

Bluetooth® Compatibility Certification Program Management Document

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1 Overview

1.1 Purpose

The purpose of the CTIA *Bluetooth*^{®1} Compatibility Certification Program (“Program”) is to evaluate the implementation, integration, and interaction between two *Bluetooth* devices that support complementary profiles and roles; one of which is a mobile phone.

1.2 Scope

This *Bluetooth* Compatibility Certification Program Management Document (BCCPMD) defines the requirements and processes of the Program. This Program is a sub-set of CTIA’s Certification Program, which is described in the CTIA Certification Program Management Document (PMD).

1.3 Definitions

BCCPMD: *Bluetooth* Compatibility Certification Program Management Document

CATL: CTIA Authorized Test Lab with scope of *Bluetooth* Compatibility Certification

ECO: Engineering Change Order. An ECO request is a request to certify a hardware or software update of a previously submitted device.

EPL: End Product Listing as defined by the Bluetooth SIG

PICS: Profile Implementation Conformance Statement as defined by the Bluetooth SIG

PTS: Profile Tuning Suite as defined by the Bluetooth SIG

QD ID: Qualified Design ID as defined by the Bluetooth SIG

QDL: Qualified Design Listing as defined by the Bluetooth SIG

¹ *Bluetooth* is a registered trademark of the Bluetooth SIG, Inc.

2 Roles and Responsibilities

This section describes the roles and responsibilities of the parties involved with the Program and mentioned in this document.

2.1 CTIA

As owner of the Program, CTIA defines the requirements for the Program, administers the overall Program and authorizes CATLs for the Program.

2.2 Bluetooth SIG

CTIA and Bluetooth SIG are working together to further improve the device implementation, integration, and interaction between two Bluetooth wireless devices that support complementary profiles and roles. Bluetooth SIG device qualification as defined by the *Bluetooth* Qualification Program² and End Product Listing are prerequisites to testing for this Program.

During the initial stages of this Program, CTIA and Bluetooth SIG will examine the test results of products that have gone through the Program to determine whether improvements can be made to either the Test Plan or Bluetooth SIG test tools. Tests may be removed from the Test Plan if it is determined that these tests are adequately covered in the Bluetooth SIG test tools. Likewise, tests may be added to the Bluetooth SIG test tools if it is determined that interoperability can be improved by doing so.

2.3 CTIA Authorized Testing Laboratories

CATLs shall evaluate devices using criteria set forth in the CTIA *Bluetooth* Compatibility Test Plan ("Test Plan") and procedures described in Section 3 of this document. Laboratory authorization requirements are described in Section 4 of this document.

Each CATL shall appoint a Primary Point of Contact (PoC) to interface with CTIA.

A current listing of CATLs can be found within the CTIA certification database and on the CTIA web site at http://www.ctia.org/business_resources/certification/test_labs/.

2.4 Manufacturers

Manufacturers submitting devices for *Bluetooth* Compatibility testing must follow the procedures described in Section 3 of this document. Testing may be conducted at any of the available CATLs per the manufacturer's choice.

Each manufacturer shall appoint a Primary Point of Contact (PoC) to interface with CTIA.

Manufacturers shall pay a certification fee to CTIA (see **APPENDIX A: Certification Fees**) and shall pay a certification testing fee to the CATL utilized for certification testing. Certification testing fees will be independently determined by each CATL

² The CTIA *Bluetooth* testing is not part of the Bluetooth SIG's Qualification Program which is described on the Bluetooth SIG's membership website at: <https://www.bluetooth.org/technical/qualification/overview.htm>

3 Program Procedures

3.1 Introduction

To obtain certification of a device, the mobile phone manufacturer or *Bluetooth* accessory manufacturer submits a certification request to CTIA. The manufacturer selects a CATL to evaluate compliance using criteria set forth in the Test Plan. The CATL is notified of the request. Once the CATL has accepted the request, the manufacturer sends the device to the CATL for testing.

The submitting manufacturer's device is known as the "A" device. The CATL shall test the A device against a pre-determined list of "B" devices. The B devices are commercially available devices that have completed³ Bluetooth SIG PTS testing and are provided by the CATL.

If the A device is a mobile phone, it shall be tested against all B-device headsets and car kits. If the A device is a headset, it shall be tested against all B-device mobile phones.

Once the evaluation is complete, the CATL provides an evaluation report to CTIA. The manufacturer pays a certification fee to CTIA and signs a certification agreement. CTIA certifies the device when all steps are complete.

3.2 Manufacturer Submission

Manufacturers shall submit certification requests via CTIA's online certification database at <https://cpo.ctia.org/>. User login accounts may be requested by selecting "I need a user name and password" on the login page.

The manufacturer shall select "Bluetooth Compatibility Certification Request - Initial" Request Type and enter information about the device, including:

- Profiles supported
- *Bluetooth* features supported
- Bluetooth SIG QD ID⁴
- Bluetooth SIG EPL (hyperlink to listing on Bluetooth SIG web site)

The manufacturer shall select a CATL and request a start date.

The manufacturer shall select the operators allowed to view the device once it is certified. The manufacturer shall also upload the following documents:

- User manual
- Secure Simple Pairing (SSP) Debug Mode Instructions, if the device supports SSP
- Bluetooth Feature List

³ The device may or may not have passed all tests

⁴ The CATL may find the QDL information by researching the device on the Bluetooth.org web site by QD ID

CTIA will invoice the manufacturer for the CTIA certification fee as described in [APPENDIX A: Certification Fees](#).

The CATL will receive an e-mail notification of the certification request. The CATL will log into the database to review and accept/reject the request. The database will send an e-mail notification to the submitter once the CATL has accepted/rejected the request. If the request is rejected, the submitter may re-assign the request to another CATL.

Once the request has been accepted by the CATL, the manufacturer may no longer make changes to the request. The manufacturer shall contact the CATL or CTIA if any changes need to be made to the data entered.

The manufacturer shall then send the device for testing ("A" device) directly to the CATL per the CATL's instructions. The manufacturer may provide multiple A device samples if desired.

The list of B devices may be found in the certification database.

3.3 Device Evaluation

The CATL shall compare the Bluetooth SIG PICS document, downloaded from the Bluetooth SIG web site, with the Bluetooth Feature List uploaded to the database by the manufacturer. Any mismatches shall be noted.

The CATL shall utilize B devices with the HW and SW version as specified in the current (at the time of submission) approved B-device list. If the CATL desires to use a newer HW / SW version, the CATL shall rerun all applicable tests of the Test Plan with the newer HW / SW version against all devices on the B-device list and confirm that the B-device capability has not changed. The CATL shall then submit a contribution to the working group proposing the newer HW/SW version be added to the B-device list as an acceptable alternative. If the CATL determined that the B-device capability has changed, the newer HW / SW version cannot be used in lieu of the official HW / SW version. Should the B-device revision number in the current B-device list change during testing, the manufacturer has the option of using the B-device with the updated B-device revision number.

The CATL shall test the devices according to the Test Plan and according to the features indicated in the Bluetooth Feature List provided by the manufacturer. The features listed in the Bluetooth Feature List take precedence over features listed or omitted in the User Manual or PICS Document. The CATL shall contact the manufacturer should there be questions on how to use a feature. Results shall be recorded in the Test Results Template downloaded from the database by the CATL.

The A device sample must pass all supported test cases per Bluetooth Feature List and B-device capability list. If one test case fails, and the failure is root caused to the A device sample, then the device submission fails. If multiple A device samples are submitted to the CATL, and there are failures on any of the A device samples, it shall be noted in the Test Results Template.

The manufacturer may need to submit modified software and/or hardware to address A-device failures. When this occurs the manufacturer shall provide the CATL with documentation that details the software/hardware changes. The CATL will use this information to identify the scope of retesting required. The test report shall indicate the final software/hardware version tested.

Should the CATL encounter a B device issue, it shall submit a formal CTIA contribution for discussion within the CTIA Bluetooth Working Group. Upon working group approval, the B device issue will be added to the B device issues list.

Any *Bluetooth* specification issues or ambiguities shall be submitted as a formal CTIA contribution for discussion within the CTIA Bluetooth Working Group so that feedback can be provided to the Bluetooth SIG representative.

Should the CATL encounter an issue with a particular CTIA test case, the CATL shall submit a formal CTIA contribution for discussion within the CTIA Bluetooth Working Group.

Upon completion of the evaluation, the CATL shall log into CTIA's online certification database and:

- Enter the version of the test plan used for the evaluation
- Enter the HW and SW versions of the device
- Verify the information, entered by the manufacturer, about the device (correcting and updating as necessary)
- Enter the start and end dates of the review
- Upload the completed Test Results Template

The test results and the information submitted by the manufacturer during the submission process will be maintained in confidence by CTIA and the CATL. CTIA will retain the information for a period of 5 years after which all documentation will be destroyed.

3.4 Certification

Upon completion of the following items, the device will be certified:

- Completed Test Results Template, with passing results, uploaded by the CATL
- All required documents from the manufacturer
- Certification of the parent product, in the case of ECO Certification Requests
- Payment of the CTIA certification fees
- Fully executed Certification License Agreement (see [APPENDIX B: LICENSE AGREEMENT](#))

3.5 Changes to Certified Devices (ECOs)

Once a Device is certified, the manufacturer shall evaluate any changes that fall within the scope of the Test Plan to determine whether the changes impact the certification. Changes that do impact the certification shall be submitted as an ECO (by logging into the CTIA Certification Database, selecting Submit New Request and choosing "*Bluetooth* Compatibility Certification Request - ECO" Request Type). Supporting documentation shall be provided to the CATL.

4 Laboratory Authorization Process

4.1 CATL Requirements

Authorized test labs must have the following attributes:

- Possess the equipment and personnel necessary to conduct all testing in the Test Plan, including the B devices listed in the current B-device list
- Be a member of Bluetooth SIG
- Have *Bluetooth* over-the-air sniffing capabilities (sniffer tool must have a free viewer available to allow product suppliers to read log files)
- On a rolling basis, participate in 3 out of the last 5 CTIA Certification Program Working Group/Bluetooth IOT Sub-Working Group meetings (conference calls and face-to-face)
- Have ISO/IEC 17025 accreditation, with the scope being the CTIA *Bluetooth* Compatibility Test Plan

4.2 CATL Assessment Process

- 1) Laboratories interested in becoming CATLs shall send an application package to CTIA containing:
 - a) Details demonstrating that the lab meets the CATL Requirements above
 - b) Company overview, including experience with *Bluetooth* Compatibility testing
 - c) CVs/resumes of personnel who will be involved with the testing, identifying their qualifications and experience
 - d) Very detailed work instructions/procedures demonstrating proficiency in testing to the Test Plan
 - e) Indication of whether testing will be performed on a live network or on a network simulator
- 2) After reviewing the application package for completeness, CTIA will forward the package to the CATL Review Committee.
- 3) The CATL Review Committee will review the application
- 4) CTIA will document any deficiencies found during the review and provide the deficiency list to the lab. The turnaround time from receipt of the application will be approximately two weeks.
- 5) The lab shall resolve all deficiencies to the satisfaction of the CATL Review Committee.
- 6) CTIA will send the lab a CATL License and Service Agreement for signature. The lab shall sign the agreement and return it to CTIA along with a copy of the lab's Certificate of Insurance.
- 7) CTIA will authorize the lab as a CATL for *Bluetooth* Compatibility Testing.

APPENDIX A: Certification Fees

The fee for CTIA *Bluetooth* Compatibility Certification is:
\$1,250 for Initial requests
\$0 for ECO requests

These fees are separate from the fees charged by the CATL to evaluate the device.

APPENDIX B: LICENSE AGREEMENT

BLUETOOTH^{®5} COMPATIBILITY CERTIFICATION AGREEMENT

THIS AGREEMENT is made in Washington, D.C.,

this ____ day of _____, _____
(month) (year)

by and between

CTIA – The Wireless Association[®]
(“CTIA”)

and

("SUBMITTER")

RECITALS

Submitter has entered into a voluntary relationship with CTIA for the testing of certain *Bluetooth* devices manufactured by or for the Submitter, and Submitter has demonstrated to CTIA's satisfaction that the

Manufacturer Name & Model Name/Number:

meets CTIA's requirements for Certification under CTIA's *Bluetooth* Compatibility Certification Program.

For these reasons, and of other good and lawful reasons and in consideration of the covenants set forth below, the parties agree as follows:

SECTION ONE CERTIFICATION

1.1 The Recitals are hereby incorporated in the same manner as if the same were repeated herein. Submitter is hereby granted a non-exclusive license to represent the specified *Bluetooth* device (hereinafter "Device") as meeting CTIA's requirements for Certification based on the guidelines set forth in the CTIA *Bluetooth* Compatibility Certification Program Management Document, incorporated herein. CTIA warrants that it has full power and authority to grant the rights herein granted.

1.2 CTIA will permit the use of appropriate references to CTIA and its *Bluetooth* Compatibility Certification Program solely in connection with the specified Device.

1.3 References to CTIA and the CTIA *Bluetooth* Compatibility Certification Program shall not be misleading as to the extent of certification.

1.4 Submitter shall be entitled to state that the specified Device meets CTIA's requirements for *Bluetooth* Compatibility certification for as long as the specified product meets such

⁵ *Bluetooth* is a registered trademark of the Bluetooth SIG, Inc.

requirements. Submitter shall discontinue use of CTIA's mark and reference to CTIA's *Bluetooth* Compatibility Certification Program upon receipt of written notice from CTIA to cease such use.

SECTION TWO COMPLIANCE

2.1 The specified Device shall comply with all of CTIA's requirements for *Bluetooth* Compatibility certification.

2.2 Submitter agrees that any tests or sampling of the specified Device conducted by CTIA is only a check as to whether the specified Device complies with CTIA's requirements for *Bluetooth* Compatibility certification and in no way relieves the Submitter of its responsibility for the Device.

SECTION THREE CORRECTIVE ACTION

3.1 Should CTIA conduct any assessments or examinations of the specified Device that disclose units of the specified Device do not comply with CTIA's requirements for *Bluetooth* Compatibility certification, CTIA retains the right to revoke certification of the specified Device. CTIA agrees to provide Submitter in a timely manner with the results of any assessments or examinations that disclose the unit(s) of the specified Device which do not comply with the requirements of certification. Submitter shall comply with all applicable laws and regulations governing a recall of any unit of the specified Device or the specified Device itself.

3.2 Submitter agrees that it will cooperate with and assist CTIA in ascertaining the facts needed to determine that the specified Device complies with CTIA's *Bluetooth* Compatibility certification requirements.

3.3 Submitter agrees that with prior written notice to Submitter, CTIA may notify vendors, authorities, potential users and others of any improper or unauthorized reference to CTIA, when in CTIA's opinion such notification is necessary in the interest of the public or for CTIA's own protection.

SECTION FOUR TERMINATION

4.1 This Agreement shall continue so long as the specified Device meets the requirements as set forth in the CTIA *Bluetooth* Compatibility Certification Program Management Document, unless termination rights provided for in this Agreement are exercised.

4.2 If Submitter fails to comply with any of the terms and conditions of this Agreement, CTIA may immediately terminate or suspend this Agreement upon written notice to Submitter.

4.3 Upon termination of this Agreement, the license granted under Section 1.1. shall be canceled.

4.4 Termination of this Agreement by whatever means shall not affect any liability of the parties existing as of the date of such termination, and shall not relieve Submitter of its obligation to indemnify CTIA hereunder.

SECTION FIVE INDEMNIFICATION

5.1 Submitter indemnifies and holds harmless CTIA, its officers, directors, employees, members and agents, against any and all liability, loss, cost damage, claims, suits or expenses (including reasonable attorneys' fees and costs) of any kind whatsoever, arising in any way from any negligent or willful acts or omission related to or in breach of this Agreement by Submitter or its agents or employees, or from Submitter's use, marketing, or sale of the specified Device, including but not limited to third party claims for injury or damage allegedly caused by the performance or failure to perform of the specified Device or false or misleading advertising or marketing in connection with the specified Device during the period of this Agreement or thereafter. Conversely, CTIA indemnifies and holds harmless Submitter, its officers, directors, employees, members, and agents against any and all liability, loss, cost, damage, claims, suits, or expenses (including reasonable attorneys' fees and costs) of any kind whatsoever, arising in any way from any negligent or willful acts or omission related to or in breach of this Agreement by CTIA, its agents or employees.

5.2 Submitter shall defend CTIA against claim to which its indemnity relates, provided that:

- (i) CTIA provides Submitter with notice of the claim promptly after CTIA becomes aware of such claim, and the notice shall state the facts giving rise to such claim;
- (ii) Submitter controls the defense or settlement of such claim, and Submitter shall not settle or otherwise dispose of such claim without CTIA's prior written consent;
- (iii) CTIA cooperates with Submitter in every reasonable way to facilitate the defense or settlement of such claim; and
- (iv) CTIA does not settle or otherwise dispose of such claim without Submitter's prior written consent, and such consent shall not be unreasonably withheld or delayed.

5.3 CTIA shall defend Submitter against claim to which its indemnity relates, provided that:

- (i) Submitter provides CTIA with notice of the claim promptly after Submitter becomes aware of such claim, and the notice shall state the facts giving rise to such claim;
- (ii) CTIA controls the defense or settlement of such claim, and CTIA shall not settle or otherwise dispose of such claim without Submitter's prior written consent;
- (iii) Submitter cooperates with CTIA in every reasonable way to facilitate the defense or settlement of such claim; and
- (iv) Submitter does not settle or otherwise dispose of such claim without CTIA's prior written consent, and such consent shall not be unreasonably withheld or delayed.

**SECTION SIX
LIMITATION OF LIABILITY**

6.1 Submitter acknowledges and agrees that CTIA shall not be responsible for the loss, damage, or claim in connection with the use or marketing of the specified Device, whether liability is asserted in contract or tort (including negligence or strict liability). In no event will either party be liable to the other party, or to any third party, for the loss of profits, loss of use, loss of production, loss of goodwill, or incidental, indirect, or consequential damages of any kind.

6.2 In no event will Submitter be liable to CTIA, or to any third party, for special, incidental or consequential damages (including, without limitation, loss or use, time or data, inconvenience, commercial loss, lost profits or savings) to the full extent such may be disclaimed by law, even if Submitter has been advised of the possibility of such damages.

**SECTION SEVEN
NO APPROVAL**

7.1 This Agreement does not constitute CTIA's guarantee or warranty of the specified Device and no representation of any kind by Submitter in connection with its use of the specified Device or otherwise will directly or indirectly, explicitly or implicitly convey or suggest any such guarantee or warranty. CTIA may require that a statement disclaiming any CTIA guarantee or warranty must be included in the marketing and informational materials accompanying the specified Device.

**SECTION EIGHT
INSURANCE**

8.1 Submitter will maintain during the period of this Agreement liability insurance of at least two million dollars in policy limits covering claims or suits arising from the specified Device and will include CTIA as an additional insured on the policy as to matters covered by this Agreement, and Submitter shall furnish to CTIA evidence of that insurance.

[REST OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, CTIA and Submitter have executed this Agreement as of the dates set forth below.

CTIA – The Wireless Association®	SUBMITTER
By: _____ Robert Mesirow Vice President, Operations	By: _____ Name: Title:
By: _____ Mark Sargent Assistant Vice President, Certification Programs	
Date:	Date:

APPENDIX C: Change History

Revision	Date	Description of Changes
Rev 1.0	April 2008	<ul style="list-style-type: none">• Initial publication for pilot program
Rev 2.0	February 2009	<ul style="list-style-type: none">• Updated for certification program
Rev 2.1	June 2009	<ul style="list-style-type: none">• Updated Device Evaluation section• Updated CATL Assessment Process