 “Unauthenticated Pairing (LE security mode 1 level 2) with LE Secure Connections Pairing only” OR CSIP 6/7 “Authenticated Pairing (LE security mode 1 level 3) with LE Secure Connections Pairing only”, otherwise not defined.

C.7: Optional IF CSIP 2/2 “Profile supported over LE”, otherwise not defined.

C.8: Optional IF CSIP 2/1 “Profile supported over BR/EDR”, otherwise not defined.

C.9: Mandatory to support at least one IF CSIP 2/2 “Profile supported over LE”, otherwise not defined.

C.10: Mandatory to support at least one IF CSIP 2/1 “Profile supported over BR/EDR”, otherwise not defined.

## 2.4 Set Coordinator role

**Table 8: Set Coordinator, X.Y Versions**

*Prerequisite: CSIP 1/2 “Set Coordinator”*

Item	Version	Reference	Status
1	CSIP v1.0	[1]	C.1, C.2

C.1: Mandatory.

C.2: Can only be supported with an active X.Y.Z version after Deprecation or Withdrawal. Deprecated 2025-02-01. Withdrawn 2027-02-01.

**Table 9: Set Coordinator, X.Y.Z Versions**

*Prerequisite: CSIP 1/2 “Set Coordinator”*

Item	Version	Reference	Status
1	No longer used	N/A	N/A
2	CSIP v1.0.1	[1]	C.1

C.1: Mandatory IF CSIP 8/1 “CSIP v1.0”, otherwise Excluded.

### 2.4.1 Services Support – Set Coordinator role

**Table 10: Service Support**

*Prerequisite: CSIP 1/2 “Set Coordinator”*

Item	Feature	Reference	Status
1	Discover Coordinated Set Identification Service	[1] 4.2	M

**Table 11: Characteristic Support Requirements***Prerequisite: CSIP 10/1 “Discover Coordinated Set Identification Service”*

Item	Capability	Reference	Status
1	Set Identity Resolving Key Characteristic	[1] 4.3	M
2	Coordinated Set Size Characteristic	[1] 4.3	M
3	Set Member Lock Characteristic	[1] 4.3	M
4	Set Member Rank Characteristic	[1] 4.3	M

**Table 12: Procedure Support Requirements***Prerequisite: CSIP 10/1 “Discover Coordinated Set Identification Service”*

Item	Capability	Reference	Status
1	Coordinated Set Discovery	[1] 4.6.1	M
2	Set Members Discovery	[1] 4.6.2	M
3	Lock Request	[1] 4.6.3	M
4	Lock Release	[1] 4.6.4	M
5	Ordered Access	[1] 4.6.5	M

## 2.4.2 GATT requirements

**Table 13: Set Coordinator GATT Requirements***Prerequisite: CSIP 1/2 “Set Coordinator”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Discover All Primary Services	[1] 4.1	C.1	[2] GATT 3/2
2	Discover Primary Services by Service UUID	[1] 4.1	C.1	[2] GATT 3/3
3	Find Included Services	[1] 4.1	M	[2] GATT 3/4
4	Discover All Characteristics of a Service	[1] 4.1	C.2	[2] GATT 3/5
5	Discover Characteristics by UUID	[1] 4.1	C.2	[2] GATT 3/6
6	Discover All Characteristic Descriptors	[1] 4.1	M	[2] GATT 3/7
7	Read Characteristic Value	[1] 4.1	M	[2] GATT 3/8
8	Write Characteristic Value	[1] 4.1	M	[2] GATT 3/14
9	Single Notification	[1] 4.1	O	[2] GATT 3/17
10	Read Characteristic Descriptors	[1] 4.1	M	[2] GATT 3/19
11	Write Characteristic Descriptors	[1] 4.1	C.3	[2] GATT 3/21
12	GATT Client over LE	[1] 4.1	C.4	[2] GATT 1a/1
13	GATT Client over BR/EDR	[1] 4.1	C.5	[2] GATT 1a/2

C.1: Mandatory to support at least one.

C.2: Mandatory to support at least one.



- C.3: Mandatory IF CSIP 13/9 “Single Notification”, otherwise not defined.  
 C.4: Mandatory IF CSIP 2/2 “Profile supported over LE”, otherwise not defined.  
 C.5: Mandatory IF CSIP 2/1 “Profile supported over BR/EDR”, otherwise not defined.

### 2.4.3 GAP requirements

**Table 14: GAP Requirements – Set Coordinator Role**

*Prerequisite: CSIP 1/2 “Set Coordinator”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Bondable mode (BR/EDR)	[1] 7.1	C.1	[3] GAP 1/7
2	Central	[1] 2.4.1	C.2	[3] GAP 38/4 OR GAP 5/4
3	LE security mode 1	[1] 6.2	C.2	[3] GAP 35/1
4	Bondable mode (LE)	[1] 6.2	C.4	[3] GAP 34/2
5	Bonding procedure	[1] 6.2	C.4	[3] GAP 34/3
6	Unauthenticated Pairing (LE security mode 1 level 2) with LE Secure Connections Pairing only	[1] 6	C.4	[3] GAP 35/11
7	Authenticated Pairing (LE security mode 1 level 3) with LE Secure Connections Pairing only	[1] 6	C.4	[3] GAP 35/12
8	LE security mode 1 level 4	[1] 6	C.4	[3] GAP 35/9
9	Minimum 128 Bit entropy key (LE)	[1] 6.1	C.7	[3] GAP 35/13
10	Derivation of LE LTK from BR/EDR Link Key	[1] 6.1	C.8	[3] GAP 41/2b
11	Security mode 4, level 2	[1] 6.2	C.3	[3] GAP 2/7c
12	128-bit encryption key size capable (BR/EDR)	[1] 6.2	C.3	[3] GAP 2/13
13	Derivation of BR/EDR Link Key from LE LTK	[1] 6.2	C.9	[3] GAP 41/2a
14	BR/EDR Secure Connections	[1] 6.2	C.9	N/A
15	LE Secure Connections (Central)	[1] 6.1	C.8	[3] GAP 37b/5
16	Out of Band (Central)	[1] 6.1	C.8	[3] GAP 37b/9
17	Out-of-Band (BR/EDR)	[1] 6.2	C.9	[3] GAP 2/14

- C.1: Optional IF CSIP 2/1 “Profile supported over BR/EDR”, otherwise not defined.  
 C.2: Mandatory IF CSIP 2/2 “Profile supported over LE”, otherwise not defined.  
 C.3: Mandatory IF CSIP 2/1 “Profile supported over BR/EDR”, otherwise not defined.  
 C.4: Optional IF CSIP 2/2 “Profile supported over LE”, otherwise not defined.  
 C.5–C.6: No longer used.  
 C.7: Mandatory IF CSIP 14/6 “Unauthenticated Pairing (LE security mode 1 level 2) with LE Secure Connections Pairing only” OR CSIP 14/7 “Authenticated Pairing (LE security mode 1 level 3) with LE Secure Connections Pairing only”, otherwise not defined.  
 C.8: Mandatory to support at least one IF CSIP 2/2 “Profile supported over LE”, otherwise not defined.  
 C.9: Mandatory to support at least one IF CSIP 2/1 “Profile supported over BR/EDR”, otherwise not defined.

## 3 References

---

- [1] Coordinated Set Identification Profile Specification, Version 1.0 or later
- [2] ICS Proforma for Generic Attribute Profile (GATT)
- [3] ICS Proforma for Generic Access Profile (GAP)
- [4] ICS Proforma for Coordinated Set Identification Service (CSIS)

## 4 Revision history and acknowledgments

### Revision History

Publication Number	Revision Number	Date	Comments
0	p0	2021-03-30	Approved by BTI on 2021-02-25. CSIP v1.0 adopted by the BoD on 2021-03-23. Prepared for publication.
	p1r00–r02	2021-09-16 – 2021-09-22	TSE 14792 (rating 4): Added ICS items for Expedited Erratum 17455 to Tables 4 and 9 and updated references. Editorials to address BTI comments and consistency checker findings.
1	p1	2021-10-12	Approved by BTI on 2021-09-28. Expedited Erratum 17455 adopted by the BoD on 2021-10-05. Prepared for publication.
	p2r00–r05	2022-02-15 – 2022-06-10	TSE 18159 (rating 2): Updated C.1 in Table 1. Performed template-related formatting fixes. Updated copyright page to align with v2 of the DNMD. TSE 18996 (rating 1): Modified Versions tables globally to account for v1.0.1 and associated deprecation and withdrawal. Affected tables are: Tables 3, 4, 8, and 9. Updated CSIP reference with “or later”.
2	p2	2022-06-28	Approved by BTI on 2022-06-20. CSIP v1.0.1 adopted by the BoD on 2022-06-21. Prepared for TCRL 2022-1 publication.
	p2ed2r00	2022-08-04	TSE 19319 (rating 1): Removed D&W information that was prematurely added during the .Z release until the dates are formally approved by the BoD.
	p2 edition 2	2022-08-22	Approved by BTI on 2022-08-22. Prepared for edition 2 publication.
	p2ed3r00	2023-02-15	TSE 22615 (rating 1): Replaced ILD references to Security Manager 8/1 with references to SM 8a/1 (for Central role) or SM 8b/1 (for Peripheral role) in Tables 7 and 15. Updated the heading for Section 1.5.2. Editorials to align the document with the latest ICS template. Deleted draft revision history comments prior to p0.
	p2 edition 3	2023-03-15	Approved by BTI on 2023-03-13. Prepared for edition 3 publication.
	p3r00–r02	2023-08-25 – 2023-11-28	TSE 23343 (rating 2): To resolve GAP/SM ILDs, removed the SM ICS from the References section and deleted the SM Requirements tables (Tables 7 and 15). Updated the Status for 6/3 – 6/10 and 6/13, and added 6/11a, 6/11b, and 6/14 – 6/19, with updated C.3 and C.4, deleted previous C.5 and C.6, and new C.5 – C.12. Updated the Feature description for 10/1. Updated the Status for 14/6, 14/9, 14/10, and 14/13, and added 14/11a, 14/11b, and 14/14 – 14/19, with updated C.5 and C.6, deleted previous C.7, and new C.8 – C.13.

Publication Number	Revision Number	Date	Comments
3	p3	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p4r00–r04	2024-10-28 – 2024-12-13	TSE 25422 (rating 2): Added Items 12 and 13 and conditionals C.4 and C.5 to Table 13. TSE 26365 (rating 1): Updated Item 1 and added conditionals C.1 and C.2 for Tables 3 and 8. Updated Items 1 and 2 and C.1 for Tables 4 and 9.
4	p4	2025-02-18	Approved by BTI on 2025-02-09. Prepared for TCRL 2025-1 publication.
	p5r00	2025-04-16	TSE 27369 (rating 1): Updated the Status value for CSIP 2/1 and CSIP 2/2. Added conditionals C.1 and C.2 to Table 2 and renumbered C.1 as C.3.
5	p5	2025-07-08	Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication.

### Acknowledgments

Name	Company
Dejan Berec	Bluetooth SIG, Inc.
Gene Chang	Bluetooth SIG, Inc.
Charlie Lenahan	Bluetooth SIG, Inc.
Jawid Mirani	Bluetooth SIG, Inc.
Alicia Courtney	Broadcom