LTE/CDMA Wireless Device Certification Program Management Document

Revision 2.0
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www.ctia.org/certification
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1. Overview

The purpose of the CTIA LTE/CDMA Wireless Device Certification Program ("Program") is to verify conformance of wireless devices, using LTE and/or CDMA air-interface technology, to defined industry requirements. Verification is performed in CTIA Authorized Test Labs.

The benefits of CTIA Certification include:

- Providing assurance to wireless network operators that devices being certified meet minimum performance requirements defined by the industry
- Speeding time-to-market for new wireless devices by providing vendors with industry-wide common baseline performance requirements to which new devices can be tested


Wireless devices that may be certified include, but are not limited to, mobile phones, tablets, modules, devices with embedded modules, and wearables.

1.1. Document Scope

This Program Management Document (PMD) defines the requirements and processes of the CTIA LTE/CDMA Wireless Device Certification Program. For device vendors, this document describes the requirements for obtaining and maintaining CTIA Certification and the process to apply for certification. For test laboratories, this document describes the procedures to evaluate vendors’ devices.

1.2. Definition of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Converged Device</td>
<td>A Device with Wi-Fi technology.</td>
</tr>
<tr>
<td>Device</td>
<td>A wireless device, utilizing LTE and/or CDMA air-interface technology.</td>
</tr>
<tr>
<td>Device Endorsement</td>
<td>See GCF-CC2 for definition.</td>
</tr>
<tr>
<td>ECO</td>
<td>Engineering Change Order. A hardware or software upgrade of a Device previously submitted for Certification.</td>
</tr>
<tr>
<td>Integration</td>
<td>A Device containing a certified Module.</td>
</tr>
<tr>
<td>Module</td>
<td>A Device requiring integration into a final consumer device. Is it optional, but recommended, that the module obtain certification. The final integrated consumer device will require certification. The advantage of obtaining certification of the module itself is to provide an assurance to the integrator that the module meets CTIA's requirements. Integrated devices incorporating certified</td>
</tr>
</tbody>
</table>

1 Global Certification Forum, Ltd (http://www.globalcertificationforum.org/)
modules may then be certified using a reduced testing process and a reduced certification fee.

<table>
<thead>
<tr>
<th>Re-Labeled Device</th>
<th>A device that is identical to a currently certified device, but has a different vendor name and model name/number.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variant</td>
<td>A Device, from the same vendor, that is similar to another Device (Parent) previously submitted for certification. The Variant has a unique model name/number.</td>
</tr>
</tbody>
</table>

### 1.3. Roles and Responsibilities

This section describes the roles and responsibilities of the parties involved with the CTIA Certification process and mentioned throughout this document.

#### 1.3.1. CTIA

As owner of the CTIA Certification Program, CTIA defines the requirements for CTIA Certification, administers the overall program and awards CTIA Certification to the vendor.

#### 1.3.2. CTIA Authorized Testing Laboratories (CATLs)

CATLs shall at all times maintain compliance with the Policies and Procedures for CTIA Authorized Testing Laboratories document. Interested organizations may contact CTIA to obtain a copy of this document. CATLs have the authority to perform certification testing for the CTIA Certification Program and must follow the procedures described in Section 2 of this document.

Each CATL shall appoint a Primary Point of Contact (PoC) to interface with CTIA. The PoC is responsible for approving who within their company shall be given access to the certification database and for informing CTIA when individual user access should be disabled (for example, when a user leaves the company).

#### 1.3.3. Wireless Device Vendors

Vendors requesting CTIA certification of a device must follow the procedures described in Section 2 of this document. Certification testing may be conducted at any of the available CATLs per the vendor’s choice.

Each vendor shall appoint a Primary Point of Contact (PoC) to interface with CTIA. The PoC is responsible for approving who within their company shall be given access to the certification database and for informing CTIA when individual user access should be disabled (for example, when a user leaves the company).

### 1.4. Is CTIA Certification Mandatory?

The CTIA Certification Program is a voluntary program operating at the request of and for the benefit of CTIA members. CTIA Certification is not a requirement for sale of a device in North America. The Program is developed by CTIA with the assistance of industry advisory groups
comprised of representatives from wireless operators, device vendors, testing laboratories and testing solution suppliers.

1.5. Eligible Participants

Any wireless device vendor may participate in the CTIA Certification Program. CTIA membership is not required to be a program participant.

2. Program Procedures

2.1. Test Facilities

Multiple laboratories are authorized to perform certification testing for the CTIA Certification Program. Labs are authorized per CTIA Certification Test Plan.

A current listing of CATLs can be found at www.ctia.org/certification. Vendors may utilize CATLs for pre-certification testing as per Section 2.3 of this document.

2.2. Test Results

CATLs are responsible for uploading the full test results, including the Summary Test Report (APPENDIX C: Summary Test Report), and test logs, to the certification database. In the event that the hardware and/or software versions are not the same for all testing, the device vendor shall fill out the Declaration of Hardware and Software Differences in Tested Devices (APPENDIX D: Declaration of Hardware and Software Differences in Tested Devices) and upload it to the Supporting Documentation area within the certification database.

2.3. Use of CTIA Certification Test Plans

As noted in the copyright statement on each of CTIA’s certification test plans, only CATLs are permitted to use the test plans for commercial testing purposes. No other test labs are permitted to use these test plans. The test plans may not be altered or reproduced in any way without prior permission from CTIA. No portions of the test plans may be used in other documents without prior permission from CTIA.

CATLs shall refer to the Policies and Procedures for CTIA Authorized Testing Laboratories document for the terms and conditions under which the certification test plans may be used.

For CTIA certification, the test plans must be run in their entirety. No tests shall be omitted. The only exceptions to this rule are:

- In cases where no testing is required (for example, see Section 3.4 of this document), but the vendor requests the CATL to run portions of a test plan. In this case, the CATL shall prominently place an explanation on the cover of the test report.
A Waiver Request Form (APPENDIX E: Waiver Request Form) has been approved by CTIA.

Use of CTIA certification test plans for pre-certification testing is permitted under the following conditions. The CATL shall inform CTIA of the vendor name and model name/number of the device to be tested by sending an e-mail to certification@ctia.org. The CATL shall prominently label on the cover of the test report: “Pre-Certification Test Report. For [vendor name] internal use only.” There is no CTIA certification fee for pre-certification testing. Within a reasonable period of time, the vendor is expected to submit a certification request following the procedures in Section 2.5 of this document.

Use of CTIA certification test plans for purposes outside of CTIA Certification must be pre-approved by CTIA. The CATL shall submit a request via CTIA’s certification database at https://cpo.ctia.org/ by selecting Non-Certification Testing, Submit Request. If approved, the CATL shall prominently label on the cover of the test report: “Test run with permission from CTIA. Device was not submitted for CTIA Certification”.

2.4. Certification Fees

Vendors shall pay a certification fee to CTIA (see APPENDIX B: CTIA Certification Fees) and shall inform the CTIA if a P.O. number shall be noted on CTIA’s invoice to the vendor. Vendors shall also pay a certification testing fee to each CATL utilized for certification testing. Certification testing fees will be independently determined by each CATL.

2.5. Vendor Submission

Vendors shall submit certification requests via CTIA’s 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 vendor shall select the appropriate request from the Request Type drop-down list:

- LTE/CDMA Device Certification Request – Initial
- LTE/CDMA Device Certification Request – Variant
- LTE/CDMA Device Certification Request – ECO

The vendor shall enter the requested information about the device and select a CATL.

The vendor shall select the operators allowed to view the device, and its certification record, on the CTIA certification database once it is certified.

The vendor shall read and agree to the certification license agreement terms and conditions (see APPENDIX B: LICENSE AGREEMENT) and click the Submit button.

CTIA will invoice the vendor for the CTIA certification fee as shown in APPENDIX A: Certification Fees.

2.6. Award of Certification

Upon completion of the following items, the device will be certified:
- Final test results, indicating the device has passed all required tests, from each CATL conducting testing on the device
- All required documents from the vendor
- Certification of the parent device, in the case of Variant Certification Requests and ECO Certification Requests
- Payment of the certification fees, in the case of Initial Certification Requests and Variant Certification Requests

2.7. **Period of Certification**

Provided that all terms defined in this document are met, CTIA Certification is valid the life of the device.

2.8. **Certification of Re-Labeled Devices**

A re-labeled device is defined as a device that is identical to a currently certified device, but has a different vendor name and model name/number.

- The device shall be submitted as an Initial certification request:
- The re-labeled vendor name and model name/number shall be entered
- The CATL used for the originally certified device shall be chosen
- The CATL shall upload the test reports of the originally certified device along with two additional documents:
  - A Product Equality Letter from the re-labeling vendor. This letter shall state that the re-labeled device is the same as the originally certified device (referenced by vendor name and model name/number as it appears in the certification database) and that no changes have been made other than the vendor name and model name/number. The letter shall be signed and dated.
  - An Authorization of Use Letter from the vendor of the originally certified device. This letter shall state that the vendor of the originally certified device allows the CATL to use the test reports from this device for certification of the relabeled device. The letter shall be signed and dated.
3. Evaluation Criteria

3.1. Effective Date

The applicable certification criteria for a given device will be those in effect, as defined in this PMD, on the date the certification request is submitted. Should the criteria change while the device is undergoing certification testing, the vendor has the option to utilize the new criteria.

The CTIA Certification Test Plans referenced in this section may be downloaded from CTIA’s web site at www.ctia.org/certification. The latest revision at the time the request is submitted shall be used. All testing must be performed in CTIA Authorized Testing Laboratories.

3.2. Conformance Testing

Devices incorporating LTE technology must be tested to the CTIA Conformance Test Plan for LTE Wireless Devices.

Devices incorporating CDMA technology must be tested to the CTIA Conformance Test Plan for CDMA Wireless Devices.

3.3. Cabled Interoperability Testing

Should the device require cabled interoperability testing, the vendor shall check the appropriate Cabled IOT Device Endorsement (CDMA Cabled IOT and/or LTE Cabled IOT) when submitting the certification request and select one or more CATLs for such testing.

3.4. Over-the-Air Performance Testing

All devices shall be tested to CTIA’s Certification Test Plan for Wireless Device Over-the-Air Performance. Test applicability shall be as described in Appendix O of the test plan.

For ECOs, testing must be conducted if the changes impact any of the following areas:

- Hardware design
- Calibration data/procedure
- Maximum output (radiated) power

If the changes do not impact these areas AND the conducted RF measurement has not changed +/- 1 db, then Over the Air Performance Testing on the ECO is not necessary.

3.5. Wi-Fi Testing

Devices that incorporate Wi-Fi technology (“Converged Devices”) shall be tested to the CTIA/Wi-Fi Alliance Test Plan for RF Performance Evaluation of Wi-Fi Mobile Converged Devices. The vendor shall check the Wi-Fi feature when submitting the certification request and select a CATL for such testing.
3.6. **Hearing Aid Compatibility (HAC) Testing**

Devices that are hearing aid compatible may optionally be tested to CTIA’s Certification Test Plan for Hearing Aid Compatibility. This is not a requirement for certification. Should a vendor choose to have the device tested to CTIA’s Certification Test Plan for Hearing Aid Compatibility, the vendor shall check the HAC feature when submitting the certification request.

If the HAC feature is checked, the following items shall be considered:

- If the manufacturer has declared an M rating for the device, the device shall be tested to Section 2 (RF Emissions Measurements) of the test plan.
- If the device supports T-coil and the manufacturer has declared a T rating for the device, then Section 3 (Audio Band Magnetic Field Measurements) of the test plan shall be performed.

3.7. **FCC Compliance**

Vendors shall obtain an FCC Grant of Equipment Authorization and provide the associated FCCID during the certification submission process.

3.8. **User’s Manual**

A user’s manual/guide for the device shall be supplied. A draft version is acceptable.
APPENDIX A: Certification License Agreement

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

<Date>

by and between

CTIA - The Wireless Association®
("CTIA")

and

<Manufacturer Name>
("Submitter")

<Model Name/#>
("Specified Device")

RECITALS

WHEREAS, CTIA-The Wireless Association®, its successors and assigns, hereinafter ("CTIA") is a non-profit trade association for the wireless industry and has established the CTIA Certification Program to encourage conformance with industry standards and requirements for wireless devices, components, and other related equipment, including the Specified Device, through independent verification;

WHEREAS, to ensure such independent verification, the CTIA Certification Program has developed objective test plans and procedures and utilizes independent, industry-recognized testing laboratories, otherwise known as CTIA Authorized Testing Laboratories ("CATLs"), to review and evaluate the compliance of Specified Devices in accordance with industry standards and requirements;

WHEREAS, CTIA owns all rights, title, and interest in the CTIA Certification Program Test Plans ("CTIA Test Plans");

WHEREAS, Submitter desires to enter into a voluntary relationship with CTIA for the testing of the Specified Device manufactured by or for the Submitter;

WHEREAS, Submitter will demonstrate to CTIA's satisfaction through an independent evaluation performed by a CATL that each Specified Device indicated directly above will meet CTIA's requirements for Certification as set forth in the applicable CTIA Certification Program Management Document and CTIA Test Plans ("CTIA Certification Requirements");

WHEREAS, upon receipt of written notification from CTIA acknowledging that Submitter's Specified Device has met the CTIA Certification Requirements, Submitter desires to pursue recognition for and represent such certification;

NOW THEREFORE, for these reasons, and for other good and lawful reasons and in consideration of the covenants set forth below, the parties agree as follows:
SECTION ONE
RIGHTS UPON CERTIFICATION

1.1 Submitter intends to sign and deliver this Agreement via electronic acceptance, which shall have the same force and effect as delivery of an original signature. Upon successful completion of the CTIA Certification Requirements, which includes the upload of completed test results to the CTIA Test Plan for the Specified Device ("Test Report") into CTIA’s Certification Database ("Database") by the CATL performing the testing, CTIA will deliver written notification to Submitter.

1.2 This Agreement shall be effective as of the day CTIA delivers written notification to Submitter acknowledging that the Specified Device has satisfied the CTIA Certification Requirements.

1.3 The rights provided for herein are expressly conditioned on the Specified Device satisfying the CTIA Certification Requirements and shall become effective only upon Submitter’s receipt of CTIA’s written acknowledgement of certification.

1.4 The electronic signing and submitting of this License Agreement constitutes Submitter’s understanding, acceptance, and agreement to the terms and conditions set forth below.

SECTION TWO
OWNERSHIP AND INTELLECTUAL PROPERTY

2.1 As between the Parties, CTIA owns and shall retain sole right, title and interest in and to CTIA Test Plans, CTIA Certification Requirements, CTIA Certification Program, and all intellectual property rights therein or thereto ("CTIA Owned Materials"). Submitter shall not acquire or retain any rights, title or interest in or to the CTIA Owned Materials except for the limited and expressed license set forth in this Section and Section 3 below.

2.2 As between the Parties, Submitter shall own the Test Report, subject to all rights, title, interests, and intellectual property rights to CTIA Owned Materials, and provided that Submitter grants to CTIA an exclusive, perpetual, irrevocable, worldwide, royalty free, fully-paid license to store, maintain, and access the Test Report in the Database.

SECTION THREE
LICENSE GRANT

3.1 The rights granted herein are granted only to the Submitter, and do not extend to Submitter’s shareholders, parents, affiliates, partners, or other related entities. The rights and obligations of this Agreement shall run to the named parties, their successors in interest, authorized assigns and insurers and reinsurers.

3.2 Subject to the terms and conditions set forth herein, Submitter shall have an exclusive, non-transferable, non-assignable right for as long as the Specified Device complies with the CTIA Certification Requirements, and without the right to sublicense, to represent the Specified Device as meeting CTIA’s Certification Requirements in Submitter’s non-consumer-facing documents, intranets, and other materials, whether in written, electronic, digital, graphic, or machine-readable form, or orally ("License"). CTIA will permit the internal or non-consumer-facing, commercial use of appropriate references to CTIA’s Certification Requirements, CTIA Test Plans, and the CTIA Certification Program for the sole and limited purpose of Submitter representing that the Specified Device satisfies the CTIA Certification Requirements. Submitter will not use the License for any other purpose.
3.3 Nothing in this Agreement shall be construed as granting Submitter a license to use any of CTIA's logos, trademarks, service marks, copyrighted materials ("CTIA Marks") or patents related to the Specified Device, CTIA's Certification Requirements, CTIA Test Plans, and the CTIA Certification Program except as expressly set forth by the License described in Subsection 3.2. Submitter shall not modify or alter any CTIA Marks without CTIA’s prior written consent, and Submitter’s use of such marks is conditioned on its compliance with any applicable CTIA usage guidelines. Any uses, modifications, or alteration of any CTIA Marks shall be the sole benefit of CTIA and shall accrue to the exclusive benefit of CTIA.

3.4 Submitter shall not make unauthorized, incomplete, inaccurate, or misleading references to CTIA, or that could reasonably be interpreted to mean CTIA, in connection with the Specified Device, CTIA Certification Requirements, CTIA Certification Program, CTIA Test Plans, CTIA Test Report, or otherwise ("Unauthorized CTIA Reference").

3.5 If CTIA knows, or has reason to know, of an Unauthorized CTIA Reference, Submitter shall modify, cure, or discontinue such use immediately upon CTIA’s written request.

3.6 Submitter shall be entitled to represent the Specified Device as meeting CTIA’s Certification Requirements pursuant to the terms set forth in this Agreement, as long as the Specified Device continues to meet CTIA’s Certification Requirements, which CTIA may amend, modify, or supplement at any time, at its sole discretion, provided that CTIA gives Submitter prior notice of any material changes.

SECTION FOUR
SUBMITTER OBLIGATIONS

4.1 The Specified Device shall comply with all of the CTIA Certification Requirements.

4.2 Submitter assumes sole and exclusive responsibility for any use or reference to CTIA Owned Materials, intellectual property rights to the CTIA Owned Materials, and the License, including, but not limited to, any references to CTIA, or that could be reasonably interpreted to reference CTIA, in connection with the Specified Device, CTIA Certification Requirements, CTIA Certification Program, and the CTIA Test Plans.

4.3 Submitter agrees that any tests or sampling of the Specified Device conducted by CTIA or CATLs, is only a check as to whether the Specified Device complies with CTIA’s Certification Requirements and in no way releases Submitter from responsibility for the Specified Device, including but not limited to any liabilities, claims, damages, or costs related to the Specified Device.

SECTION FIVE
CORRECTIVE ACTION

5.1 If at any point after this Agreement becomes effective, CTIA becomes aware through any CTIA tests, assessments, examinations, or otherwise that the Specified Device does not comply with, in whole or in part, the CTIA Certification Requirements ("Noncompliant Specified Device"), CTIA shall notify the Submitter, and the Submitter shall immediately and at its own expense, remove, delete, or destroy any references to CTIA in connection with the Noncompliant Specified Device, including any covenants, obligations, representations, or warranties. If Submitter is in possession or reasonable control of the Noncompliant Specified Device at the time of notification (including all replicate units thereof) and Submitter chooses not to pursue Subsection 4.2 herein, then Submitter agrees to use best efforts, at its own expense, to destroy all such Noncompliant Specified Devices.
5.2 If the Submitter wishes to maintain compliance with the CTIA Certification Requirements, Submitter shall, at its own expense, immediately notify CTIA of its decision and promptly rework, recall, or cure all units of the Noncompliant Specified Device that in CTIA’s opinion do not comply with the CTIA Certification Requirements, provided that such units are still in Submitter’s control at the time of notification of noncompliance. All rights, interests, and permissions granted herein shall immediately revert to CTIA until such units are reworked and cured to CTIA’s satisfaction and are no longer deemed noncompliant, which CTIA will acknowledge in a written notification to Submitter.

5.3 Submitter agrees that it will use best efforts to cooperate with and assist CTIA, or CTIA’s authorized third-party agents and contractors, including but not limited to applicable CATLs, in ascertaining the facts needed to determine that the Specified Device complies with CTIA’s Certification Requirements.

5.4 Submitter agrees that CTIA may notify vendors, authorities, potential users, and others of an improper or unauthorized reference to CTIA, provided that such notification is made to (1) protect CTIA’s property, brand, reputation, or other assets, (2) a matter of public interest, or (3) otherwise necessary for the protection of CTIA’s business or legal interests.

SECTION SIX
TERMINATION

6.1 This Agreement shall continue so long as the Specified Device meets the CTIA Certification Requirements, unless sooner terminated as set forth in this Section.

6.2 If Submitter fails to comply with any of the terms and conditions of this Agreement, CTIA may immediately suspend or terminate this Agreement by providing written notice to Submitter. If CTIA chooses to suspend this Agreement, it will specify the time period for such suspension in its written notification, as well as any applicable cure period.

6.3 Upon termination of this Agreement by CTIA, the license granted by Section 3 will terminate immediately and all rights, permissions, and interests shall revert immediately back to CTIA, and Submitter shall cease all use of CTIA Owned Materials, or any of CTIA’s intellectual property rights to the Test Report or otherwise, and shall not reference CTIA in connection with the Specified Device, including, but not limited to, any covenants, obligations, representations, or warranties.

6.4 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 SEVEN
INDEMNIFICATION

7.1 Submitter shall indemnify and hold 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 or breach of this Agreement by Submitter or its agents or employees, or from Submitter’s use, marketing, sale, or distribution of the Specified Device, including but not limited to any third-party claims 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. Submitter’s obligation to indemnify CTIA shall survive any termination or expiration of this Agreement. Conversely, CTIA shall indemnify and hold 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 from any reckless acts by CTIA or its agents or employees.
Submitter shall defend CTIA against any 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;

(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.

CTIA shall defend Submitter against any 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;

(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 EIGHT
LIMITATION OF LIABILITY

SUBMITTER ACKNOWLEDGES AND AGREES THAT IN NO EVENT SHALL CTIA BE LIABLE FOR ANY LOSS, DAMAGE, OR CLAIM, RELATED TO THE SPECIFIED DEVICE, WHETHER LIABILITY IS ASSERTED IN CONTRACT, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY), OR OTHER LEGAL THEORY. IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER PARTY, OR TO ANY OTHER 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.

SECTION NINE
NO APPROVAL

Nothing in this Agreement shall be interpreted or construed to constitute a guarantee, representation, or warranty by CTIA in connection with the Specified Device. No representation by Submitter in connection with its use, marketing, sale, or distribution of the Specified Device will directly or indirectly, explicitly or implicitly convey or suggest any such guarantee or warranty. CTIA reserves the right to require Submitter to include a statement disclaiming directly or indirectly CTIA's guarantee, representation or warranty in the marketing and informational materials associated with the Specified Device.

SECTION TEN
INSURANCE

10.1 Submitter will maintain during the period of this Agreement liability insurance of at least two million dollars in policy limits covering claims or suits related to the Specified Device, and will include CTIA as an additional insured on the policy as to matters covered by this Agreement, and Submitter will furnish to CTIA evidence of that insurance, upon CTIA’s written request.

10.2 Submitter must notify CTIA of cancellation or non-renewal of applicable insurance policies within 30 days of such cancellation or non-renewal. Failure to comply with the insurance provisions of this Agreement constitutes a material breach of Submitter’s material obligations under the Agreement, and may result, in suspension or revocation of the license granted hereunder as well as termination of the Agreement.

SECTION ELEVEN
MISCELLANEOUS

11.1 Survival. The sections 2, 3, 4, 5, 6, 7, 8, 9, and 11 shall survive the termination or expiration of this Agreement. Those sections that are intended by their nature to survive this Agreement shall survive the termination or expiration of this Agreement. Upon expiration or termination of this Agreement, any provisions herein that provide for its survival shall survive the termination or expiration of this Agreement for any reason. Provisions of other sections, which, by their nature, must remain in effect beyond the termination or expiration of this Agreement, shall also survive termination or expiration of this Agreement for any reason.

11.2 Assignment and Delegation. Submitter shall not assign this Agreement or its rights, and shall not delegate its duties and obligations under this Agreement to any other entity without the prior written consent of CTIA, which shall not be unreasonably withheld or denied. Furthermore, no work to be performed by Submitter hereunder shall be subcontracted to or performed on behalf of Submitter by any third party, except with the prior written consent of CTIA.

11.3 Governing Law. The Agreement shall be governed and interpreted in accordance with the laws of the District of Columbia without regard to principles of conflicts of laws. The Parties agree to submit to the exclusive jurisdiction over all disputes hereunder in the appropriate federal or state courts in the District of Columbia.

11.4 Arbitration. Unless unenforceable due to federal or state law, any controversy or claim, including, but not limited to, errors and omissions arising out of or relating to this Agreement or the breach thereof, shall be settled by arbitration in accordance with the rules, then in effect, of the American Arbitration Association (“AAA”) or, if AAA shall refuse to arbitrate any such controversy, by such arbitrators as the parties shall mutually agree upon. Judgment upon any award rendered by the arbitrators may be entered in any court having jurisdiction thereof. Any arbitration shall be held in the District of Columbia.

THE PARTIES AGREE THAT ANY DISPUTE WILL BE ARBITRATED ON AN INDIVIDUAL BASIS; CLASS, REPRESENTATIVE, AND PRIVATE ATTORNEY GENERAL ARBITRATIONS AND ACTIONS ARE NOT PERMITTED. A party may bring claims against another party only in that party's individual capacity and may not participate as a class member or serve as a named plaintiff in any purported class, representative, or private attorney general proceeding. This Arbitration Provision does not permit and explicitly prohibits the arbitration of consolidated, class, or representative disputes of any form. In addition, although the arbitrator may award any relief that a court could award that is individualized to the claimant and would not affect other parties, no party may seek, nor may the arbitrator award, non-individualized relief that would affect other parties. Further, the arbitrator may not consolidate or join more than one person's claims unless all parties affirmatively agree in writing. If any of the
prohibitions in the preceding paragraph is held to be unenforceable as to a particular claim, then that claim (and only that claim) must be severed from the arbitration and brought in court.

11.5 Entire Agreement. This Agreement constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes all prior and contemporaneous agreements, and communications, whether oral or written, between the Parties relating to the subject matter of this Agreement and all past courses of dealing or industry custom. This Agreement may be amended only with the specific written consent of both Parties.

11.6 Severability. If any court of law determines that any clause in the Agreement is unenforceable or void, that clause shall be deleted while the rest of the Agreement remains in force. Moreover, the Parties agree to replace the invalid provisions with a substitute provision that will satisfy the intent of the Parties.

11.7 No Waiver. The waiver by either Party of any breach of any provision of this Agreement shall not be construed to be either a waiver of CTIA’s or Submitter’s rights regarding any succeeding breach of any such provision or a waiver of the provision itself, nor shall any delay or omission on the part of CTIA or Submitter to exercise or avail itself of any right, power or privilege that it has, or may have hereunder, operate as a waiver of any right, power or privilege by CTIA or Submitter.
APPENDIX B: CTIA Certification Fees

<table>
<thead>
<tr>
<th>Certification Request Type</th>
<th>Fee (U.S. $) for Non-Converged Device</th>
<th>Fee (U.S. $) for Converged Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial</td>
<td>$12,500</td>
<td>$15,000</td>
</tr>
<tr>
<td>Variant</td>
<td>$3,125</td>
<td>$3,750</td>
</tr>
<tr>
<td>ECO</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

All fees will be invoiced to the vendor per the guidelines explained in Section 2.4 of this document.

Certification fees are per device.

Fees for Integrations and Re-Labeled Devices are the same as those of Variants.

Certification testing fees are separate from these fees and are determined independently by each CATL.
For devices incorporating CDMA technology:

Summary CTIA CDMA  
Test Report.doc

For devices incorporating LTE technology, refer to the GCF-CC reporting criteria.
APPENDIX D: Declaration of Hardware and Software Differences in Tested Devices
If the device does not meet the certification criteria, the vendor shall complete the Waiver Request Form and submit it to CTIA at certification@ctia.org. CTIA will review the request and attempt to provide an answer within 5 business days. If the request is approved, the CATL shall upload the form along with the test results to the certification database.
## APPENDIX F: Change History

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Description of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rev 1.0</td>
<td>August 2015</td>
<td>- Replaces CTIA CDMA Certification Program Management Document</td>
</tr>
<tr>
<td>Rev 2.0</td>
<td>May 2017</td>
<td>- Updated vendor submission process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Eliminated certification seal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Updated certification license agreement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Removed Supplier Best Practices section</td>
</tr>
</tbody>
</table>