FCC Certification Process Overview
(Revised February 15, 2017)

INTRODUCTION

On November 22, 2016, the Federal Communications Commission has adopted rules to facilitate the continued rapid introduction of new and innovative products to the market while ensuring that these products do not cause harmful interference. The Telecommunication Certification Body (TCB) program was established in 1998 and updated in 2014 as part of a review of the Commission's equipment authorization program.[1] A TCB is a private third-party organization, which is authorized to issue grants of certification, within its scope of recognition, for equipment subject to the Commission's certification procedures. Under these rules, a TCB has the authority to review and grant an application for certification for a product subject to the FCC certification rules. The rules also established procedures for the recognition of foreign TCBs under the terms of a government-to- government Mutual Recognition Agreement/Arrangement (MRA).

The FCC, as the foremost regulatory agency in the United States designated an initial group TCBs on June 1, 2000, including *PCTEST Engineering Laboratory, Inc*. Certification Body operating under ISO/IEC 17065:2012.

DOCUMENT REVISION HISTORY:

On September 15, 2015, transition to ISO/IEC 17065 has been concluded and all references to the old Guide 65 have been deleted.

Permit-But-Ask (PBA) procedures have been replaced with Pre-Approval Guidance (PAG).

TCB PROGRAM ROLES AND RESPONSIBILITIES
(KDB 641163 TCB Program Roles and Resp v03r01 November 22, 2016)

A. TCB Requirements

The requirements for TCBs were adopted in the FCC Report and Order in GEN Docket No. 98-68 (FCC 98-338) on December 17, 1998.[2] Further information on the accreditation requirements for TCBs was provided in FCC Public Notice DA 99-1640 issued on August 17, 1999. The rules were revised under ET Docket No. 03-201 (FCC 04-165) adopted on July 8, 2004, and ET Docket No. 13-44 (FCC 14-208) adopted on December 17, 2014. The designation process and the requirements that a TCB shall meet are contained in these rules.

TCBs are required to be accredited in accordance with ISO/IEC 17065:2012 *Conformity assessment— Requirements for bodies certifying products, processes and services*,[3] and with a scope covering the applicable FCC requirements. In the United States this is managed by the National Institute of Standards and Technology (NIST). NIST may allow other qualified accreditation bodies to accredit TCBs in accordance with its procedures. NIST has recognized the American National Standards Institute (ANSI) and the American Association for Laboratory Accreditation (A2LA) to accredit TCBs located in the United States in accordance with ISO/IEC 17011:2004, *Conformity assessment—General Requirements for Accreditation bodies accrediting conformity assessment bodies.*[4] These accreditation bodies in turn accredit TCBs in accordance with the TCB product certification program requirements and with ISO/IEC 17065:2012. Once accredited, the U.S. TCB must be designated to the FCC by NIST, and recognized by the FCC.

Third-party Certification bodies located outside of the United States may be recognized as a TCB when there is

a government-to-government MRA between the country they are located in and the United States.[5] It is the responsibility of the designating authority in that country to assess the competence of the TCB. The organization accrediting the prospective TCBs shall be capable of meeting the requirements and conditions in ISO/IEC 17011:2004.[6] Foreign organizations desiring to be recognized by the FCC as a TCB should contact a recognized TCB designation authority within their country to determine the procedures to be assessed to ISO/IEC 17065 and designated to the FCC. A list of FCC recognized TCB designating authorities is available at: https://apps.fcc.gov/oetcf/tcb/reports/accreditor_report.cfm. Information regarding applicable MRAs can be found at: http://www.fcc.gov/oet/ea/mra/.

To ensure the continued integrity of the accreditation program, the FCC Office of Engineering and Technology (OET) will periodically review the accreditation process, and maintain close coordination with each of the organizations that NIST has recognized to perform accreditations and with each of our MRA partners. OET will pursue opportunities to participate in peer review assessments under the International Accreditation Forum (IAF) Multilateral Recognition Agreements (MLA) process, and to observe on-site assessments performed as part of the NIST/National Voluntary Conformity Assessment System Evaluation (NVCASE) program.

B. Accreditation Requirements

A TCB is required to be accredited to the following:

1. ISO/IEC 17065 (2012), *Conformity Assessment-Requirements for bodies certifying products, processes and services*, and
2. ISO/IEC 17025 (2005), *General requirements for the competence of testing and calibration laboratories.*

C. TCB Scope of Accreditation

TCBs may be accredited to certify products to one or more of the scopes of accreditation listed in Table 1. It is not necessary to be accredited to all of Scope A, B or C. The TCB may choose which of the following scopes they wish to be accredited to perform.

Table 1 – TCB Scope of Accreditation

Scope A – Unlicensed Radio Frequency Devices	
A1	Low power transmitters operating on frequencies below 1 GHz (with the exception of spread spectrum devices), emergency alert systems, unintentional radiators (e.g., personal computers and associated peripherals and TV Interface Devices) and consumer ISM devices subject to certification (e.g., microwave ovens, RF lighting and other consumer ISM devices)
A2	Low power transmitters operating on frequencies above 1 GHz, with the exception of spread spectrum devices
A3	Unlicensed Personal Communication Service (PCS) Devices
A4	Unlicensed National Information Infrastructure (UNII) devices and low power transmitters using spread spectrum techniques

Scope B – Licensed Radio Service Equipment	
B1	Commercial Mobile Services in 47 CFR Parts 20, 22 (cellular), 24, 25 (non-microwave), and 27
B2	General Mobile Radio Services and Citizen Band Radio in 47 CFR Parts 22 (non-cellular), 73, 74 (non-microwave), 90 (non-microwave), 95, 96 97, and 101 (non-microwave)
B3	Maritime and Aviation Radio Services in 47 CFR Parts 80 and 87
B4	Microwave Radio Services in 47 CFR Parts 25,74, 90 (90Y, 90Z, DSRC) and 101

Scope C – Telephone Terminal Equipment	
C1	Telephone terminal equipment in 47 CFR Part 68

D. Application, Application Review, Evaluation, Review, and Certification Decision

Table 2 contains a summary flow chart of the FCC certification process requirements.

As part of the Application process requirement, the TCB shall obtain all of the necessary information to complete the certification process as required in ISO/IEC 17065:2012, 7.2.

As part of the Application Review process requirement, the TCB shall conduct a review of the information submitted with the application process requirement as required in ISO/IEC 17065:2012, 7.3.[9]

The Evaluation process requirement is a combination of the Selection and Determination functions of conformity assessment activities,[10] and includes, but is not limited to, documentation review and testing of a device to the technical requirements of the FCC rules. Testing of the device shall be performed by an FCC-recognized accredited testing laboratory (ISO/IEC 17025).[11] The TCB may use internal resources or outsourced (external) resources to perform evaluation process requirements. If the TCB accepts test reports from external resources, the TCB must still perform the remaining evaluation process requirements such as the documentation review, inspection, verification and documentation of the results of the evaluation. The Evaluation process requirement must be performed by person(s) different from those who perform the Review process requirement and the Certification Decision process requirement.

When a TCB is managing outsourced (external) resources in accordance with the evaluation plan per ISO/IEC 17065, 7.4.4, the TCB may only outsource the portions of the Evaluation activities that they are required to perform to other recognized TCBs. These bodies meet the FCC TCB scheme requirements, including accreditation to ISO/IEC 17065 and ISO/IEC 17025.

For TCB evaluation process requirements that are not required to be performed by the TCB, such as market surveillance testing or RF Exposure testing, the TCB may only outsource these activities to a FCC-recognized ISO/IEC 17025 accredited testing laboratory.

The Review process requirement includes a review of all of the information and results related to the Evaluation process requirement. The TCB shall review the test report and related supporting information (exhibits) to determine compliance with the applicable FCC requirements.[12] The Review process requirement

shall be performed by TCB personnel using internal resources.

The Certification Decision process requirement includes an assessment of the information related to the Evaluation and Review process requirements and any other relevant information to determine that the device is compliant with all applicable requirements and may be authorized.[13]

Table 2 – TCB Certification Process Requirement Flow Chart

Step	FCC Process Requirement	Resources
1	**Application** – Grantee or authorized agent of grantee requests authorization of product, and TCB obtains all necessary information to issue grant of certification in accordance with FCC requirements.	Grantee or their authorized representative may request Certification. TCB collects information necessary to issue a grant of certification.
2	**Application Review** – TCB reviews information obtained to ensure: - Sufficient grantee and product information was submitted to perform certification process. - TCB and grantee are in agreement on what is being requested. - The scope of certification is defined. - The TCB has the appropriate scope of accreditation to certify the product. - The TCB has the competence and capability to evaluate and make a certification decision on the product.	This process requirement must be performed by the TCB using internal resources.

3	**Evaluation** The combination of the Selection and Determination functions of conformity assessment activities, including testing, for compliance with the FCC requirements. - The TCB shall have an evaluation plan for the product. - The TCB may use internal resources to perform the testing portion of the evaluation process or the TCB may accept testing reports from outsourced (external) resources in accordance with the FCC requirements. - If the TCB uses internal resources for the entire evaluation process, the TCB shall assign personnel to perform each evaluation process requirement. - If the TCB outsources the testing portion of the evaluation process requirement, the TCB shall ensure that the outsourced evaluation process requirements are in compliance with all FCC requirements. - The TCB is responsible for all outsourced process requirements.	The testing portion of the evaluation process requirements may be performed by the TCB using internal resources, or outsourced (external) resources. Outsourced (external) resources may include a manufacturer's testing laboratory that is recognized by the FCC or an independent testing laboratory that is recognized by the FCC. The TCB is responsible for all evaluation activities performed by outsourced (external) resources. After July 12, 2017, all testing must be performed by an accredited FCC recognized testing laboratory per 47 CFR 2.950(e).

	- If the TCB accepts test reports from outsourced (external) resources, the TCB must still perform the remaining evaluation process requirements such as the documentation review, inspection, verification and documentation of the results of the evaluation**.** - The TCB shall ensure that all required information and documentation has been provided to complete the evaluation. - The TCB shall evaluate the product against the requirements covered by the test procedure and the FCC requirements. - Evaluation may include testing to confirm previous test results. - The TCB shall document all evaluation process requirements. - The TCB shall inform the grantee of all non-conformities.	
4	**Review** Assessing all of the information and results related to the Evaluation process requirement to determine compliance and conformance with the applicable FCC requirements. - The TCB shall review all information and results related to the Evaluation process requirements. - The TCB shall document all Review process requirements.	The Review process requirement must be performed by the TCB using internal resources. The person(s) performing the Review process requirements must be different from those who perform the Evaluation process requirements.
5	**Certification Decision** – Assessment of the Evaluation and Review process requirements and any other relevant information to determine that the product is compliant with all applicable requirements and may be authorized. - The TCB shall assess the Evaluation and Review process requirements, then make a determination whether or not the product may be certified. - The TCB shall document the Certification Decision process requirements, and supply the grantee with formal certification documentation.	This process requirement must be performed by the TCB using internal resources. The person(s) making the Certification Decision must be different from those who performed the Evaluation process requirements.
6	**Grant of Certification** – Uploading of all applicable information and exhibits to the FCC Equipment Authorization Electronic Filing System (EAS), after the TCB has determined	This process requirement must be performed by TCB using internal resources.

	that a product meets all requirements and a grant of certification may be authorized.	
	- The TCB shall upload all applicable information and exhibits to the EAS.	
	- The TCB shall publish the grant of certification by accepting the grant on the FCC EAS.	

E. Resources for Evaluation, Review, and Certification Decision

A TCB may utilize resources subject to the following.

1. A TCB may use either internal or outsourced (external) resources for the testing portion of the Evaluation process requirement.[14] When a TCB outsources testing, as allowed (*e.g.,* for post-market surveillance and RF exposure testing) by the FCC procedures, the requirements of 6.2 of ISO/IEC 17065:2012 shall be met. The TCB shall ensure that all Evaluation process requirements are managed in a manner that provides confidence in the results, and that the TCB has records to justify that confidence. All TCB personnel, including external personnel under contract, are required to comply with the procedures defined by the certification body.[15]

2. A TCB may also accept test reports from other competent sources. When a TCB accepts test data from another source the TCB needs to have confidence in the results, justification documentation for the acceptance of the test data, follow the requirements of sub-clause N of this publication, ensure that the scope of the testing entity is applicable to the testing that is being performed, and verifying the qualifications (including proper FCC recognition per § 2.948 of the FCC rules) of
the testing body. If a TCB accepts test reports from other sources, the TCB shall ensure that the other source meets all requirements of KDB Publication 974614. If a TCB accepts test reports
from other sources, the Evaluation and Review process requirements conducted by the certification body must verify that the testing was completed properly. The TCB shall conduct the review of test reports in accordance with Section N using an equally rigorous, independent and impartial process regardless of the source of the report (i.e. internal or external test laboratory).

3. Adequate oversight and quality control procedures shall be in place to ensure that all applications for certification are evaluated consistently.

4. The TCB shall ensure that the external resource or body that provides the outsourced services, and the personnel that it uses, are not involved, either directly or through any other employer, in such a way that the impartiality of the results could be compromised or questioned. The TCB shall maintain impartiality as required by ISO/IEC 17065:2012.[16]

5. The contract(s) under which the external resource or outsourced activities are performed are reviewed during the accreditation assessment, to ensure that all TCB and ISO/IEC 17065:2012 requirements are met.

6. The Review and Certification Decision process requirements shall be undertaken by internal resources, and shall not be outsourced.[17] Note that the use of external personnel under contract, and persons working as personnel under contract, are considered employees for the purpose of these functions, and are expected to be fully familiar with procedures and systems

of the TCB, and are not considered as outsourced.[18] ISO/IEC 17065 notes in 7.6.2 that the Review and Certification Decision process requirements may be completed by the same person or group of persons.

7. The persons who perform the Review and Certification Decision, shall be identified as key employees in the FCC EA System and shall have the necessary technical competency and understanding of the FCC rules.

8. The appropriate certification body personnel shall have access to appropriate testing facilities, and be able to perform product testing, when necessary.

9. The TCB shall take responsibility for all process requirements outsourced to another body and/or performed by an external resource.[19]

10. The grant of certification is the responsibility of, and shall be issued by, the TCB recognized by the FCC.

F. Impartiality

As required by ISO/IEC 17065:2012, a TCB shall ensure that activities of related bodies do not affect the confidentiality, objectivity, and impartiality of its decision on certification. As part of its assessment, a TCB shall show how it manages impartiality and ensures that the certification body does not allow commercial, financial or other pressures to compromise impartiality. Particular attention should be made to ensure that certification personnel meet the requirements in ISO/IEC 17065:2012 regarding consultancy.

G. Location of TCB

A TCB is required to be permanently located in the territory from which it is designated, which may be within the United States or in an MRA partner territory. TCB personnel may perform their duties while remotely located from the permanent TCB facility. When certification personnel work remotely, the TCB shall have appropriate management controls in place to assure that their quality system is followed.

The TCB facility and the TCB accredited testing laboratory may be in different physical locations, but must be located within the same country. In such cases, the TCB shall show what procedures are in place to provide reasonable access to an accredited testing facility by the certification personnel. An employee who performs the Evaluation process requirement task shall have access to appropriate testing facilities and be able to test products for their given area of expertise, when necessary. The ability to perform such testing by the certification personnel who perform the Evaluation process requirement shall be considered during the ISO/IEC 17065:2012 assessment.

H. TCB Grants of Certification

In accordance with the requirements in 47 CFR Part 2, a TCB shall not: grant waivers of Commission rules; take enforcement actions; authorize a transfer of grantee control; or interpret the FCC rules.[21]

TCBs are allowed to certify all equipment subject to certification in the FCC rules; however, in circumstances where the FCC has not provided specific guidance, or where the applicant intends to use
alternatives to published procedures or guidelines to demonstrate compliance, then such applications are subject to processing using the Pre-Approval Guidance procedures.[22] The Pre-Approval Guidance procedure is intended to allow FCC oversight for those types of devices that are not sufficiently "technically-mature" for unrestricted TCB approval. TCBs may approve devices on the Pre-Approval Guidance list, but must obtain FCC guidance prior to issuing the grant of certification.

As part of the general approval process, TCBs are expected to validate the contact information on file for a grantee prior to issuing a grant of certification, to correct the information on file with the FCC where needed, and to notify the grantee that a future audit sample may be requested.

I. Testing Capability

A TCB is required to have the capability to perform a "core" set of tests, for each scope of accreditation. Requirements for "core" test capability are given in FCC Public Notice DA 99-1640, released August 17, 1999. The TCB laboratory is required to have the test instrumentation necessary to perform each of the "core" tests identified in DA 99-1640. To ensure that it is capable of performing the tests within its scope of accreditation, the TCB shall be accredited to ISO/IEC 17025:2005 with an appropriate scope of accreditation, and the TCB shall have available the test equipment necessary to perform the "core" tests during the ISO/IEC 17065:2012 on-site assessment.

Table 3 – TCB Scope vs FCC Accredited Laboratory Scope of Accreditation

	Scope A – Unlicensed Radio Frequency Devices
A1	**Unintentional Radiators FCC Part 15 Subpart B** • ANSI C63.4-2014, *American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz* **Intentional Radiators FCC Part 15 Subpart C** • ANSI C63.10-2013, *American National Standard for Testing Unlicensed Wireless Devices* **Industrial, Scientific, and Medical Equipment Part 18** • FCC MP-5, (February 1986) *FCC Methods of Measurements of Radio Noise Emissions From Industrial, Scientific, and Medical Equipment* **Unlicensed National Information Infrastructure Devices (U-NII) without Dynamic Frequency Selection (DFS) Part 15 Subpart E** • ANSI C63.10-2013, *American National Standard for Testing Unlicensed Wireless Devices* • KDB Publication 789033 **Ultra-wideband (UWB) Intentional Radiators FCC Part 15 Subpart F** • ANSI C63.10-2013, *American National Standard for Testing Unlicensed Wireless Devices* **BPL Intentional Radiators (FCC Part 15 Subpart G)** • ANSI C63.10-2013 **White Space Device Intentional Radiators (FCC Part 15 Subpart H)** • ANSI C63.10-2013
A2	**Intentional Radiators FCC Part 15 Subpart C** • ANSI C63.10-2013, *American National Standard for Testing Unlicensed Wireless Devices* **Unlicensed National Information Infrastructure Devices (U-NII) without Dynamic Frequency Selection (DFS) Part 15 Subpart E** • ANSI C63.10-2013, *American National Standard for Testing Unlicensed Wireless Devices* • KDB Publication 789033 **Ultra-wideband (UWB) Intentional Radiators FCC Part 15 Subpart F** • ANSI C63.10-2013, *American National Standard for Testing Unlicensed Wireless Devices*

A3	**Unlicensed Personal Communications Services (UPCS) Devices FCC Part 15, Subpart D**
	• ANSI C63.17-2013, *American National Standard for Methods of Measurement of the Electromagnetic and Operational Compatibility of Unlicensed Personal Communications Services (UPCS) Devices*
	RF Exposure
	• IEEE Std 1528™-2013, *IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques*
A4	**Intentional Radiators FCC Part 15 Subpart C**
	• ANSI C63.10-2013, *American National Standard for Testing Unlicensed Wireless Device*
	Unlicensed National Information Infrastructure Devices (U-NII) with Dynamic Frequency Selection (DFS) Part 15 Subpart E
	• KDB Publication 905462
	RF Exposure
	• IEEE Std 1528™-2013, *IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques*
	• KDB Publication 865664
	• KDB Publication 447498

Scope B – Licensed Radio Service Equipment

B1	**Commercial Mobile Services FCC Parts 22 (cellular), 24, 25 (non-microwave), and 27**
	• ANSI/TIA-603-D (2010), *Land Mobile FM or PM Communications Equipment Measurement and Performance Standards*
	• TIA-102.CAAA-D, *Digital C4FM/CQPSK Transceiver Measurement Methods*, 2013
	• KDB Publication 971168
	Hearing Aid Compatibility (HAC) FCC Part 20
	• ANSI C63.19-2007, *American National Standard for Methods of Measurement of Compatibility Between Wireless Communication Devices and Hearing Aids; or*
	• ANSI C63.19 (2011) *American National Standard Methods of Measurement of Compatibility between Wireless Communications Devices and Hearing Aids*
	• KDB Publication 285076
	RF Exposure
	• IEEE Std 1528™-2013, *IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques*
	• KDB Publication 865664
	• KDB Publication 447498
	Signal Boosters (Part 20)
	• KDB Publication 935210

2	**General Mobile Radio Services FCC Parts 22 (non-cellular), 90 (non-microwave), 95, 97, and 101 (non-microwave)**
	• ANSI/TIA-603-D (2010), *Land Mobile FM or PM Communications Equipment Measurement and Performance Standards*
	• TIA-102.CAAA-D, *Digital C4FM/CQPSK Transceiver Measurement Methods*, 2013
	• KDB Publication 971168
	Citizens Broadband Radio Service Part 96
	• ANSI/TIA-603-D (2010), *Land Mobile FM or PM Communications Equipment Measurement and Performance Standards*
	• TIA-102.CAAA-D, *Digital C4FM/CQPSK Transceiver Measurement Methods*, 2013
	Broadcast Radio Services FCC Part 73 and 74 (non-microwave)
	• ANSI/TIA-603-D (2010), *Land Mobile FM or PM Communications Equipment Measurement and Performance Standards*
	• TIA-102.CAAA-D, *Digital C4FM/CQPSK Transceiver Measurement Methods*, 2013
	• KDB Publication 971168
	RF Exposure
	• IEEE Std 1528™-2013, *IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques*
	• KDB Publication 865664
	• KDB Publication 447498
	Signal Boosters
	• KDB Publication 935210
B3	**Maritime and Aviation Radio Services FCC Part 80 and 87**
	• ANSI/TIA-603-D (2010), *Land Mobile FM or PM Communications Equipment Measurement and Performance Standards*
B4	**Microwave and Millimeter Bands Radio Services FCC Parts 25, 74, 90 (90Y, 90Z, DSRC) and 101**
	• ANSI/TIA-603-D (2010), *Land Mobile FM or PM Communications Equipment Measurement and Performance Standards*
	• TIA-102.CAAA-D, *Digital C4FM/CQPSK Transceiver Measurement Methods*, 2013
Scope C – Telephone Terminal Equipment	
C1	**Telephone Terminal Equipment**
	• TIA-968-B (July 15, 2016), *Telecommunications - Telephone Terminal Equipment - Technical Requirements for Connection of Terminal Equipment to the Telephone Network*

J. Scope of Accreditation for TCB Laboratory

TCBs are required to have a testing laboratory accredited to ISO/IEC 17025 and recognized by the FCC as accredited. The testing laboratory portion of the TCB shall be accredited to ISO/IEC 17025:2005, with a scope of accreditation covering the regulations and meeting the requirements of KDB Publication 974614. It should be noted that further guidance on the measurement techniques to be used for a given regulation may be found in the associated FCC Report and Order, FCC Public Notice, FCC Bulletin, or guidance as found in related KDB Publications.

When the TCB does not have the capability to perform Hearing Aid Compatibility (HAC) and/or Radio Frequency (RF) exposure testing, it is acceptable for the TCB to use external resources for the HAC

and/or RF exposure testing, using a ISO/IEC 17025 accredited testing laboratory that has a scope of accreditation covering the applicable HAC and/or RF exposure standard(s) listed in KDB Publication 974614, and that has been recognized by the FCC as accredited for the applicable scope.

K. Key Personnel

As required in 6.1.2.1 of ISO/IEC 17065:2012, the TCB must establish, implement, and maintain a procedure for the management of competencies of personnel involved in the certification process. The TCB shall maintain a list of the names, qualifications, experience, and terms of reference of the senior executive and other certification personnel, both internal and external.

As required in 6.1.2.2 of ISO/IEC 17065:2012, information on the relevant qualifications, training, and experience of each member of the personnel involved in the certification process shall be maintained by the certification body. Records of training and experience shall be kept up to date, in particular for the following:
1. Name and address
2. Employer(s) and position held
3. Educational qualification and professional status
4. Experience and training in each field of the certification body's competence
5. The assessment of competence
6. Performance monitoring
7. Authorizations held within the certification body
8. Date of most recent updating of each record

For each TCB, the FCC maintains a list of Key Employees involved in the certification process functions. Table 4 contains a list of the Key Employee types. The TCB shall identify and provide supporting documentation on each Key Employee in accordance with the following:

Table 4 – FCC TCB Key Employee Types

Administrative Contact
Application Reviewer
EMC Reviewer
General RF Exposure Reviewer
SAR Qualified Reviewer
Certification Decision Maker

Administrative Contact

Each TCB shall identify a primary Administrative Contact to the FCC as a Key Employee. The Administrative Contact will be responsible for contacting the FCC for all administrative issues related to equipment authorizations (specific grants) for the TCB. The Administrative Contact is responsible for understanding the administrative procedures of the TCB and FCC. It is not necessary for the Administrative Contact to be assessed during the accreditation process for them to be listed as the Administrative Contact.

Reviewers/Decision Makers

Each employee that performs the following TCB Certification process functions of shall be interviewed during the accreditation assessment at least once every two years:

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- Application Review
- Evaluation
- Review
- Certification Decision

The accreditation body may request in advance of an assessment that the personnel involved with a particular area of interest be available during an assessment. For all initial TCB accreditation assessments, all employees performing these functions must be physically present; however, during subsequent surveillance and renewal assessments, the accreditation body may perform remote assessments of these persons at its own discretion (based on the TCB's performance or other relevant factors).

During the initial TCB accreditation assessment, each employee that fulfills one or more of the Key Employee roles noted in Table 4 shall be assessed by the accreditation body to determine competency for their roles. The TCB shall then provide the designating authority with the accreditation body's assessment information and the name and e-mail address of all Key Employees. The designating authority will enter the Key Employee information into the FCC database if the accreditation body's assessment confirms the competency of the Key Employee. Once the Key Employee's roles are entered in to the FCC database,
the Key Employee may begin to serve in their approved role(s).

When an existing TCB adds a new Key Employee or modifies the role of an existing Key Employee, the employee shall first be assessed by the accreditation body (either on-site, or remotely, at the accreditation body's discretion) before being added to the Key Employee List in accordance to the process noted
above.

A TCB shall notify their designating authority and accreditation body within 30 days if a Key Employee leaves the TCB or is no longer performing their approved roles.   The TCB may be subject to a reassessment when there is a change in Key Employees that affects the technical competence of the TCB.

TCB Primary Contact for FCC

Each TCB shall identify a person who is the primary contact for all FCC general correspondence.

The TCB shall provide the designating authority with the name, phone number, fax number and e-mail for the TCB primary contact. It is noted that many TCBs provide a group e-mail address so that multiple individuals within the TCB receive key FCC correspondence.

A TCB shall notify their designating authority within 30 days of any changes to the TCB primary contact.

L. Resources for Evaluation (Testing), Review, and Decision Making

TCBs are expected to keep the FCC informed of current contact information, as shown in the FCC Equipment Authorization System (https://apps.fcc.gov/tcb/TcbHome.do). TCBs shall notify their designating authority when there are changes to key information, such as changes in the key employees, address, name, and accreditation expiration date. For TCBs located in the United States, the TCB shall contact NIST. For TCBs outside of the United States, recognized under the terms of a government-to-government MRA, the TCB shall contact their designating authority to report any changes. The designating authority will then update the information in the FCC EA System.

M. TCB Personnel Training

As required in 6.1.2.2 of ISO/IEC 17065:2012, the TCB shall maintain information on the relevant qualifications, training, and experience of each member of the personnel involved in the certification process. The TCB shall provide records demonstrating that each of their certification personnel that perform Application Review, Evaluation, Review, and Certification Decision of products subject to certification have successfully completed training covering their area of operation. The TCB as an entity shall have personnel trained covering their FCC scope as a TCB. This training may consist of either attendance at relevant external training courses, or internal training courses. Records shall be maintained of such training courses including: attendance, instructors, instructor qualifications, course content, and results of any tests given during the course.

TCBs are also strongly encouraged to participate in additional training opportunities, including conference calls with the FCC, TCB workshops, and/or any other applicable conformity assessment and/or equipment authorization workshops.

N. TCB Acceptance of Test Data

After July 12, 2017, all equipment subject to certification is required to be tested at measurement facilities that have been recognized by the FCC as accredited to ISO/IEC 17025 and the FCC requirements.[25] The accreditation and recognition of a test site applies to a specific test facility. All testing, including testing by external resources and subcontracted testing, must be performed at an accredited test facility that is recognized by the FCC. It is not permitted for a TCB to accept test reports for which an FCC recognized accredited testing laboratory did not perform the testing, but instead only reviewed testing completed at a non-recognized site, without full re-test. When filing an application for certification, the TCB is required to enter the name of the test site from the list of recognized test sites, as shown in the Equipment Authorization System. If a product was tested at more than one site, the test report should specify what tests were performed at which locations.[26]

When accepting test data in support of an application for certification, the TCB shall review the test report as part of the Evaluation process requirement and verify the testing laboratory was FCC recognized for
the FCC scope of the device. The TCB needs to be confident that the product meets the relevant requirements before it certifies the product. The process used by the TCB for the acceptance of test data
will be reviewed during the ISO/IEC 17065:2012 assessment. All testing for certification must
be completed at an accredited testing laboratory that is recognized by the FCC as accredited.

O. Test Procedures

When evaluating an application for certification, a TCB shall ensure that the appropriate test procedures have been followed. Any party making measurements to show compliance with the FCC rules needs to select the appropriate measurement methods as required and specified in the particular section of the FCC rules. For example, for Part 15 devices, see §§ 15.31, 15.32, 15.33, and 15.35. The FCC Knowledge Database provides additional guidance on testing devices subject to the FCC rules.

P. Dismissal of Application

A TCB may request a dismissal of an application that they have been requested to approve, prior to issuing the certification or certifications which they approved, within 30 days of the approval, for non-compliance with FCC requirements. These requests should be submitted as a KDB inquiry with an explanation of the reason for the dismissal and in cases of non-compliance, a detailed explanation of the

non-compliance.

Q. Records Retention

The TCB shall retain for five years all documentation associated with the approval of a product subject to certification by the FCC.

R. TCB Post-Market Surveillance Requirements

47 CFR § 2.962(g) requires a TCB to perform appropriate post-market surveillance activities. These activities shall be based on type testing a few samples of the total number of product types that the TCB has certified. The FCC has provided guidance in KDB Publication 610077 for performing post-market surveillance.

S. List of TCBs

A list of recognized TCBs and their scope of accreditation may be searched on the FCC webpage at https://apps.fcc.gov/tcb/TcbHome.do. The TCB search link allows searching for a specific TCB, or if the search fields are left blank, a listing of all recognized TCBs will be returned.

Overview of Industry Canada Application and Certification Process

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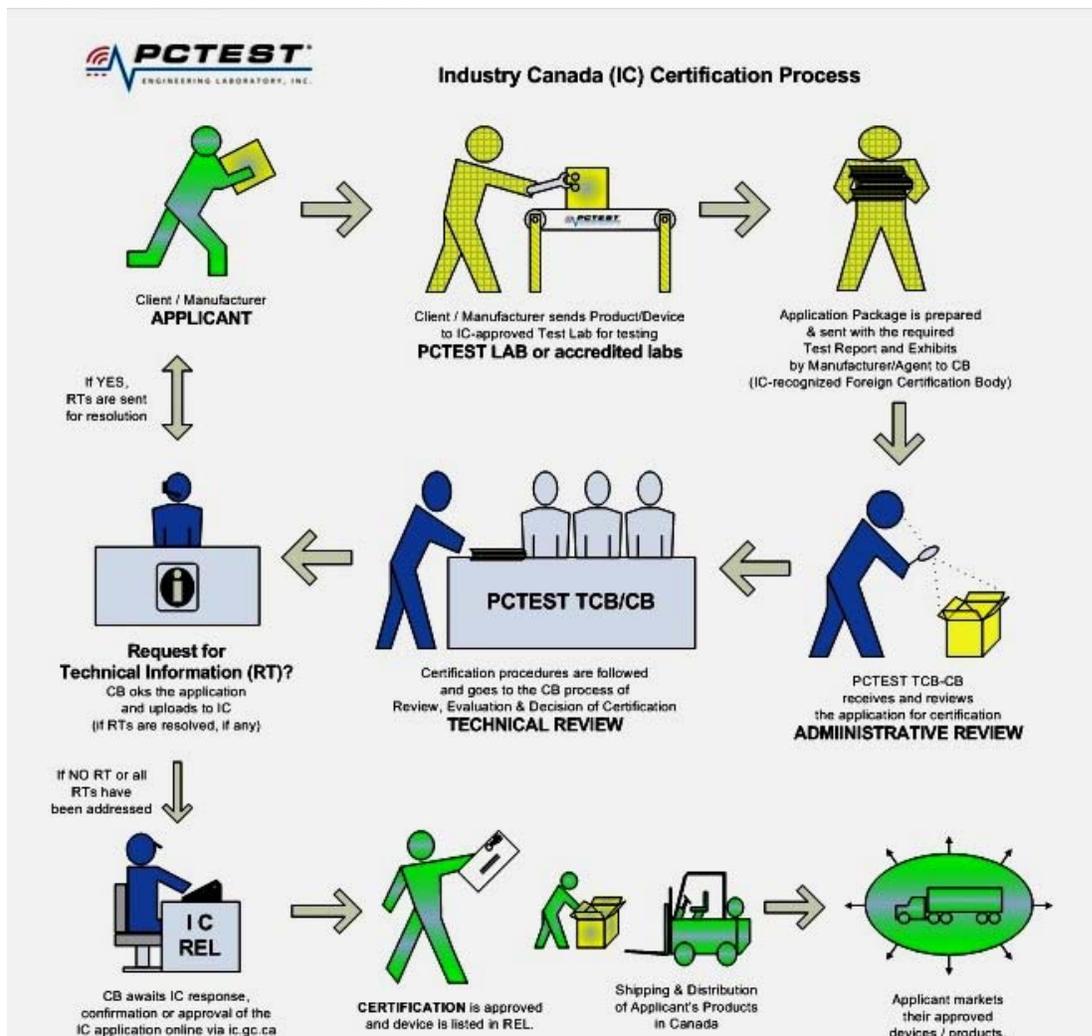
IC Product Audit Requirements

Industry Canada has specified the requirements needed for conducting product audits in Clause 6.2 of the CB-02 — *Recognition Criteria, and Administrative and Operational Requirements Applicable to Certification Bodies (CB) for the Certification of Radio Apparatus to Industry Canada's Standards and Specifications.*

6.2.1 CBs shall conduct appropriate product audit activities in accordance with the latest edition of ISO/IEC 17065.

6.2.2 The number of samples to be audited by the CB in any given calendar year (January 1 through December 31 inclusive) shall be based on the following:

(a) a minimum of five (5) percent of the total number of products certified by the CB in that calendar year; and

(b) a minimum of one (1) percent of the total number of products certified by the CB in that calendar year that are subject to specific absorption rate (SAR) requirements outlined in RSS-102.[3] This one percent SAR audit can be part of the five percent audit in (a) if the audited equipment requires testing for both radio and SAR parameters;

6.2.2.1 When calculating the number of products to be audited per Section 6.2.2, the following shall apply:

(a) different models of equipment covered under a unique Industry Canada certification number are counted as a single product;

(b) the total number of products to be audited comprises the total number of products subject to (i) single new certifications **and** (ii) new family certifications, as per RSP-100[4] (see sections 5.1 and 5.2 respectively); and

(c) the number of products to be audited shall be rounded up to the next whole number. For example, a result of 0.04 is rounded up to 1, a result of 95.3 is rounded up to 96 and so on.

6.2.3 A product certified in a prior calendar year, but audited in the current calendar year, will be credited as audit in the current calendar year.

6.2.4 As part of the CB's product audit responsibility, CBs shall notify the Bureau, by electronic filing via the Bureau's website, upon completion of an audit during the current calendar year, or at the latest by January 31 of the following year.

6.2.5 CBs should consider the following when selecting samples for audit:

(a) the manufacturer's history of compliance;

(b) whether the sample comes from a new applicant;

(c) whether the sample is based upon new technology;

(d) popularity (mass deployment) of the technology;

(e) price of the sample relative to the average price of similar technology; and

(f) potential harm/impact to network or people due to non-compliance.

6.2.6   CBs shall notify certificate holders of the audit requirement and advise them that they should make provision to always have production samples available upon request by the CB or by the Bureau, for auditing purposes. The CB shall notify the Bureau if the request for a sample cannot be met.

6.2.7   CBs shall advise certificate holders that, in the event of an investigation of non-compliance, the certificate holder will be asked to provide, to the Department, records of the quality control process and any relevant information that would help to identify the cause and extent of the non-compliance. It is expected that all certificate holders will be able to demonstrate a quality control process used for production inspection and testing in accordance with good engineering practices.

6.2.7.1   If a product fails to comply with the applicable requirements during an audit conducted by the CB, the **CB shall immediately notify the certificate holder and the Bureau**. The information submitted to the Bureau shall include a copy of the certificate that was issued for the subject equipment.

6.2.7.2   In the notification to the certificate holder, the CB shall instruct the certificate holder to provide it with relevant information, including but not limited to, the following: test samples/test reports, quality control data and/or an action plan. The notification will indicate that the requested information shall be provided within thirty (30) calendar days from the date of the notification. An acknowledgement of receipt of the notification by the certificate holder shall be provided to the CB within fifteen (15) calendar days of the date of the notification. However, if a product fails to comply with SAR requirements, the requested information shall be submitted to the CB within twenty-one (21) calendar days from the date of the notification. An acknowledgement of receipt of the notification by the certificate holder shall be provided to the CB within seven (7) calendar days of the date of the notification.

6.2.7.3   Should the non-compliance case not be resolved, the CB will provide all information obtained during its investigation to the Bureau. Decertification will be considered after full consultation between the Bureau, the CB and the certificate holder. The Department anticipates that the certificate holder will normally take prompt, satisfactory corrective action.

6.2.8   If a CB does not have an SAR testing facility and therefore subcontracts testing to a third party laboratory, the CB shall coordinate the audit results of the subcontracted SAR testing laboratory and submit the audit results to the Department, as part of the CB's audit report.

6.2.9   The Bureau may also request test reports of audit activities from the CB. The CB shall submit such reports to the Bureau within thirty (30) calendar days of the request.

6.2.10   In addition to the minimum auditing requirements of Section 6.2.2, CBs shall conduct testing on targeted products upon request by the Department. CBs shall submit their findings to the Bureau within thirty (30) calendar days of the request.

6.2.11   The Bureau can be contacted at:

Certification and Engineering Bureau
Industry Canada
P.O. Box 11490, Station H
3701 Carling Avenue
Building 94

Ottawa, Ontario
Canada K2H 8S2

Telephone: 613-990-4218
Facsimile: 613-990-4752
E-mail: certification.bureau@ic.gc.ca
Website: http://ic.gc.ca/certification

CB Scope of Accreditation

PCTEST has been accredited by ANSI and is designated by IC to certify all Radio Standards Specifications (RSS) in the Category I Equipment Standards List.

Radio Scope 1	License-Exempt Radio Frequency Devices
Radio Scope 2	Licensed Personal Mobile Radio Services
Radio Scope 3	Licensed General Mobile & Fixed Radio Services
Radio Scope 4	Licensed Maritime & Aviation Radio Services
Radio Scope 5	Licensed Fixed Microwave Radio Service

TCB/CB Overview of Fee Schedule

To provide an overview of the means by which the CB obtains financial support.

Overview

PCTEST CB generates revenues on application review and processing fees charged to clients. Applicants are treated equally and no bias given any one client. Fee structures are available upon request from PCTEST CB.

Fee charged

Certification fees are application dependent and will vary as each application has varying degrees of scope. The cost of services can be obtained through direct contact with the TCB Project Manager.

Contact PCTESTTCB@pctest.com or call 1.410.290.6652 to request a quotation for PCTEST CB Services