

Battery Program Management Document

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1 Overview

1.1 Purpose

The purpose of the CTIA Battery Certification Program (“Program”) is to verify conformance of applicable products to IEEE Std 1725™¹-2011 (“IEEE 1725”), Standard for Rechargeable Batteries for Cellular Telephones and to IEEE Std 1625™²-2008 (“IEEE 1625”), Standard for Rechargeable Batteries for Multi-Cell Mobile Computing Devices.

The Program consists of the following elements:

- 1) Battery cell manufacturing site authorization based on on-site audit and analysis by a CTIA Authorized Test Lab (CATL) of management controls, process controls, quality systems and technical competence;
- 2) Battery cell product recognition based on testing and analysis by a CATL, and cell vendor declaration of compliance;
- 3) Battery pack product recognition based on testing and analysis by a CATL, and pack vendor declaration of compliance;
- 4) Adapter product recognition/certification based on testing and analysis by a CATL, and adapter vendor declaration of compliance;
- 5) System certification based on use of recognized subsystems, System test and analysis by a CATL, and a System Vendor declaration of compliance

1.2 Scope

This Battery Program Management Document (BPMD) defines the requirements and processes of the Program. For cell and pack vendors, this document describes the requirements for obtaining and maintaining product recognition. For adapter vendors, this document describes the requirements for obtaining and maintaining product recognition and product certification. For System Vendors, this document describes the requirements for obtaining and maintaining System certification. For test laboratories, this document describes the requirements to become a CTIA Authorized Testing Laboratory (CATL) and the procedures to evaluate vendors' products.

1.3 Disclaimer

CTIA and the CATL make no representations that a certified System or a recognized Subsystem will operate free from defect, without error or according to its applicable design and technical standards.

¹ IEEE Std 1725 is a registered trademark of the Institute of Electrical and Electronics Engineers, Inc.

² IEEE Std 1625 is a registered trademark of the Institute of Electrical and Electronics Engineers, Inc.

1.4 Definitions

Note: the following definitions may differ from the definitions in IEEE 1725 and IEEE 1625.

Adapter: A device or combination of devices in the power path that transforms the available power from an external source (e.g. a wall outlet, airline or automobile outlet, etc.) to the power used by the host (an adapter is often referred to as a power supply). Adapters may be either Recognized or Certified.

Adapter Simulator: An assembly which simulates an Adapter for System level evaluation of Systems certified without a known Adapter.

Audit Due Date: The date by which the cell manufacturing site must have the follow-up audit performed. The Audit Due Date is 12 months from date of the previous on-site audit (date auditor physically at cell manufacturing site conducting audit) and must be performed on or before this date. This date will be entered by the CATL when uploading the current audit data to the CTIA certification database.

Battery/Battery Pack: An assembly of any number of Li-Ion or Li-Ion Polymer cells, associated electronics, battery packaging and connector(s).

BPMD: Battery Program Management Document.

CATL Worksheets: A set of Microsoft Excel worksheets, based on the current CRSL, to be completed by the Subsystem vendor and the CATL, serving as a submission form and itemization of compliance results.

CATL: CTIA Authorized Test Lab with scope of Battery Certification. For this Program, the CATL will be authorized by CTIA to perform all the requirements in the applicable CRD (i.e., both testing and auditing). CATLs will be authorized to conduct evaluations to either the CTIA Certification Requirements for Battery System Compliance to IEEE 1725 and/or the CTIA Certification Requirements for Battery System Compliance to IEEE 1625.

Cell: Basic manufactured Li-Ion or Li-Ion Polymer unit providing a source of electrical energy by direct conversion of chemical energy that consists of electrodes, separators, electrolyte, container and terminals, and that is designed to be charged electrically.

Certified Adapter: An Adapter approved by CTIA as meeting the requirements of the Program for a Certified Adapter. The adapter shall have a permanently connected or detachable output cable. The output cable shall terminate with a USB-IF Micro-B connector. The adapter may also be known as a Common Power Supply (CPS).

Certified System: A System approved by CTIA as meeting the requirements of the Program.

CRD: Certification requirements Document. There is a CRD for IEEE 1725 and a CRD for IEEE 1625.

CRSL: Certification Requirements Status List. There is a CRSL for IEEE 1725 and a CRSL for IEEE 1625.

Declaration of Compliance: A declaration stating that the System or Subsystem complies with all applicable provisions of IEEE 1725 or IEEE 1625.

Embedded Pack: A non-user replaceable pack.

Host: A device that is powered by a battery and/or charges the battery. Mobile phones, netbooks and charger-only devices are examples of a host device.

Host Simulator: An assembly which simulates a Host for System level evaluation of an Adapter to be Certified without a known Host.

Hybrid: A Subsystem that cannot be assigned to a single Subsystem category, but utilizes multiple categories and may also exhibit characteristics of a Host. A power bank is an example of a Hybrid device.

Operator: A provider of Commercial Mobile Radio Services as defined by the FCC.

Recognized Subsystem: A Cell, Battery Pack or Adapter that is in compliance with the requirements of this document.

Subsystem: a Cell, Battery Pack, Adapter or Hybrid.

System: A combination of cell(s), battery pack(s), host, and adapter(s). The System may also include Hybrid devices.

Subsystem Compliance Folder: The Declaration of Compliance, CATL evaluation report and CATL worksheets.

Subsystem Vendor: A supplier of a Subsystem.

System Compliance Folder: The Declaration of Compliance, CATL evaluation report and CATL worksheets.

System Vendor: A supplier of a System. For the purposes of this document, only a Host supplier may be a System Vendor.

2 Roles and Responsibilities

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

2.1 Subsystem Vendor

Vendors shall ensure that their Subsystems are evaluated for compliance to IEEE 1725 or IEEE 1625 by a CATL.

Vendors shall ensure that their Cell manufacturing sites are evaluated for compliance to IEEE 1725 and/or IEEE 1625 by a CATL.

Subsystem recognition requests and Adapter certification requests shall be submitted to CTIA. Only Subsystem Vendors may submit these types of requests.

Vendors shall pay a fee to CTIA (see [APPENDIX A: CTIA Recognition and Certification Fees](#)) for recognition of a Subsystem or certification of an Adapter.

Vendors may select any CATL for the evaluation and are responsible for any required contracts and non-disclosure agreements with their suppliers and the CATL. Vendors are free to select different CATLs for evaluation of subsystems and manufacturing site audits or to change CATLs at their option. Any issues regarding the performance of a CATL may be brought to the attention of CTIA.

Vendors shall be responsible for the fees associated with the CATL evaluation. These fees will be independently determined by each CATL.

2.2 System Vendor

System Vendors shall evaluate their System for compliance to IEEE 1725 or IEEE 1625 by using criteria set forth in the CTIA Certification Requirements for Battery System Compliance to IEEE 1725 document or CTIA Certification Requirements for Battery System Compliance to IEEE 1625 document (CRD) in accordance with the applicable version of the Certification Requirements Status List (CRSL).

Vendors shall submit System certification requests to CTIA. Only System Vendors may submit System certification requests.

Vendors shall pay a fee to CTIA (see [APPENDIX A: CTIA Recognition and Certification Fees](#)) for certification of a System.

Vendors may select any CATL for the evaluation and are responsible for any required contracts and nondisclosure agreements with their suppliers (e.g., pack vendor, cell vendor, adapter vendor) and the CATL.

Vendors shall be responsible for the fees associated with the CATL evaluation. These fees will be independently determined by each CATL.

2.3 CTIA

As owner of the Program, CTIA defines the requirements for CTIA recognition and certification; administers the overall program; authorizes CATLs; reviews recognition and certification applications; awards CTIA recognition and certification to the vendor; and maintains product compliance folders for Recognized Subsystems and Certified Systems.

2.4 CATL

CATLs shall evaluate Systems, Subsystems and manufacturing sites using criteria set forth in the CRD in accordance with the applicable version of the CRSL. 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.

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/.

3 Subsystem Recognition Process

3.1 Introduction

To obtain recognition of a Subsystem, the Subsystem vendor submits a recognition request to CTIA. The vendor selects a CATL to evaluate compliance to IEEE 1725 or IEEE 1625 using criteria set forth in the CRD in accordance with the applicable version of the CRSL. The CATL evaluates compliance and provides an evaluation report to CTIA. The vendor declares compliance to IEEE 1725 or IEEE 1625, agrees to the recognition license agreement terms and conditions, and pays a recognition fee to CTIA. For cells, the manufacturing site(s) must also be evaluated by a CATL and authorized by CTIA. CTIA recognizes the Subsystem when all steps are complete.

See [APPENDIX K: Process Flowchart](#) for an overview of the process.

3.2 Subsystem Recognition Request

Vendors shall submit Subsystem recognition 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.

Once logged into the certification database, the Vendor shall select the appropriate request type: from the Recognition/Audit Request drop-down list:

For IEEE 1725 Compliant Subsystems:

- Cell Recognition Request – 1725
- Pack Recognition Request – 1725
- Embedded Pack Recognition Request – 1725
- Adapter Recognition Request – 1725
- Hybrid Recognition Request – 1725

For IEEE 1625 Compliant Subsystems:

- Cell Recognition Request – 1625
- Pack Recognition Request – 1625
- Embedded Pack Recognition Request – 1625
- Adapter Recognition Request – 1625
- Hybrid Recognition Request – 1625

The vendor shall select "Initial" Request Type and enter information about the Subsystem.

- For cells, the vendor shall identify the site(s) where the cell is manufactured. If the cell is manufactured in multiple sites, those sites shall all be identified on the request. Only authorized sites may be selected (see Section 3.4 of this document).
- For packs, including embedded packs, the vendor shall identify the site(s) where the pack is manufactured. The vendor shall also identify the cell(s) used in the pack. If a cell is already recognized, it will appear on a drop-down list. If a cell is not yet recognized, the vendor shall check the “Pending Recognition” box (the pack can be recognized only after that cell becomes recognized, however).
- For adapters, the vendor shall identify the site(s) where the adapter is manufactured.
- For devices that do not exactly fit the category of pack or adapter (e.g., a battery-powered DC-DC converter, an external battery with self-contained charging circuitry, a hybrid charger/adapter), the vendor shall select “Hybrid Recognition Request”.

Multiple models may be submitted in a single request provided there are no differences that impact the requirements of this Program.

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

The vendor shall read and agree to the Declaration of Compliance for IEEE 1725 (see [APPENDIX C: Subsystem Declaration of Compliance – IEEE 1725](#)) or Declaration of Compliance for IEEE 1625 (see [APPENDIX D: Subsystem Declaration of Compliance – IEEE 1625](#)).

The vendor shall read and agree to the Recognition License Agreement (see [APPENDIX E: Subsystem Recognition Agreement](#)).

CTIA will invoice the vendor for the CTIA fees as described in [APPENDIX A: CTIA Recognition and Certification Fees](#). Vendor shall inform CTIA if a P.O. number is required on the invoice.

The CATL will receive an e-mail notification of the recognition request. The CATL will log into the database (<https://cpo.ctia.org/>) 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 vendor may no longer make changes to the request. The vendor shall contact the CATL or CTIA if any changes need to be made to the data entered.

3.3 CATL Evaluation

The vendor shall provide, as appropriate, declarations, design data, manufacturing data, test data, test reports, audit reports, test samples and device specifications as required for the CATL to complete its evaluation.

For cells, a set of test samples (as defined in the CRD) shall be provided from each manufacturing site.

For packs, a set of test samples (as defined in the CRD) for each combination of pack manufacturing site and cell model shall be submitted.

- Should the pack contain multiple revisions of the cell or same cell revision from multiple manufacturing sites, only one revision of the cell or a cell from one manufacturing site

needs to be considered for testing at the pack level. The vendor shall ensure the cell revision or cell manufacturing site being tested represents the worst-case scenario for pack recognition and is currently recognized. Should the pack contain multiple cell models, each cell model shall be tested at the pack level.

- Should pack manufacturing sites use identical processes, as reviewed and agreed upon by the CATL, a full set of test samples from each site may not be required. To make this determination, the pack assembler shall provide 2 battery packs from each alternative pack manufacturing site for inspection, along with a declaration that the assembly and test processes are identical between the manufacturing sites.

If a pack and cell are undergoing parallel recognition at different CATLs, the pack vendor shall supply a signed declaration to the CATL conducting the pack review. The declaration shall indicate that the cell evaluated within the pack is identical to the cell that achieved recognition.

The CATL shall use the Certification Requirements Status List (CRSL) to determine the applicable recognition steps.

After accepting the request, the CATL shall work with the vendor to conduct an evaluation, which might include testing samples, reviewing supplied evidence or conducting an on-site audit³. The evaluation may start only after the vendor has entered the request into the database and the CATL has accepted the request.

Non-compliances will be resolved between the CATL and the vendor.

Should the CATL identify a potential problem with a requirement, it shall issue a Change Request (CR), with adequate justification, proposing a change in category status. The CR shall be sent to all active CATLs for review. The CATLs shall have 5 business days to comment on the CR. Comments arguing against the change shall include adequate justification. Upon mutual resolution of any comments, the requirement may be changed.

Test results from similar products may be used at the CATL's judgment. The CATL shall provide justification in the evaluation report for using these results.

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

- Enter the CRSL version used for the evaluation (the version to be used is one that is active on the date the evaluation report is uploaded to the database)
- Verify the Subsystem information (correcting and updating as necessary). If the vendor selected the "Hybrid Recognition Request" type when entering the subsystem request, the CATL will categorize the device as a pack, adapter or both (and will enter any additional required information).
- Enter the start and end dates of the review
- Upload the CATL evaluation report and the completed CATL Worksheets (the report and worksheets shall not contain any confidential/proprietary technical information). The vendor may then view and download these documents via the database.

The CATL evaluation report shall have a cover page with the company logo and shall include the following information:

³ An on-site audit may be required to evaluate a subsystem. The audit is product-specific and augments the manufacturing site authorization audit.

- 1) Subsystem Vendor name, model number, revision number and capacity (as appropriate) for each Subsystem evaluated
- 2) Review date(s)
- 3) IEEE 1725 or IEEE 1625 version, and CRSL versions
- 4) Summary of review
- 5) Person(s) who conducted evaluation
- 6) Contact point
- 7) Lab accreditation identifier (issued by accreditation body), CATL authorization code
- 8) Signature of authorized representative

CATL evaluation reports, CATL worksheets, and declarations will be accessible by the vendor via CTIA's certification database and retained by CTIA for a period of 5 years from the date of recognition, after which all documentation will be destroyed.

Unless authorized by the Subsystem Vendor, the Compliance Folder will be maintained in confidence by CTIA.

3.4 Cell Manufacturing Site Authorization

Cell vendors shall select a CATL to audit their manufacturing sites in accordance with the applicable version of the CRSL. The vendor shall determine what constitutes the manufacturing site and provide a description to the CATL.

Vendors shall submit manufacturing site audit requests via CTIA's certification database at <https://cpo.ctia.org/>. The vendor shall select either Site Audit Request - 1725 or Site Audit Request - 1625, select "Initial" Request Type and enter information about the manufacturing site. The vendor shall select a CATL and request a start date.

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

- Enter the CRSL version used for the audit (the version to be used is one that is active on the date the audit report is uploaded to the database)
- Verify the site information (correcting and updating as necessary)
- Enter the start and end dates of the audit
- Link the audit request to another audit request, if necessary
- Upload a summary audit report, which will include:
 - Cell Manufacturing Site name
 - Cell Manufacturing Site address

- A judgment of whether the site audited complies with IEEE 1725 or IEEE 1625 using criteria set forth in the CRD
- Review date(s)
- IEEE 1725 or IEEE 1625 version, and CRSL version
- Summary of review
- Detail whether this audit is linked to another site audit
- Person(s) who conducted audit

CTIA will authorize those sites that are in compliance, as recommended by a CATL.

Cells can only be recognized once the sites where they are manufactured are authorized by CTIA.

Once authorized, the vendor shall evaluate all manufacturing process changes to determine if any processes within the scope of IEEE 1725 or IEEE 1625 have been changed. Processes within the scope of IEEE 1725 or IEEE 1625 that have been changed shall be communicated to the CATL by the vendor, along with applicable supporting evidence. The CATL shall determine whether another audit is required to assist in its evaluation of the supporting evidence. Should an audit be required, the vendor shall submit a site audit request via CTIA's certification database at <https://cpo.ctia.org/>, selecting the "Update/Renewal" Request Type. Upon completion of the evaluation, the CATL shall log into CTIA's certification database and upload a summary report, which will include the information above. If, in the CATL's judgment, the sites no longer comply, cells manufactured at those sites may no longer be submitted for recognition.

Manufacturing sites shall be re-audited on an annual basis (i.e., 12 months from the last full audit and identified in the certification database as "Audit Due Date"). The vendor shall submit a site audit request via CTIA's certification database at <https://cpo.ctia.org/>, selecting the "Update/Renewal" Request Type. During follow-up audits, any non-compliances must be addressed and closed within 30 calendar days from date the non-compliances were issued. Manufacturing sites failing to address any non-compliance within the 30 days will be removed from the list of authorized cell manufacturing sites; a new audit must be performed in order to be reinstated.

Sites not re-audited after the 12-month period will be removed from the list of authorized cell manufacturing sites; cells manufactured at those sites may no longer be submitted for recognition.

3.5 Recognition

Upon completion of the following items, a Subsystem will be recognized:

- CATL evaluation report and completed CATL Worksheets uploaded by the CATL
- Manufacturing site authorization (for cells)
- Payment of the CTIA recognition fees

3.6 Changes to Recognized Subsystems

Once a Subsystem is recognized, the vendor shall evaluate any changes within the Subsystem that fall within the scope of IEEE 1725 or IEEE 1625 to determine whether the changes impact the recognition. Changes that do impact the recognition shall be submitted as an ECO (by logging into the CTIA certification database, selecting Submit New Request and choosing “ECO” Request Type), identifying the new Revision # of the Subsystem. Supporting evidence shall be provided to the CATL. For any changes, the current revision of the CRSL and CRD shall be used; in addition a gap analysis must be performed by the CATL between the CRSL and CRD used for the most recently approved request and the current CRSL and CRD. Additional documentation and/or testing may be required if any requirements have changed.

Once a Subsystem is recognized, any required changes to the subsystem model number in the certification database shall be submitted as a new Initial request.

A change in the capacity of either a cell or a pack constitutes a new model. A new Initial request shall be submitted, with a new model number.

3.7 De-Listing

Subsystem vendors may at any time request de-listing of a recognized Subsystem. One reason for doing this would be to remove from the database drop-down selections products that are no longer on the market. Another reason would be to notify CTIA of Subsystems that are no longer in compliance. The vendor shall send an e-mail to certification@ctia.org and include the manufacturer name, model #, revision # and reason for requesting de-listing.

If the reason is that the product is no longer on the market, CTIA will remove the Subsystem from the recognized Subsystem drop-down selections in the certification database so that it can no longer be chosen when a new request is entered. The Subsystem will still appear on the Subsystem recognition list.

If the reason is that the product is no longer in compliance, CTIA will withdraw the recognition as well as remove the Subsystem from the Subsystem recognition list and recognized Subsystem drop-down selections in the certification database. CTIA will make its best effort to contact the vendors and operators listed in its certification database who may be impacted

3.8 Re-Labeled Subsystems

A re-labeled Subsystem is defined as a Subsystem that is identical to a currently recognized Subsystem, but has a different vendor name and may (or may not) have a different model number.

The re-labeling vendor may recognize a re-labeled Subsystem by entering the Subsystem into CTIA’s certification database as an Initial recognition request:

- The re-labeled vendor name and model number shall be entered
- The CATL used for the originally recognized Subsystem shall be chosen
- The CATL shall evaluate any requirements that may be affected by the re-labeling (e.g., traceability) and upload the CATL evaluation report of the originally recognized Subsystem along with two additional documents:

- A Product Equality Letter from the re-labeling vendor. This letter shall state that the re-labeled Subsystem is the same as the originally recognized Subsystem (referenced by vendor name and model number as it appears in CTIA's certification database) and that no changes have been made other than the vendor name and possibly model number. The letter shall be signed and dated.
- An Authorization of Use Letter from the vendor of the originally recognized Subsystem. This letter shall state that the vendor of the originally recognized Subsystem allows the CATL to use the evaluation report from this Subsystem for recognition of the relabeled Subsystem. The letter shall be signed and dated.

3.9 Embedded Packs

There are two options for the recognition of embedded (non-user replaceable) packs:

- a) Option 1

The embedded pack may follow the standard pack recognition process. In this case, the pack must meet all of the requirements of the pack section of the CRSL including Sections 5.23 and 5.48 for IEEE 1725 and Sections 5.48, 5.66 and 5.75 for IEEE 1625. During the System certification request, the host vendor will find the pack listed in the recognized pack drop-down list. In this option, compliance is not dependent on the Host. To use this process, the pack vendor shall select one of the following request types, as shown in Section 3.2 of this document:

 - Pack Recognition Request – 1725
 - Pack Recognition Request – 1625
- b) Option 2

Alternatively, the embedded pack may follow a special embedded pack recognition process. The pack will be evaluated by using the requirements of the pack section of the CRSL and omitting Sections 5.23 and 5.48 for IEEE 1725 and Sections 5.48, 5.66 and 5.75 for IEEE 1625. These sections will be evaluated during the System certification request⁴. Because these sections will not be performed during the pack evaluation, the pack will be listed as a recognized embedded pack in the CTIA certification database. During the System certification request, the host vendor will find the pack listed in the recognized pack drop-down list (when selected, the host vendor will be notified that the pack is an embedded pack and will require additional battery pack validation testing during the system evaluation). In this option, compliance is dependent on the Host.

To use this process, the pack vendor shall select one of the following request types, as shown in Section 3.2 of this document:

- Embedded Pack Recognition Request – 1725
- Embedded Pack Recognition Request – 1625

This special embedded pack recognition process may also apply in cases where the pack protection circuitry is part of the host. The host vendor shall make two submissions: an embedded pack recognition request and a System certification

⁴ The CATL performing the pack evaluation may, at the request of the pack vendor, perform these optional tests for embedded pack recognition. Should the CATL performing the System evaluation request confirmation that these optional tests were conducted, the CATL that performed the pack evaluation shall confirm this by appropriate means.

request. The embedded pack recognition request and the System certification request may have the same model number.

3.10 Embedded Adapters

Embedded (non-user replaceable) adapters cannot be recognized and shall be evaluated as part of the System certification request (see Section [5.2](#) of this document).

4 Adapter Certification Process

4.1 Introduction

To obtain certification of an Adapter, the Adapter vendor submits a certification request to CTIA. The vendor selects a CATL to evaluate compliance to IEEE Std 1725 using criteria set forth in the CRD in accordance with the applicable version of the CRSL. The CATL evaluates compliance and provides an evaluation report to CTIA. The vendor submits a Declaration of Compliance and pays a certification fee to CTIA. CTIA certifies the Adapter when all steps are complete.

See [APPENDIX K: Process Flowchart](#) for an overview of the process.

4.2 Adapter Certification Request

Vendors shall submit Adapter 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 "Initial" Request Type and enter information about the Adapter, including identification of the site(s) where the adapter is manufactured.

Multiple models may be submitted in a single request provided there are no differences that impact the requirements of this Program.

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

The vendor shall read and agree to the Declaration of Compliance for IEEE 1725 (see [APPENDIX C: Subsystem Declaration of Compliance – IEEE 1725](#)).

The vendor shall read and agree to the Adapter Certification License Agreement (see [APPENDIX J: Adapter Certification Agreement](#)).

CTIA will invoice the vendor for the CTIA fees as described in [APPENDIX A: CTIA Recognition and Certification Fees](#). Vendor shall inform CTIA if a P.O. number is required on the invoice.

The CATL will receive an e-mail notification of the certification request. The CATL will log into the database (<https://cpo.ctia.org/>) 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 vendor may no longer make changes to the request. The vendor shall contact the CATL or CTIA if any changes need to be made to the data entered.

4.3 CATL Evaluation

The vendor shall provide, as appropriate, declarations, design data, manufacturing data, test data, test reports, audit reports, test samples and device specifications as required for the CATL to complete its evaluation.

The CATL shall use the Certification Requirements Status List (CRSL) to determine the applicable certification steps.

After accepting the request, the CATL shall work with the vendor to conduct an evaluation, which might include testing samples, reviewing supplied evidence or conducting an on-site audit⁵. The evaluation may start only after the vendor has entered the request into the database and the CATL has accepted the request.

The Adapter will be tested against a Host Simulator.

Non-compliances will be resolved between the CATL and the vendor.

Should the CATL identify a potential problem with a requirement, it shall issue a Change Request (CR), with adequate justification, proposing a change in category status. The CR shall be sent to all active CATLs for review. The CATLs shall have 5 business days to comment on the CR. Comments arguing against the change shall include adequate justification. Upon mutual resolution of any comments, the requirement may be changed.

Test results from similar products may be used at the CATL's judgment. The CATL shall provide justification in the evaluation report for using these results.

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

- Enter the CRSL version used for the evaluation (the version to be used is one that is active on the date the evaluation report is uploaded to the database)
- Verify the Adapter information (correcting and updating as necessary).
- Enter the start and end dates of the review
- Upload the CATL evaluation report and the completed CATL Worksheets (the report and worksheets shall not contain any confidential/proprietary technical information). The vendor may then view and download these documents via the database.

The CATL evaluation report shall have a cover page with the company logo and shall include the following information:

- 1)** Adapter Vendor name, model number and revision number for each Adapter evaluated
- 2)** Review date(s)
- 3)** IEEE 1725 and CRSL versions
- 4)** Summary of review
- 5)** Person(s) who conducted evaluation
- 6)** Contact point
- 7)** Lab accreditation identifier (issued by accreditation body), CATL authorization code
- 8)** Signature of authorized representative

⁵ An on-site audit may be required to evaluate a subsystem.

CATL evaluation reports, CATL worksheets, and declarations will be accessible by the vendor via CTIA's certification database and retained by CTIA for a period of 5 years from the date of certification, after which all documentation will be destroyed.

Unless authorized by the Adapter Vendor, the Compliance Folder will be maintained in confidence by CTIA.

4.4 Certification

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

- CATL evaluation report and completed CATL Worksheets uploaded by the CATL
- Payment of the CTIA certification fees
-)

4.5 Changes to Certified Adapters

Once an Adapter is certified, the vendor shall evaluate any changes within the Adapter that fall within the scope of IEEE 1725 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 "ECO" Request Type), identifying the new Revision # of the Adapter. Supporting evidence shall be provided to the CATL. For any changes, the current revision the CRSL and CRD shall be used, in addition a gap analysis must be performed by the CATL between the CRSL and CRD used for the most recently approved request and the current CRSL and CRD. Additional documentation and/or testing may be required if any requirements have changed.

Once an Adapter is certified, any required changes to the Adapter model number in the certification database shall be submitted as a new request.

4.6 De-Listing

Adapter vendors may at any time request de-listing of a certified Adapter. One reason for doing this would be to remove from the database drop-down selections products that are no longer on the market. Another reason would be to notify CTIA of Adapters that are no longer in compliance. The vendor shall send an e-mail to certification@ctia.org and include the manufacturer name, model #, revision # and reason for requesting de-listing.

If the reason is that the product is no longer in compliance, CTIA will withdraw the certification as well as remove the Adapter from the Certified Adapter list. CTIA will make its best effort to contact the vendors and operators listed in its certification database who may be impacted

4.7 Re-Labeled Certified Adapters

A re-labeled Certified Adapter is defined as a Certified Adapter that is identical to a currently Certified Adapter, but has a different vendor name and may (or may not) have a different model number.

The re-labeling vendor may certify a re-labeled Adapter by entering the Adapter into CTIA's certification database as an Initial certification request:

- The re-labeled vendor name and model number shall be entered
- The CATL used for the originally certified Adapter shall be chosen
- The CATL shall evaluate any requirements that may be affected by the re-labeling (e.g., traceability) and upload the CATL evaluation report of the originally certified Adapter along with two additional documents:
 - A Product Equality Letter from the re-labeling vendor. This letter shall state that the re-labeled Adapter is the same as the originally certified Adapter (referenced by vendor name and model number as it appears in CTIA's certification database) and that no changes have been made other than the vendor name and possibly model number. The letter shall be signed and dated.
 - An Authorization of Use Letter from the vendor of the originally certified Adapter. This letter shall state that the vendor of the originally certified Adapter allows the CATL to use the evaluation report from this Adapter for certification of the relabeled Adapter. The letter shall be signed and dated.

5 System Certification Process

5.1 Introduction

To certify a System, the System Vendor submits a certification request to CTIA. The System must include one or more recognized packs or recognized embedded (non-user replaceable) packs. The System may also include one or more recognized adapters or an embedded (non-user replaceable) adapter. Should the System not contain an adapter, the System will be tested with an Adapter Simulator or Certified Adapter, depending on the test.

The vendor selects a CATL to evaluate compliance to IEEE 1725 or IEEE 1625 using criteria set forth in the CRD in accordance with the applicable version of the CRSL. The CATL evaluates compliance and provides an evaluation report to CTIA. The vendor submits a Declaration of Compliance and pays a certification fee to CTIA. CTIA certifies the System when all steps are complete.

See [APPENDIX K: Process Flowchart](#) for an overview of the process.

Systems with single-cell batteries shall be certified to IEEE 1725.

Systems containing only cells connected in parallel shall be certified to IEEE 1725.

Systems with cells connected in series, including series and parallel combinations, shall be certified to IEEE 1625.

5.2 Certification Request

System 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.

Only System Vendors may submit System certification requests.

Systems shall be certified based on the host. Multiple models may be submitted in a single request provided there are no differences that impact the requirements of this Program. Any subsequent additions or changes to the System shall be entered as ECOs (see Section 5.5 of this document).

A new System may be certified using the supporting evidence of a previously certified System provided there are no differences that impact the requirements of this Program. The System Vendor shall provide a declaration to the CATL stating that the two Systems are identical in terms of the Program requirements. The declaration shall reference the host model number of the new System and the previously certified System. The CATL shall submit updated CATL Worksheets and CATL Evaluation Report referencing the model number of the new host. The evaluation report shall indicate that the evaluation from the previous System was used and shall include the justification provided by the System Vendor. The CRD version of the previously certified System will therefore apply to this new System, even if that CRD version is now expired. The Declaration of Compliance submitted by the System Vendor must reference the new model number.

The System Vendor shall select Battery System Certification Request and then select "Initial" Request Type. The System Vendor shall then enter information about the System, including selecting the recognized Subsystems that are part of the System. Recognized Subsystems will

appear on drop-down lists for selection. If a subsystem is not yet recognized, the System Vendor shall check the “Pending Recognition” box (the System can be certified only after those subsystems become recognized, however).

- If the Host includes an embedded adapter, the vendor shall check “Unrecognized Embedded Adapter” and enter the manufacturer name and model number of the embedded adapter. As the adapter is an integral part of the Host and may not have a model number of its own, any identifying information may be entered.
- If the System does not include an Adapter, the vendor shall check “No Adapter”.

The System Vendor shall select a CATL and request a start date.

The System Vendor shall also select the operators allowed to view the contents of the System Compliance Folder once the System is certified. Viewing the System Compliance Folder also allows for viewing of the Subsystem compliance folders.

The System Vendor shall read and agree to the Declaration of Compliance for IEEE 1725 (see [APPENDIX F: System Declaration of Compliance – IEEE 1725](#)) or Declaration of Compliance for IEEE 1625 (see [APPENDIX G: System Declaration of Compliance – IEEE 1625](#)).

The vendor shall read and agree to the Battery System Certification Agreement (see [APPENDIX H: Battery System Certification Agreement](#)).

CTIA will invoice the System Vendor for the CTIA fees as described in [APPENDIX A: CTIA Recognition and Certification Fees](#).

The CATL will receive an e-mail notification of the certification request. The CATL will log into the database (<https://cpo.ctia.org/>) 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 vendor may no longer make changes to the request. The vendor shall contact the CATL or CTIA if any changes need to be made to the data entered.

5.3 CATL Evaluation

The vendor shall provide, as appropriate, declarations, design data, manufacturing data, test data, test reports, audit reports, test samples and device specifications as required for the CATL to complete its evaluation.

Test samples covering all iterations of the System should be submitted. If all iterations are not submitted, justification shall be documented in the CATL evaluation report.

The CATL shall use the Certification Requirements Status List (CRSL) to determine the applicable recognition steps.

After accepting the request, the CATL shall work with the vendor to conduct an evaluation, which might include testing samples, reviewing supplied evidence or conducting an on-site audit⁶. The evaluation may start only after the vendor has entered the request into the database and the CATL has accepted the request.

⁶ An on-site audit may be required to evaluate a subsystem. The audit is product-specific and augments the manufacturing site authorization audit.

Non-compliances will be resolved between the CATL and the vendor.

Should the CATL identify a potential problem with a requirement, it shall issue a Change Request (CR), with adequate justification, proposing a change in category status. The CR shall be sent to all active CATLs for review. The CATLs shall have 5 business days to comment on the CR. Comments arguing against the change shall include adequate justification. Upon mutual resolution of any comments, the requirement may be changed.

Test results from similar products may be used at the CATL's judgment. The CATL shall provide justification in the evaluation report for using these results.

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

- Enter the CRSL version used for the evaluation (the version to be used is one that is active on the date the evaluation report is uploaded to the database)
- Verify the System information (correcting and updating as necessary)
- Enter the start and end dates of the review
- Upload the CATL evaluation report and the completed CATL Worksheets (the report and worksheets shall not contain any confidential/proprietary technical information). The vendor may then view and download these documents via the database.

The CATL evaluation report shall have a cover page with the company logo and shall include the following information:

- 1)** System Vendor name
- 2)** Model number(s) of host
- 3)** Hardware version of host
- 4)** Software version of host
- 5)** Vendor names and model numbers of System components (batteries, cells, adapters). Should a Subsystem contain multiple model numbers, the specific model numbers used within the System shall be clearly identified.
- 6)** Review date(s)
- 7)** IEEE 1725 or IEEE 1625 version, and CRSL version
- 8)** Summary of review
- 9)** Person(s) who conducted review
- 10)** Contact point
- 11)** Lab accreditation identifier (issued by accreditation body), CATL authorization code

CATL evaluation reports, CATL worksheets, and declarations will be accessible by the vendor via CTIA's certification database and retained by CTIA for a period of 5 years from the date of recognition, after which all documentation will be destroyed.

Unless authorized by the Subsystem Vendor, the Compliance Folder will be maintained in confidence by CTIA.

5.4 Certification

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

- CATL evaluation report and completed CATL Worksheets uploaded by the CATL

5.5 Changes to Certified Systems

Once a System is certified, the System Vendor shall evaluate any changes within the Subsystems that fall within the scope of IEEE 1725 or IEEE 1625 to determine whether the changes impact the System certification. Changes that do impact the certification shall be submitted as an ECO (by logging into the CTIA certification database, selecting Battery System Certification Request and choosing "ECO" Request Type). Supporting evidence shall be provided to the CATL. For any changes, the current revision the CRSL and CRD shall be used, in addition a gap analysis must be performed by the CATL between the CRSL and CRD used for the most recently approved request and the current CRSL and CRD. Additional documentation and/or testing may be required if any requirements have changed.

Changes could include, for example:

- Changes to System components (e.g., new revisions)
- Addition or removal of System components
- New HW/SW revisions of the host

The System Vendor shall read and agree to the Declaration of Compliance for IEEE 1725 (see [APPENDIX F: System Declaration of Compliance – IEEE 1725](#)) or Declaration of Compliance for IEEE 1625 (see [APPENDIX G: System Declaration of Compliance – IEEE 1625](#)).

The vendor shall read and agree to the Battery System Certification Agreement (see [APPENDIX H: Battery System Certification Agreement](#)).

Once a System is certified, any required changes to the host model number entered into the certification database shall be submitted as a new request.

6 Certification Database

Certified Systems will be available for view, via CTIA's certification database, to

- The System Vendor
- The CATL that certified the System
- Operators authorized by the System Vendor to view the certified System

System information that can be viewed will include:

- Host vendor name and model number
- HW/SW version of the host
- Battery vendor name(s) and model number(s)
- Cell vendor name(s) and model number(s)
- Adapter vendor name(s) and model number(s)
- Date certified
- Declaration of Compliance
- CATL evaluation report

Recognized Subsystems and Certified Adapters will be available for view, via CTIA's certification database, to

- All System Vendors
- All Subsystem Vendors
- All Operators
- All CATLs

Subsystem information that can be viewed will include:

- Vendor name and model number
- Capacity (for Cells and Packs)
- Manufacturing Sites
- Revision #
- CRSL version used for the evaluation
- Date recognized

Note: The Subsystem Vendor can view all information entered in the database for their Subsystems, including the CATL evaluation reports and Declarations of Compliance.

Authorized cell manufacturing site detail will be available for view, via CTIA's certification database, to

- Cell Vendors (can view only their own sites)
- All CATLs (can view all sites)

Site information that can be viewed will include:

- Vendor name, site name and address
- Comments
- CRSL version used for the evaluation
- Date authorized

7 Site Authorization, Recognition or Certification Challenge

7.1 Introduction

This section provides the process for challenging the continued validity of a site authorization, Subsystem recognition, Adapter certification or System certification.

7.2 Challenge Process

Any interested person may challenge the continued validity of a site authorization, Subsystem recognition, Adapter certification or System certification by submitting a written request to CTIA. The written request must state with particularity the basis for the challenge.

CTIA will review all such requests with the Operator members of the CATL Review Committee and will then determine the next steps, if any, in pursuing a challenge.

If a challenge is determined to be warranted, CTIA will notify the challenged CATL and vendors that their continuing compliance with the program requirements has been challenged, and will provide the CATL and vendor(s) with the basis for the challenge. CTIA will ask the CATL and/or vendor(s) responsible for the site authorization, Recognition, or Certification to respond to the issues raised by the challenge.

CTIA, in consultation with the Operator members of the CATL Review Committee, also may ask the challenged CATL to re-evaluate the site, Subsystem or System. If deemed necessary, CTIA may select a different CATL to re-evaluate the site, Subsystem or System.

7.3 Successful Challenge

If a challenge to a site authorization is affirmed, the site authorization will be revoked until the site can demonstrate its compliance with the program requirements and be re-authorized by CTIA. Cells manufactured at a site prior to its re-authorization, may have their recognition revoked. Subsequently, all Battery Packs and Systems utilizing the revoked Cells may also be revoked.

If a challenge to a Subsystem recognition is affirmed, the Subsystem recognition will be revoked. Subsequently, all impacted Subsystems/Systems utilizing the revoked Subsystem may also be revoked.

If a challenge to a System certification or Adapter certification is affirmed, the certification will be revoked.

Subsystem recognitions, Adapter certifications and System certifications may be reinstated if a re-evaluation shows no issues with the Subsystem/System and demonstrates its compliance with the program requirements.

If it is determined that the challenged CATL did not properly follow the program requirements, the CATL may be placed on probation or have its CTIA authorization revoked.

APPENDIX A: CTIA Recognition and Certification Fees

The fee for Subsystem recognition is:
\$2,500 for Cell, Pack or Hybrid– Initial
\$750 for Adapter - Initial
\$0 for Cell, Pack or Adapter - ECO

The fee for Adapter certification is \$2,500.

There is no fee for System certification.

These fees are separate from the fees charged by the CATL to evaluate compliance of Subsystems or Systems.

APPENDIX B: CATL Authorization Requirements

Please see the Policies and Procedures for CTIA Authorized Testing Laboratories document.

APPENDIX C: Subsystem Declaration of Compliance – IEEE 1725

DECLARATION OF COMPLIANCE

Date:

**<Manufacturer Name>
("Declarer")**

**<Model #>
("Subsystem")**

WHEREAS, Declarer has developed the Subsystem that meets the terms and conditions of IEEE 1725™;

WHEREAS, the Declarer issues this Declaration of Compliance in order to certify to CTIA that the Subsystem complies with all applicable provisions of IEEE 1725;

WHEREAS, for purposes of the CTIA Battery Certification Program, the Compliance Folder shall include this declaration, the CTIA Authorized Test Lab evaluation report and the CTIA Authorized Test Lab worksheets; and

WHEREAS, the Compliance Folder constitutes evidence demonstrating compliance of the Subsystem to IEEE 1725 and is maintained by CTIA.

WHEREAS, the Declarer undertakes and certifies that the Subsystem, as manufactured and marketed, complies with all applicable provisions of IEEE 1725 and the current version of the CTIA Battery Program Management Document (BPMD);

FURTHERMORE, Declarer further undertakes and certifies that this Declaration of Compliance constitutes an essential element of CTIA's Battery Certification Program, and acknowledges responsibility for compliance with all applicable provisions; and

FURTHERMORE, Declarer authorizes CTIA to audit the Compliance Folder.

APPENDIX D: Subsystem Declaration of Compliance – IEEE 1625

DECLARATION OF COMPLIANCE

Date:

**<Manufacturer Name>
("Declarer")**

**<Model #>
("Subsystem")**

WHEREAS, Declarer has developed the Subsystem that meets the terms and conditions of IEEE 1625™;

WHEREAS, the Declarer issues this Declaration of Compliance in order to certify to CTIA that the Subsystem complies with all applicable provisions of IEEE 1625;

WHEREAS, for purposes of the CTIA Battery Certification Program, the Compliance Folder shall include this declaration, the CTIA Authorized Test Lab evaluation report and the CTIA Authorized Test Lab worksheets; and

WHEREAS, the Compliance Folder constitutes evidence demonstrating compliance of the Subsystem to IEEE 1725 and is maintained by CTIA.

WHEREAS, the Declarer undertakes and certifies that the Subsystem, as manufactured and marketed, complies with all applicable provisions of IEEE 1725 and the current version of the CTIA Battery Program Management Document (BPMD);

FURTHERMORE, Declarer further undertakes and certifies that this Declaration of Compliance constitutes an essential element of CTIA's Battery Certification Program, and acknowledges responsibility for compliance with all applicable provisions; and

FURTHERMORE, Declarer authorizes CTIA to audit the Compliance Folder.

APPENDIX E: Subsystem Recognition Agreement

LICENSE AGREEMENT

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

Date:

by and between

CTIA - The Wireless Association
("CTIA")

and

<Manufacturer Name>
("Submitter")

<Model #>
("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 Recognition as set forth in the applicable CTIA Certification Program Management Document and CTIA Test Plans ("**CTIA Recognition Requirements**");

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

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 RECOGNITION

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 Recognition 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 Recognition Requirements.

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

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 Recognition 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 Recognition Requirements, and without the right to sublicense, to represent the Specified Device as meeting CTIA's Recognition 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 Recognition 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 Recognition 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 Recognition 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 Recognition 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 Recognition Requirements pursuant to the terms set forth in this Agreement, as long as the Specified Device continues to meet CTIA's Recognition 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 Recognition 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 Recognition 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 Recognition 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 Recognition Requirements ("**Noncompliant Specified Device**"), CTIA retains the right to revoke recognition of the 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. Submitter shall comply with the applicable laws and regulations governing a recall of the Specified Device.

5.2 Submitter shall notify CTIA of its decision to rework, recall, or cure all units of a Noncompliant Specified Device, within a reasonable period of time from Submitter's decision. 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 upon CTIA's written request, 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 Recognition 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 Recognition 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.

7.2 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; 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.
- 7.3 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; 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 EIGHT LIMITATION OF LIABILITY

8.1 SUBMITTER ACKNOWLEDGES AND AGREES THAT IN NO EVENT SHALL CTIA BE LAIBLE 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

9.1 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 F: System Declaration of Compliance – IEEE 1725

DECLARATION OF COMPLIANCE

Date:

**<Manufacturer Name>
("Declarer")**

**Battery System:
<Host Manufacturer Name, Model Name & Number>
<Battery Manufacturer Name, Model Name & Number(s)>
<Adapter Manufacturer Name, Model Name & Number(s)>
("System")**

WHEREAS, Declarer has developed the System that meets the terms and conditions of IEEE 1725™;

WHEREAS, the Declarer issues this Declaration of Compliance in order to certify to CTIA that the System complies with all applicable provisions of IEEE 1725;

WHEREAS, for purposes of the CTIA Battery Certification Program, the Compliance Folder shall include this declaration, the CTIA Authorized Test Lab evaluation report and the CTIA Authorized Test Lab worksheets; and

WHEREAS, the Compliance Folder constitutes evidence demonstrating compliance of the System to IEEE 1725 and is maintained by CTIA.

WHEREAS, the Declarer undertakes and certifies that the System, as manufactured and marketed, complies with all applicable provisions of IEEE 1725 and the current version of the CTIA Battery Program Management Document (BPMD);

FURTHERMORE, Declarer further undertakes and certifies that this Declaration of Compliance constitutes an essential element of CTIA's Battery Certification Program, and acknowledges responsibility for compliance with all applicable provisions; and

FURTHERMORE, Declarer authorizes CTIA to audit the Compliance Folder.

APPENDIX G: System Declaration of Compliance – IEEE 1625

DECLARATION OF COMPLIANCE

Date:

**<Manufacturer Name>
("Declarer")**

**Battery System:
<Host Manufacturer Name, Model Name & Number>
<Battery Manufacturer Name, Model Name & Number(s)>
<Adapter Manufacturer Name, Model Name & Number(s)>
("System")**

WHEREAS, Declarer has developed the System that meets the terms and conditions of IEEE 1625™;

WHEREAS, the Declarer issues this Declaration of Compliance in order to certify to CTIA that the System complies with all applicable provisions of IEEE 1625;

WHEREAS, for purposes of the CTIA Battery Certification Program, the Compliance Folder shall include this declaration, the CTIA Authorized Test Lab evaluation report and the CTIA Authorized Test Lab worksheets; and

WHEREAS, the Compliance Folder constitutes evidence demonstrating compliance of the System to IEEE 1625 and is maintained by CTIA.

WHEREAS, the Declarer undertakes and certifies that the System, as manufactured and marketed, complies with all applicable provisions of IEEE 1625 and the current version of the CTIA Battery Program Management Document (BPMD);

FURTHERMORE, Declarer further undertakes and certifies that this Declaration of Compliance constitutes an essential element of CTIA's Battery Certification Program, and acknowledges responsibility for compliance with all applicable provisions; and

FURTHERMORE, Declarer authorizes CTIA to audit the Compliance Folder.

APPENDIX H: Battery System Certification Agreement

LICENSE AGREEMENT

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

Date:

by and between

**CTIA - The Wireless Association
("CTIA")**

and

**<Manufacturer Name>
("Submitter")**

Battery System:

**<Host Manufacturer Name, Model Name & Number>
<Battery Manufacturer Name, Model Name & Number(s)>
<Adapter Manufacturer Name, Model Name & Number(s)>
("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 retains the right to revoke certification of the 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. Submitter shall comply with the applicable laws and regulations governing a recall of the Specified Device.

5.2 Submitter shall notify CTIA of its decision to rework, recall, or cure all units of a Noncompliant Specified Device, within a reasonable period of time from Submitter's decision. 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 upon CTIA's written request, 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.

7.2 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; 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.
- 7.3 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; 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 EIGHT LIMITATION OF LIABILITY

8.1 SUBMITTER ACKNOWLEDGES AND AGREES THAT IN NO EVENT SHALL CTIA BE LAIBLE 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

9.1 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 I: Blank

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APPENDIX J: Adapter Certification Agreement

LICENSE AGREEMENT

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

Date:

by and between

CTIA - The Wireless Association®
("CTIA")

and

<Manufacturer Name>
("Submitter")

<Model #>
("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 retains the right to revoke certification of the 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. Submitter shall comply with the applicable laws and regulations governing a recall of the Specified Device.

5.2 Submitter shall notify CTIA of its decision to rework, recall, or cure all units of a Noncompliant Specified Device, within a reasonable period of time from Submitter's decision. 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 upon CTIA's written request, 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.

7.2 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; 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.
- 7.3 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; 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 EIGHT LIMITATION OF LIABILITY

8.1 SUBMITTER ACKNOWLEDGES AND AGREES THAT IN NO EVENT SHALL CTIA BE LAIBLE 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

9.1 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.

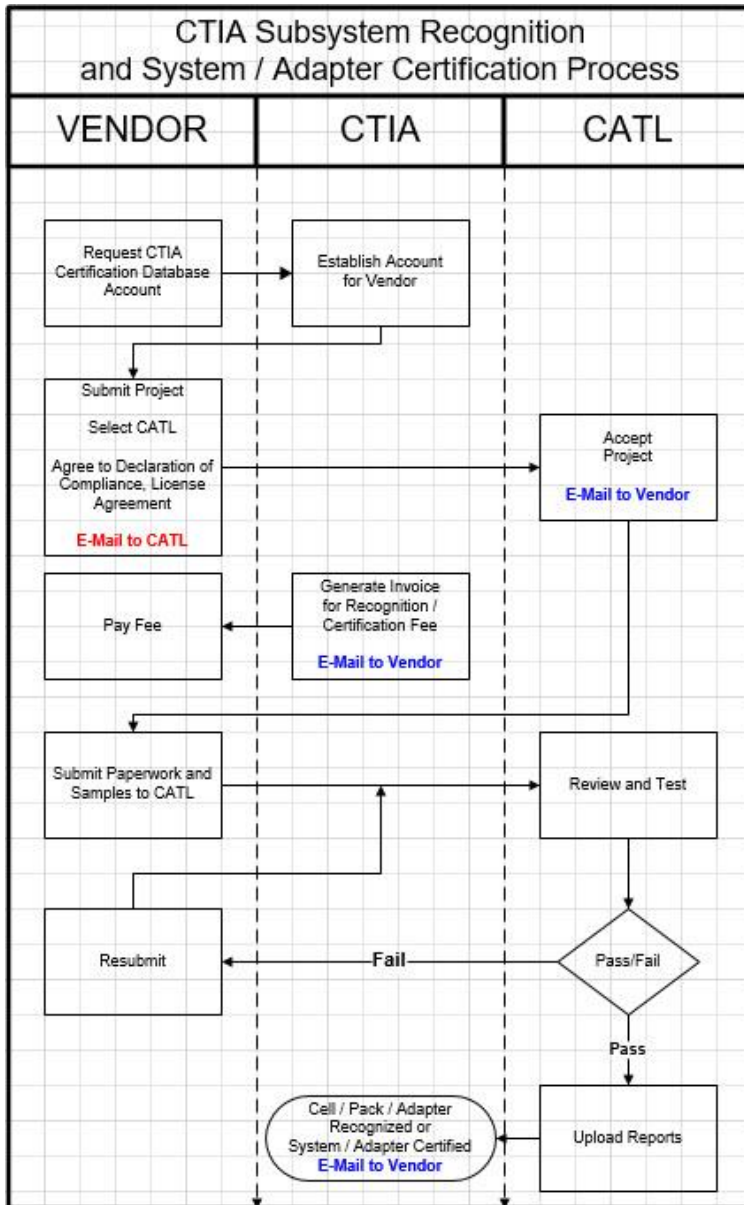
THE PARTIES AGREE THAT ANY DISPUTE WILL BE ARBITRATED ON AN INDIVIDUAL BASIS; CLASS, REPRESENTATIVE, AND PRIVATE ATTORNEY GENERAL ARBITRATIONS AND ACTIONS ARE NOT PERMITTED. A party may bring claims against another party only in that party's individual capacity and may not participate as a class member 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 K: Process Flowchart



APPENDIX L: Change History

Revision	Date	Description of Changes
Rev 1.0	October 2006	<ul style="list-style-type: none"> Initial publication
Rev 1.1	December 2006	<ul style="list-style-type: none"> Added BCRO Worksheets System Vendor supporting evidence no longer provided to CTIA Updated CRSL definitions Updated registration process
Rev 1.2	February 2007	<ul style="list-style-type: none"> Clarified that the BCRO evaluation report and the completed BCRO Worksheets shall not contain any confidential/proprietary technical information about the System Updated Declaration of Compliance and Submitter's Declaration
Rev 1.3	March 2007	<ul style="list-style-type: none"> Updated Indemnification clause of Battery Registration Agreement
Rev 1.4	April 2007	<ul style="list-style-type: none"> Clarified examples of supporting evidence
Rev 1.5	July 2007	<ul style="list-style-type: none"> Corrected typographical errors in Battery Registration Agreement: first paragraph of Indemnification section and second paragraph of Limitation of Liability section Added note that definitions may differ from definitions in IEEE 1725 Added process for submitting multiple host models in a single request
Rev 1.6	October 2007	<ul style="list-style-type: none"> Added process for allowing use of supporting evidence and evaluation data of previously registered Systems Corrected typographical errors in Battery Registration Agreement: second paragraph of Limitation of Liability section and No Approval section Updated Corrective Action and Indemnification sections of Battery Registration Agreement Updated signature area of Battery Registration Agreement
Rev 2.0	January 2008	<ul style="list-style-type: none"> Updated to incorporate transition from Phase One to Phase Two
Rev 2.1	March 2008	<ul style="list-style-type: none"> Corrected hyperlink references Updated Subsystem Vendor and CATL Roles & Responsibilities Updated Subsystem Recognition and System Registration Processes Clarified no recognition fee for ECO
Rev 2.2	July 2008	<ul style="list-style-type: none"> Added battery pack recognition Added certification database process for cell manufacturing site authorization Updated cell recognition process to include identifying the manufacturing site(s) Added that vendor can contact CATL/BCRO if changes are needed to data entered in a request Clarified that non-compliances will be resolved between the CATL/BCRO and the vendor Clarified that documents uploaded to the database by CATL or BCRO are available to vendor

		<ul style="list-style-type: none"> Updated Subsystem Recognition Agreement and System Registration Agreement execution processes
Rev 2.3	October 2008	<ul style="list-style-type: none"> Added adapter recognition and system certification Modified pack recognition request process Defined test samples required for cells and packs Updated Subsystem Declaration of Compliance and Subsystem Recognition Agreement to include battery and adapter
Rev 3.0	January 2009	<ul style="list-style-type: none"> Removed System Registration (Phase One) procedures Updated definition of Adapter Updated Subsystem Recognition Process - CATL Evaluation section to address packs with multiple cell revisions and to address parallel recognition of packs and cells Updated System Certification Process - CATL Evaluation to clarify samples required
Rev 3.1	March 2009	<ul style="list-style-type: none"> Updated Subsystem Recognition Process - CATL Evaluation section to address packs with multiple cell models Clarified cell manufacturing site re-audit requirement Added subsystem de-recognition process
Rev 3.2	September 2009	<ul style="list-style-type: none"> Added instructions for vendor to inform CTIA if P.O. number is required on certification fee invoice Renamed De-Recognition section to De-Listing and revised procedures. Clarified that multiple models of a subsystem may be submitted in a single request Added process for re-labeled subsystems Updated System ECO process Added Battery System Certification Agreement Amendment Included provisions for embedded battery packs and adapters
Rev 3.3	November 2009	<ul style="list-style-type: none"> Updated definitions Added process flowchart Changed "Other Recognition Request" to "Hybrid Recognition Request" Clarified de-listing process Clarified System Certification Requests with embedded packs or adapters Added Hybrid to Subsystem Recognition fee schedule
Rev 3.4	February 2010	<ul style="list-style-type: none"> Updated process for re-labeled subsystems Added Embedded Packs and Embedded Adapters sections to Subsystem Recognition process Updated process for certification of systems with embedded packs and embedded adapters
Rev 3.5	April 2010	<ul style="list-style-type: none"> Updated Scope Added meeting attendance requirements for CATLs Added to Cell Manufacturing Site Authorization section: Sites not re-audited after the 12-month period will be removed from the list of authorized cell manufacturing sites; cells manufactured at those sites may no longer be submitted for recognition. Clarified that changes to subsystem or host model numbers requires the submission of a new request
Rev 4.0	August 2010	<ul style="list-style-type: none"> Added requirements for adapter certification and certification of systems without adapters Added the word "any" in the first sentence of Sections 5.2 and

		<p>5.3 of both the Subsystem Recognition Agreement and the System Certification Agreement</p> <ul style="list-style-type: none"> Added items 1e and 1f to CATL Authorization Requirements/Assessment Process
Rev 5.0	January 2011	<ul style="list-style-type: none"> Updated to incorporate IEEE 1625
Rev 5.1	February 2011	<ul style="list-style-type: none"> Updated Definitions section to include BPMD, CRD and CRSL. Also updated CATL definition. Updated System Certification Process – Introduction section to explain applicability of IEEE 1625 and IEEE 1725 Updated CATL Authorization Requirements to allow CATLs to be authorized for the IEEE 1625 CRD and/or IEEE 1725 CRD
Rev 5.2	October 2011	<ul style="list-style-type: none"> Updated processes for embedded packs Updated Changes to Recognized Subsystems section Updated Changes to Certified Adapters section Clarified CATL evaluation of a pack containing multiple revisions of a cell or the same cell revision from multiple manufacturing sites
Rev 5.3	April 2012	<ul style="list-style-type: none"> Updated IEEE 1725 reference to IEEE Std 1725™-2011 Updated CATL Roles and Responsibilities to reference the Policies and Procedures for CTIA Authorized Testing Laboratories document Updated Changes to Recognized Subsystems section to indicate that a change in the capacity of either a cell or a pack constitutes a new model Added Site Authorization, Recognition or Certification Challenge section Replaced text in Appendix B (CATL Authorization Requirements) with a reference to the Policies and Procedures for CTIA Authorized Testing Laboratories document
Rev 5.4	February 2013	<ul style="list-style-type: none"> Updated embedded pack recognition process to include cases where the pack protection circuitry is part of the host
Rev 5.5	April 2013	<ul style="list-style-type: none"> Updated embedded pack recognition process to include CATL statement regarding CRSL sections tested during pack evaluation
Rev 5.6	August 2013	<ul style="list-style-type: none"> Further updates to CATL statement regarding CRSL sections tested during embedded pack evaluation.
Rev 5.7	December 2013	<ul style="list-style-type: none"> Updated definition of Certified Adapter.
Rev 5.8	May 2014	<ul style="list-style-type: none"> Updated System Certification Process – Introduction section to allow systems without an adapter to be tested against an Adapter Simulator or a Certified Adapter.
Rev 5.9	December 2015	<ul style="list-style-type: none"> Updated Certified Adapter and Hybrid definitions
Rev 6.0	May 2017	<ul style="list-style-type: none"> Added Audit Due Date to Definitions section Updated Cell Manufacturing Site Authorization section Declarations of compliance and license agreements made electronic Updated process flowchart