



OnGo Release 1 Certification Test Plan

ONGO-TS-9001

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1 Introduction and Scope

This document defines the device testing requirements for the CBRS Alliance Certification Program. There are both mandatory and optional test modules.

The current version of the document focuses on testing requirements for CBSD certification. Additional testing requirements may be added later for certification of other entities in the CBRS ecosystem, such as End User Device (EUD) and Coexistence Manager (CxM).

2 References

- [1] Wireless Innovation Forum, WINNF-TS-0122 V1.0.1, “Test and Certification for Citizens Broadband Radio Service (CBRS); Conformance and Performance Test Technical Specification; CBSD/DP as Unit Under Test (UUT)”, 28 September 2018.
- [2] 3GPP, “3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception (Release 14)”, 3GPP TS 36.104 V14.9.0, March 2019.
- [3] OnGo Alliance, “OnGo Coexistence Technical Specifications”, ONGO-TS-2001, V4.1.0.
- [4] 3GPP, “3rd Generation Partnership Project; 5G; NR; Base Station (BS) radio transmission and reception”, 3GPP TS 38.104 version 16.3.0 Release 16, March 2020 or later Release 16 versions.

3 Definition and Abbreviations

3.1 Definitions

No definitions.

3.2 Abbreviations

Abbreviation	Explanation
CBRS	Citizens Broadband Radio Service
CBSD	Citizens Broadband Radio Service Device
CxM	Coexistence Manager
EUD	End User Device
UUT	Unit under Test

4 CBSD Test Modules

4.1 CBSD Mandatory Test Modules

4.1.1 WInnForum Conformance and Performance Test Technical Specification

Refer to [1].

4.2 CBSD Optional Test Modules

There are no optional test modules at the present time.

5 CBSD Certification Requirements

5.1 OnGo 4G Certified

To claim “OnGo 4G Certified”, the Unit under Test (UUT) shall pass the test requirements in Section 4.1.1. In addition, the manufacturer of the UUT shall attest to the following, by way of formal declaration:

1. The UUT is equipment that supports operation as a 3GPP E-UTRA TDD device capable of supporting 3GPP Band 48 operation across the frequency range 3550-3700 MHz in accordance with [2].
2. The UUT supports operation with at least one of the mandatory TDD configurations 1 or 2, with Special Subframe (SSF) Configuration 7 in accordance with [3].
3. The UUT is capable of complying with the E-UTRA CBRS network synchronization requirements in accordance with [3].

CBSDs, which previously achieved OnGo Certification as “OnGo Certified” can have their certifications updated to “OnGo 4G Certified”.

5.2 OnGo 5G Certified

To claim “OnGo 5G Certified”, the Unit under Test (UUT) shall pass the test requirements in Section 4.1.1. In addition, the manufacturer of the UUT shall attest to the following, by way of formal declaration:

1. The UUT is equipment that supports operation as a 3GPP NR TDD device capable of supporting 3GPP band n48 operation across the frequency range 3550-3700 MHz as defined in [4].
2. The UUT supports operation with at least one of the NR equivalent mandatory TDD configurations 1 or 2, with Special Subframe (SSF) Configuration 7 in accordance with [3].
3. The UUT is capable of complying with the NR CBRS network synchronization requirements in accordance with [3].

5.3 OnGo 4G/5G Certified

To claim “OnGo 4G/5G Certified”, the Unit under Test (UUT) shall pass the test requirements in Section 4.1.1. In addition, the manufacturer of the UUT shall attest to the following, by way of formal declaration, before receiving OnGo™ Certification:

1. The UUT is equipment that supports operation as a 3GPP E-UTRA TDD device capable of supporting 3GPP Band 48 operation across the frequency range 3550-3700 MHz in accordance with [2].
2. The UUT is equipment that supports operation as a 3GPP NR TDD device capable of supporting 3GPP band n48 operation across the frequency range 3550-3700 MHz as defined in [4].
3. The UUT supports 3GPP E-UTRA operation with at least one of the mandatory TDD configurations 1 or 2, with Special Subframe (SSF) Configuration 7 in accordance with [3].
4. The UUT supports 3GPP NR operation with at least one of the NR equivalent mandatory TDD configurations 1 or 2, with Special Subframe (SSF) Configuration 7, or supports switching to 3GPP E-UTRA operation or stops operation, in accordance with [3] (See Note).

Note: If a CBSD in NR operation does not support either of the mandatory TDD configuration directed by the CxM, the CBSD shall revert to E-UTRA operation using one of the mandatory TDD configurations or the CBSD shall stop 5G/NR transmission if the operation mode needs to be manually configured to E-UTRA operation.

5. In 3GPP E-UTRA operation, the UUT is capable of complying with the E-UTRA CBRS network synchronization requirements in accordance with [3].
6. In 3GPP NR operation, the UUT is capable of complying with the NR CBRS network synchronization requirements in accordance with [3].

CBSDs, which previously achieved OnGo Certification as “OnGo Certified + OnGo 5G Ready” can have their certifications updated to “OnGo 4G/5G Certified”.

Appendix A (Informative): Change History

Table 1: Change History

Version	Date	Description
V1.0.0	2018-03-20	Initial published version
V1.1.0	2018-10-11	Addition of Section 5: CBSD Certification Requirements and Appendix B: Compliance Form Template
V1.2.0	2020-10-07	Section 2: Updated references; added 5G reference. Section 3: Added abbreviation for UUT. Section 5: Update to include 5G Ready. Appendix B: Update compliance form for E-UTRA. Appendix C: Add compliance form for E-UTRA + 5G Ready.
V1.2.1	2021-07-29	Editorial Update to new specification template.
V1.3.0	2023-01-xx	Introduction of new certification requirements for OnGo 4G Certified, OnGo 5G Certified and OnGo 4G/5G Certified.

Appendix B (Informative): Declaration Form (4G)

Declaration of Compliance for OnGo™ 4G Certification

_____ hereby declares that the CBSD named _____ with FCC-ID _____, offered as the Unit Under Test (UUT) for OnGo™ Certification further complies with the following qualifications:

1. The UUT is equipment that supports operation as a 3GPP E-UTRA TDD device capable of supporting 3GPP Band 48 operation across the frequency range 3550 – 3700 MHz ¹.
2. The UUT supports operation with at least one of the mandatory TDD configurations 1 or 2, with Special Subframe (SSF) Configuration 7 ².
3. The UUT is capable of complying with the E-UTRA CBRS network synchronization requirements ².

Signature: _____

Name: _____

Position: _____

Address: _____

¹ 3GPP, “3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception (Release 14),” 3GPP TS36.104 V14.9.0, March 2019.

² OnGo Alliance, “CBRS Coexistence Technical Specifications,” ONGO-TS-2001, V4.1.0 or later versions.

Appendix C (Informative): Declaration Form (5G)

Declaration of Compliance for OnGo™ 5G Certification

_____ hereby declares that the CBSD named _____ with FCC-ID _____, offered as the Unit Under Test (UUT) for OnGo™ Certification further complies with the following qualifications:

1. The UUT is equipment that supports operation as a 3GPP NR TDD device capable of supporting 3GPP band n48 operation across the frequency range 3550-3700 MHz ¹.
2. The UUT supports operation with at least one of the NR equivalent mandatory TDD configuration 1 or 2, with Special Subframe (SSF) Configuration 7 ².
3. The UUT is capable of complying with the NR CBRS network synchronization requirements ².

Signature: _____

Name: _____

Position: _____

Address: _____

¹ 3GPP, “3rd Generation Partnership Project; 5G; NR; Base Station (BS) radio transmission and reception”, 3GPP TS 38.104 version 16.3.0 Release 16, March 2020 or later Release 16 versions.

² OnGo Alliance, “CBRS Coexistence Technical Specifications,” ONGO-TS-2001, V4.1.0 or later versions.

Appendix D (Informative): Declaration Form (4G/5G)

Declaration of Compliance for OnGo™ 4G/5G Certification

_____ hereby declares that the CBSD named _____ with FCC-ID _____, offered as the Unit Under Test (UUT) for OnGo™ Certification further complies with the following qualifications:

1. The UUT is equipment that supports operation as a 3GPP E-UTRA TDD device capable of supporting 3GPP Band 48 operation across the frequency range 3550 – 3700 MHz ¹.
2. The UUT is equipment that supports operation as a 3GPP NR TDD device capable of supporting 3GPP band n48 operation across the frequency range 3550-3700 MHz ³.
3. The UUT supports 3GPP E-UTRA operation with at least one of the mandatory TDD configurations 1 or 2, with Special Subframe (SSF) Configuration 7 ³.
4. The UUT supports 3GPP NR operation with at least one of the NR equivalent mandatory TDD configurations 1 and 2, with Special Subframe (SSF) Configuration 7 or supports switching to 3GPP E-UTRA operation or stops operation ³.
5. In 3GPP E-UTRA operation, the UUT is capable of complying with the E-UTRA CBRS network synchronization requirements ².
6. In 3GPP NR operation, the UUT is capable of complying with the NR CBRS network synchronization requirements ².

Signature: _____

Name: _____

Position: _____

Address: _____

¹ 3GPP, “3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Evolved Universal Terrestrial Radio Access (E-UTRA); Base Station (BS) radio transmission and reception (Release 14),” 3GPP TS36.104 V14.9.0, March 2019.

² 3GPP, “3rd Generation Partnership Project; 5G; NR; Base Station (BS) radio transmission and reception”, 3GPP TS 38.104 version 16.3.0 Release 16, March 2020 or later Release 16 versions.

³ OnGo Alliance, “CBRS Coexistence Technical Specifications,” ONGO-TS-2001, V4.1.0 or later versions.