Signaling Protocols and Procedures for Citizens Broadband Radio Service (CBRS):

WInnForum Recognized CBRS Grouping Information

Document WINNF-SSC-0010

Version 5.0.0

18 March 2026

Copyright © 2026 The Software Defined Radio Forum Inc - All Rights Reserved

Table of Contents

1 Introduction 2
2 Scope 2
3 References 2
3.1 Normative references 2
4 Definitions and abbreviations 3
4.1 Definitions 3
4.2 Abbreviations 3
5 Version Compatibility 3
6 Grouping Parameters 4
6.1 VOID 4
6.2 Coexistence Group (CxG) 4
6.2.1 CBRS Alliance Coexistence Group 4
6.3 Single Frequency Group (SFG) 4
6.3.1 Principal-Subordinate SFG 4
6.3.2 Interdependent SFG 5
6.3.3 Separable SFG 5
6.4 Spectrum Reuse Group (SRG) 6
6.4.1 General 6
6.5 Passive DAS 6
6.5.1 General 6
6.6 Active DAS 7
6.6.1 General 7
7 Grouping Configuration 8
7.1 Coexistence Group (CxG) 8
7.1.1 CBRS Alliance Coexistence Group 8
7.2 Single Frequency Group (SFG) 8
7.2.1 Principal-Subordinate SFG 8
7.2.2 Independent SFG 8
7.2.3 Separable SFG 8
7.3 Spectrum Reuse Group (SRG) 8
7.4 Passive DAS 8
8 Grouping Information Response Object 9
8.1 Coexistence Group (CxG) 9
8.1.1 CBRS Alliance Coexistence Group 9
8.2 Single Frequency Group (SFG) 9
8.2.1 Principal-Subordinate Single Frequency Group 9
8.2.2 Interdependent Single Frequency Group 9
8.2.3 Separable Single Frequency Group 9
8.3 Spectrum Reuse Group (SRG) 9
9 Document History 10

Copyright © 2026 The Software Defined Radio Forum Inc
All Rights Reserved

List of Tables

Table 1: *GroupInfo* Object Definition 5
Table 2: *GroupConfigInfo* Object Definition 8

Copyright © 2026 The Software Defined Radio Forum Inc
All Rights Reserved

WInnForum Recognized CBRS Grouping Information

1 Introduction

This document specifies Citizens Broadband Radio Service (CBRS) Grouping Information supported by the standards, e.g. [n.6][n.7], developed by the Wireless Innovation Forum (WInnForum) Spectrum Sharing Committee (SSC) for the CBRS band.

2 Scope

This document specifies CBRS Grouping Information. There are two types of Grouping Information:

- Grouping Parameters: used to communicate grouping information from the Citizens Broadband Radio Service Devices (CBSDs)/Domain Proxy (DP) to Spectrum Access System (SAS)
- Grouping Configuration: used to communicate grouping configuration from SAS to CBSD/DP.
- Grouping Parameter Response Object: used to communicate errors in *GroupInfo* object from SAS to CBSD/DP.

This document only contains Group types and IDs that have been defined by the WInnForum or Third-Party proprietary Group types and/or IDs that have been registered with the WInnForum via a Grouping Information registration request [n.1]. Third-party proprietary Group types that are not registered in this document can be used for operation but groupType values of such Groups must be a string prefixed with CBRS Vendor/Admin IDs registered in WINNF-SSC-0013 [n.11].

The entity or individual that defines a particular Grouping Information is responsible for fully defining the Grouping Information such that implementation can be accomplished [n.1].

3 References

3.1 Normative references

The following referenced documents are necessary for the application of the present document.

[n.1] "Spectrum Sharing Committee Policy and Procedure CBRS Grouping Information Registration," WINNF-SSC-0009.

[n.2] VOID.

[n.3] VOID

[n.4] "Requirements for Commercial Operation in the U.S. 3550-3700 MHz Citizens Broadband Radio Service Band," WINNF-TS-0112.

[n.5] "CBRS Coexistence Technical Specifications," CBRSA-TS-2001.

[n.6] "Signaling Protocols and Procedures for Citizens Broadband Radio Service (CBRS): Extensions to Spectrum Access System (SAS) - Citizens Broadband Radio Service Device (CBSD) Interface Technical Specification (Release 2)," WINNF-TS-3002.

[n.7] "Signaling Protocols and Procedures for Citizens Broadband Radio Service (CBRS): Extensions to Spectrum Access System (SAS) - SAS Interface Technical Specification (Release 2)," WINNF-TS-3003

[n.8] "CBRS Operational and Functional Requirements (Release 2)," WINNF-TS-1001

Copyright © 2026 The Software Defined Radio Forum Inc

All Rights Reserved

[n.9] "Signaling Protocols and Procedures for Citizens Broadband Radio Service (CBRS): Spectrum Access System (SAS) - Citizens Broadband Radio Service Device (CBSD) Interface Technical Specification (Release 1)," WINNF-TS-0016.

[n.10] "CBRS Deployment Guidelines for Installers", WINNF-TR-5001

[n.11] "WInnForum Registry of CBRS Vendor/Admin IDs for Third-Party Proprietary Feature Prefixes", WINNF-SSC-0013

[n.12] "Post Initial Certification Revisions to CBRS Baseline Operational and Functional Requirements Specification (WINNF-TS-0112-V1.9.1)", WINNF-TS-1020

4 Definitions and abbreviations

4.1 Definitions

CBRS band: The 3550-3700 MHz Citizens Broadband Radio Service band.

Citizens Broadband Radio Service Device (CBSD): Fixed Stations, or networks of such stations, that operate on a Priority Access or General Authorized Access basis in the Citizens Broadband Radio Service band.

Domain Proxy (DP): The DP is a logical entity that can represent one or more CBSD(s) to the SAS. The DP presents a consistent and secure interface to the SAS that can convey all messages pertaining to the SAS-CBSD interface for client CBSDs.

Spectrum Access System (SAS): A system that authorizes and manages use of spectrum for the Citizens Broadband Radio Service in accordance with subpart F.

4.2 Abbreviations

CBRS	Citizens Broadband Radio Service
CBSD	Citizens Broadband Radio Service Device
DP	Domain Proxy
SAS	Spectrum Access System

5 Version Compatibility

This document is applicable to the Release 2 feature "Enhanced CBSD Group Handling" specified in [n.6] and [n.7].

Copyright © 2026 The Software Defined Radio Forum Inc

All Rights Reserved

6 Grouping Parameters

The *GroupParam* JSON object is used to communicate grouping information from the CBSD/DP to SAS and is defined in section 8.2.8 of WINNF-TS-3002 [n.6].

6.1 VOID

6.2 Coexistence Group (CxG)

Coexistence Group (CxG) has been defined by the WInnForum in WINNF-TS-0112 [n.4]. This Group type identifies a Group of CBSDs that coordinate their own interference within the group according to a common interference management policy [n.4].

6.2.1 CBRS Alliance Coexistence Group

CBRS Alliance Coexistence Group (CxG) and its common interference management policy has been defined by CBRS Alliance in CBRSA-TS-2001 [n.5].

6.2.1.1 groupType

The *groupType* value is “COEXISTENCE_GROUP”.

6.2.1.2 groupId

The *groupId* value is “CBRS_ALLIANCE”.

6.2.1.3 *GroupInfo* Object Definition

See details of *GroupInfo* object definition in CBRSA-TS-2001 [n.5].

6.3 Single Frequency Group (SFG)

6.3.1 Principal-Subordinate SFG

Principal-Subordinate SFG is defined in Annex 2 of WINNF-TS-1001 [n.8].

6.3.1.1 groupType

The *groupType* value is “PRINCIPAL_SUBORDINATE_SFG”.

6.3.1.2 groupId

The *groupId* values for Principal-Subordinate SFG are not registered with WInnForum and are not guaranteed by WInnForum to be unique. The CBSD Users are encouraged to pre-coordinate with their Managing SAS Administrator offline to ensure uniqueness of the *groupId* values. The *groupId* value is assigned when the Managing SAS accepts the *groupId* value in response to the membership indication by the first member of the planned Group. The CBSD User can specify its planned *groupId* value in the *GroupParam* object sent by its CBSDs to its Managing SAS, and the Managing SAS will accept the *groupId* value if the uniqueness of the *groupId* value is ensured.

6.3.1.3 *GroupInfo* Object Definition

The *GroupInfo* object is defined in Table 1.

Copyright © 2026 The Software Defined Radio Forum Inc

All Rights Reserved

Table 1: *GroupInfo* Object Definition

Parameter	Presence	Description
NAME: *cbsdType* **DATA TYPE**: string	Optional	This parameter represents a type of CBSD in this Group. Acceptable values are: ▪ "PRINCIPAL" ▪ "SUBORDINATE" The default value of this parameter is "SUBORDINATE".

6.3.2 Interdependent SFG

Interdependent SFG is defined in Annex 3 of WINNF-TS-1001 [n.8].

6.3.2.1 groupType

The *groupType* value is "INTERDEPENDENT_SFG".

6.3.2.2 groupId

The *groupId* values are not registered with WInnForum and are not guaranteed by WInnForum to be unique. The CBSD Users are encouraged to pre-coordinate with their Managing SAS Administrator offline to ensure uniqueness of the *groupId* values. The *groupId* value is assigned when the Managing SAS accepts the *groupId* value in response to the membership indication by the first member of the planned Group. The CBSD User can specify its planned *groupId* value in the *GroupParam* object sent by its CBSDs to its Managing SAS, and the Managing SAS will accept the *groupId* value if the uniqueness of the *groupId* value is ensured.

6.3.2.3 *GroupInfo* Object Definition

The *GroupInfo* object is not defined for this type of SFG.

6.3.3 Separable SFG

Separable SFG is defined in Annex 4 of WINNF-TS-1001 [n.8].

6.3.3.1 groupType

The *groupType* value is "SEPARABLE_SFG".

6.3.3.2 groupId

The *groupId* values are not registered with WInnForum and are not guaranteed by WInnForum to be unique. The CBSD Users are encouraged to pre-coordinate with their Managing SAS Administrator offline to ensure uniqueness of the *groupId* values. The *groupId* value is assigned when the Managing SAS accepts the *groupId* value in response to the membership indication by the first member of the planned Group. The CBSD User can specify its planned *groupId* value in the *GroupParam* object sent by its CBSDs to its Managing SAS, and the Managing SAS will accept the *groupId* value if the uniqueness of the *groupId* value is ensured.

Copyright © 2026 The Software Defined Radio Forum Inc

All Rights Reserved

6.3.3.3 *GroupInfo* Object Definition

The *GroupInfo* object is not defined for this type of SFG.

6.4 Spectrum Reuse Group (SRG)

Spectrum Reuse Group has been defined per a Grouping Information registration request [n.1].

6.4.1 General

This Group type identifies a Group of CBSDs operated by a CBSD User or a group of CBSD Users where the CBSDs can use the same spectrum. SAS is not involved in the interference management among the members of this group.

6.4.1.1 groupType

The *groupType* value is “SPECTRUM_REUSE”.

6.4.1.2 groupId

The *groupId* values are not registered with WInnForum and are not guaranteed by WInnForum to be unique. The CBSD Users or the representative of the group of the CBSD Users are encouraged to pre-coordinate with their Managing SAS Administrator offline to ensure uniqueness of the *groupId* values. The *groupId* value is assigned when the Managing SAS accepts the *groupId* value in response to the membership indication by the first member of the Group. The CBSD User can specify its planned *groupId* value in the *GroupParam* object sent by its CBSDs to its Managing SAS, and the Managing SAS will accept the *groupId* value if the uniqueness of the *groupId* value is ensured.

6.4.1.3 *GroupInfo* Object Definition

The *GroupInfo* object for SRG is not defined in this version of this document.

6.5 Passive DAS

Passive DAS is defined in WINNF-TS-1020 [n.12].

6.5.1 General

This Group type identifies a Group of CBSDs belonging to the same Passive DAS chain of antennas (Transmission Points) fed from a unique Radio Unit.

6.5.1.1 groupType

The *groupType* value is “PASSIVE_DAS”.

6.5.1.2 groupId

The *groupId* is a string of <FCC-ID>:<Serial Number>:[<Sector_ID>], where <FCC-ID> and <Serial Number> are the FCC-ID and Serial Number of the Radio Unit feeding the Passive DAS chain. Sector ID is a unique identifier that identifies the Passive DAS sector according to WINNF-TR-5001 [n.10]. For single sector Radio units, this parameter may be either set at value 0, or be omitted.

Copyright © 2026 The Software Defined Radio Forum Inc

All Rights Reserved

6.5.1.3 *GroupInfo* Object Definition

The *GroupInfo* object for Passive DAS is not defined in this version of this document.

6.6 Active DAS

Active DAS is defined in WINNF-TS-1020 [n.12].

6.6.1 General

This Group type identifies a Group of CBSDs belonging to the same Active DAS chain of antennas (Transmission Points) fed from a unique Radio Unit.

6.6.1.1 groupType

The *groupType* value is “ACTIVE_DAS”.

6.6.1.2 groupId

If the Radio Unit (i.e., the RAN Source feeding the Active DAS Control Unit) has an independent Part-96 FCC-ID and Serial Number, the *groupId* is a string of <FCC-ID>:<Serial Number>:[<Sector_ID>], where <FCC-ID> and <Serial Number> are the FCC-ID and Serial Number of the Radio Unit (RAN Source feeding the Active DAS Control Unit) chain.

If the Radio Unit (i.e., RAN Source feeding the Active DAS Control Unit) does not have an independent Part-96 FCC-ID and Serial Number, the *groupId* is a string of <RAN OEM>:<Model Number>:[<Sector_ID>], where <RAN OEM> and <Model Number> are the name of the RAN OEM and Model Number of the Radio Unit (RAN Source feeding the Active DAS Control Unit) chain.

Sector_ID is a unique identifier that identifies the Active DAS according to WINNF-TR-5001 [n.10]. For single sector Radio units, this parameter may be either set at value 0, or be omitted

6.6.1.3 *GroupInfo* Object Definition

The *GroupInfo* object for Active DAS is not defined in this version of this document.

Copyright © 2026 The Software Defined Radio Forum Inc

All Rights Reserved

7 Grouping Configuration

The *GroupConfig* JSON object is used to communicate grouping configuration from SAS to the CBSD/DP and it is defined in Table 16 of WINNF-TS-3002 [n.6]. The *GroupConfig* object includes the *groupConfigInfo* parameter (data type: *GroupConfigInfo* object) containing details of the grouping configuration.

7.1 Coexistence Group (CxG)

7.1.1 CBRS Alliance Coexistence Group

GroupConfigInfo object definition for CBRS Alliance CxG is defined in Table 2.

Table 2: *GroupConfigInfo* Object Definition

Parameter	Presence	Description
NAME: *cbrsAllianceConfig* **DATA TYPE**: object: *CbrsAllianceConfig*	Optional	See definition of the *CbrsAllianceConfig* object in CBRSA-TS-2001 [n.5].

7.2 Single Frequency Group (SFG)

7.2.1 Principal-Subordinate SFG

GroupConfigInfo object definition for Principal-Subordinate SFG is not defined in this version of this document.

7.2.2 Independent SFG

GroupConfigInfo object definition for Independent SFG is not defined in this version of this document.

7.2.3 Separable SFG

GroupConfigInfo object definition for Separable SFG is not defined in this version of this document.

7.3 Spectrum Reuse Group (SRG)

GroupConfigInfo object definition for SRG is not defined in this version of this document.

7.4 Passive DAS

GroupConfigInfo object definition for Passive DAS is not defined in this version of this document.

Copyright © 2026 The Software Defined Radio Forum Inc
All Rights Reserved

8 Grouping Information Response Object

GroupInfoResponse object, which is defined as part of *GroupConfig* object in WINNF-TS-3002 [n.6], can be used to communicate errors in *GroupInfo* object from a SAS to a CBSD/DP. The *GroupInfoResponse* object includes *groupInfoResponseCode* parameter indicating a type of errors in *GroupInfo* object.

In addition to common acceptable values of the *groupInfoResponseCode* parameter for any Group type/ID defined in WINNF-TS-3002 [n.6], the organization, entity or individual that specifies the *groupType* and/or *groupId* may additionally define the acceptable values of this parameter specific to its Group.

8.1 Coexistence Group (CxG)

8.1.1 CBRS Alliance Coexistence Group

Reference is not available for this version of this document.

8.2 Single Frequency Group (SFG)

8.2.1 Principal-Subordinate Single Frequency Group

Not available for this version of this document.

8.2.2 Interdependent Single Frequency Group

Not available for this version of this document.

8.2.3 Separable Single Frequency Group

Not available for this version of this document.

8.3 Spectrum Reuse Group (SRG)

A CBSD User or a group of CBSD Users operating a group of CBSDs can freely define values of *groupInfoResponseCode* parameter per *groupId*.

Copyright © 2026 The Software Defined Radio Forum Inc
All Rights Reserved

9 Document History

Document history		
V1.0.0	31 January 2019	Initial Version approved for Publication by SSC Steering Group
V2.0.0	19 February 2020	Revision published to align with WINNF-SSC-3002
V3.0.0	30 September 2020	Spectrum Reuse Group is registered with this document.
V4.0.0	20 November 2020	Passive DAS is registered with this document.
V4.1.0	19 February 2021	Clarification on scope of this document.
V4.2.0	30 June 2021	Technical revision to align with WINNF-TS-3002-V1.2.0.
V5.0.0	18 March 2026	Active DAS is registered with this document.

Copyright © 2026 The Software Defined Radio Forum Inc
All Rights Reserved