



Bay Area Compliance Laboratory

Product Certification User’s

Manual for

**ACTA, FCC, ISED, IMDA, Japan MIC, OFCA, Notified
Body EMC and Radio Equipment Directives**

Document Code: QAM-UM

Version: S

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	Bay Area Compliance Laboratories Corp.	<i>Issue Date : 4/7/2010</i>
		<i>Revision Date : 10/12/2020</i>
	Product Certification Users Manual	<i>Doc Code: QAM-UM-S</i>

Product Certification User’s Manual

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0. Introduction to Bay Area Compliance Laboratories Corp (BACL)

Incorporation

BACL (Bay Area Compliance Laboratories Corp) is organized under the General Corporations Law of California and was incorporated in California on Nov. 17, 1996.

Accreditations

BACL is accredited as a Product Certification Body (PCB) by A2LA (American Association for Laboratory Accreditation) in accordance with ISO/IEC 17065 and is recognized as a TCB (Telecommunication Certification Body) by the FCC. The scope of certification covers Unlicensed Radio Frequency Devices, Licensed Radio Service Equipment and Telephone Terminal Equipment.

BACL is accredited as an ISED FCB (Innovation, Science, and Economic Development Canada Foreign Certification Body) by A2LA for Innovation, Science and Economic Development Canada for all Radio Standards Specifications (RSS) and all Broadcasting Technical Standards (BETS) in category 1 equipment standards.

BACL is accredited as a Product Certification Body by A2LA for IMDA (Infocomm Media Development Authority) Singapore, for Radio and Communication Equipment.

BACL is accredited as an OFCA FCB (Office of the Telecommunication Authority Foreign Certification Body) by A2LA for Hong Kong for Radio, Marine and Fixed Network Equipment.

BACL is designated as an EU NB (European Union Notified Body) by NIST (National Institute of Standards and Technology) for the EMCDD (Electromagnetic Compatibility Directive) and RED (Radio Equipment Directive). BACL is NB # 1313.

BACL is accredited as a Product Test Laboratory per ISO/IEC 17025:2005 by NIST under the A2LA (American Association for Laboratory Accreditation). The scope covers Emissions, Immunity, Product Safety, Radio, RF Exposure, Telecom and Energy Efficient Lighting testing.

BACL is designated as a CAB (Conformity Assessment Body) Phase-I by NIST for product testing by ACMA (Australian Communications and Media Authority), BSMI (Chinese Taipei's Bureau of Standards, Metrology and Inspection), DGT (Chinese Taipei's Directorate General of Telecommunications) now NCC, ISED C (Innovation, Science, and Economic Development Canada), IMDA (Singapore's Infocomm Media Development Authority), OFCA (Hong Kong's Office of the Telecom Authority), RRL (Korea's Ministry of Communications Radio Research Laboratory) now KCC and VCCI (Japan's Voluntary Control Council for Interference).

Facility Location and Contact Information

Bay Area Compliance Laboratories Corp. (BACL) 1274 Anvilwood Avenue Sunnyvale, CA 94089	Phone: (408) 732-9162 Fax: (408) 732-9164 E-Mail: info@baclcorp.com
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1. ACTA & FCC USER'S MANUAL

This section of the user's manual provides information to applicants applying for an ACTA and/or an FCC Grant of Certification.

1.1. The TCB program

The FCC created the Telecommunication Certification Body (TCB) program in a Report and Order adopted Dec. 17, 1998 to provide for acceptance of tests and certifications from all regions of the world. With this order, the FCC allows companies that are accredited to ISO 17065, such as BACL, to issue most FCC Grants on behalf of the FCC. Prior to the TCB program, product manufacturers had to apply to the FCC for grants for all product types subject to certification. Before 1999, processing time for the FCC was typically 4 weeks or more. Since 2000, the FCC now allows other companies to certify and provide grants. Manufacturers that use companies such as BACL, receive a rigorous technical review of their application, and receive their certifications and grants much quicker.

1.2. BACL's TCB program

Manufacturers of Unlicensed Radio Frequency Devices or Licensed Radio Service Equipment which require a Grant of Certification from the FCC prior to marketing in the United States can use BACL's TCB program to obtain their grant faster than using the traditional FCC process.

Agents and test laboratories, which assemble certification applications for manufacturers, may also submit their applications directly to BACL. An applicant or agent must file their application directly with the FCC for certain specified products.

BACL as a TCB cannot:

- Grant a waiver of the rules,
- Issue a grantee code,
- Take enforcement actions,
- Authorize a transfer of control of a grantee,
- Revoke a grant after 30 days.

1.3. Eligible products

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The FCC allows almost all products to be certified under the TCB program. Some products are not eligible for the TCB program because procedures do not exist for some test methods used to evaluate certain devices. Until those procedures are written and adopted by the FCC, applications for approval of those devices must be sent directly to the FCC. Contact BACL if you have any questions concerning your product's qualification for processing under BACL's TCB program.

1.4. ACTA (Part 68) Certification Program

ACTA (Administrative Council for Terminal Attachments) has taken over the Part 68 database task from the FCC. The ACTA website is located at www.part68.org. The FCC still maintains authority for Part 68 rules, enforcement actions, etc.

The applicant must submit an applicable Test Report or have BACL perform the appropriate product testing. A completed ACTA TTE submission form must also be submitted to BACL. An MS-Word formatted blank form is available on the ACTA website @ www.part68.org. The applicant and BACL must also execute a BACL Certification Agreement [QA-FR-08](#).

A test report from an outside test lab that is not accredited or does not have the proper scope will require assessment by BACL before BACL can accept an outside test report for certification services.

A Technical Evaluation must be performed on the documentation provided to assure everything meets ACTA requirements. A "Recommend Grant" Technical Evaluation Report is required to proceed to the Certifier. The Certifier reviews the documents and data and if everything meets requirements, completes a "Recommend Grant" Certification Checklist which Document Control uses to create the Grant Certificate and complete the certification. A Certificate and Issuance Letter is forwarded to the applicant.

1.5. BACL contact for certification application

Contact: Certification Manager
Email: bacl.regulatory@baclcorp.com
Phone: 408-732-9162
Fax: 408-732-9164

Mail: Bay Area Compliance Laboratories Corp.
Attention: Certification Manager
1274 Anvilwood Avenue
Sunnyvale, CA 94089
USA

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1.6. The Certification Agreement

The applicant and BACL must execute a Certification Agreement (QA-FR-08), signed by an authorized representative of the applicant and BACL Sunnyvale, CA, agreeing to various terms and conditions for product certification. The Certification Agreement requests product information, test data, product specifications and various information required in accordance with the certification scheme, liabilities, confidentiality, compliance, certification withdrawal/cancellation, changes, regulatory revisions to certified products, disputes & appeals, complaints, surveillance testing, anti-drug abuse statement, agents, payment, agreement period, etc.

1.7. Choice of Test Laboratory

Applicants may use BACL or another test laboratory for product testing. Test laboratories should be accredited to ISO 17025:2005 by a national accreditation body such as A2LA, ACLASS, NVLAP, etc., or be recognized through an MRA (Mutual Recognition Agreement) and have the relevant test methods in their scope of accreditation to be considered competent to perform the specific tests and measurements. BACL must assess any outside test lab that was used to perform the product testing and provides a test report which is to be used for certification, that is not accredited or without the proper test scope for competency to perform the test and measurements. Applicants must assure their tested product is equivalent to their production product.

For certification of devices under 47 CFR Part 15 or Part 18, the test laboratory Open Area Test Site (OATS) or Anechoic test chamber must be on file with the FCC as specified in 47 CFR 2.948. Each test laboratory listed with the FCC must be able to produce a letter from the FCC acknowledging receipt of the description of their test site.

A Technical Evaluator that is familiar with the particular product type and the rules for the specific certification sought will review the certification application file. If the test data does not adequately document product compliance, additional test data may be requested. If the test data presented is questionable, a product sample may be requested for testing. A “Recommend Grant” Technical Evaluation Report is required to proceed to the Certifier. The Certifier reviews the documents, data, etc., and if everything meets requirements, completes a “Recommend Grant” Certification Checklist which Document Control uses to create the Grant Certificate and complete the certification application.

1.8. Certification Fees

Certification Fees are set by BACL. All applicants are charged the same fee proportional to the scope of work, regardless of the number of certificates issued. Certification fees include a levy supporting BACL post market surveillance test audits. Certification fees are subject to change without notice.

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1.9. Payment Methods

Payment may be cash, credit card, cashier's check, wire transfer, purchase order, etc. Remittance must be in US dollars drawn on a US bank and made payable to Bay Area Compliance Laboratories Corp. All fees are non-refundable once the application is accepted by BACL for processing.

1.10. The Application & Delivery

Applications for ACTA or FCC certification are submitted to BACL in an electronic format, or there are additional fees for processing. If the application is adequate it is accepted. If it is deficient, BACL will provide the application deficiencies to the applicant for corrective action.

Electronic Format files submitted in Adobe pdf format are preferred. Files in MS-WORD, jpg, MS-Excel, or ASCII text are acceptable. The above files may be delivered by email to BACL's FTP site at: [63.193.26.115](ftp://63.193.26.115). BACL will email a follow-up confirmation to the applicant.

Paper Files should be sent to BACL by Federal Express, DHL or UPS Red as those companies track their packages. The BACL delivery address is:


Bay Area Compliance Laboratories Corp.
Attention: (appropriate Salesperson)
1274 Anvilwood Avenue
Sunnyvale, CA 94089
Telephone: 408-732-9162

1.11. Application Format for FCC Transmitters and Receivers

All application information must conform to 47 CFR 2.1033 requirements. BACL will submit your application files in the FCC required format. A certification application must have at least one file from each category below marked with an asterisk (*). Applications cannot be submitted as a single file, but are submitted as a collection of files from the various required categories. Applicant may provide more than one file of each category to submit. Applicants should limit individual file sizes to 2 megabytes.

FRN Number (FCC Registration Number)

The FRN number is a unique number obtained from the FCC by each applicant and is required and used to track the company and its compliance with FCC rules. If the applicant does not have an FRN number, it can be obtained from the FCC website at www.fcc.gov, e-filing page.

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*** Cover Letter**

The customer's cover letter explains the services being requested from BACL and may request confidentiality of some certification application elements.

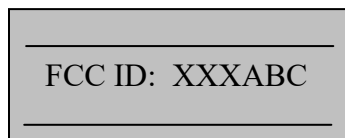
*** Form 731**

The applicant must submit a signed FCC Form 731. The applicant signature must be a person that is registered with the FCC.

*** ID Label/Location**

All FCC certified products must display an identification label showing the FCC Identifier (FCC ID) under which the product is authorized. Sections 47 CFR 2.925 and 2.926 provide detailed labeling requirements. Additional labeling requirements may be specified in the FCC rules (in particular see 15.19) governing a particular class of equipment.

FCC ID: The FCC ID consists of two elements, a grantee code and an equipment product code in the exact order shown in the example below. See section 47 CFR 2.926 for additional information.



XXX= The three character Grantee Code is assigned by the FCC to a specific grantee and is valid only for the company listed and at the address listed.

ABC= The Equipment Product Code (EPC) is assigned by the applicant. It can be a minimum of 1 character and a maximum of 14 characters, which may consist of capital letters, arabic numerals or any combination thereof, and/or hyphen or dash (-). The Applicant should assign the least number of characters that will adequately identify their product.

The label drawing above illustrates the FCC ID: XXXABC example required format for the FCC ID label. Where FCC required identification data is included on a label with other information by the applicant, or required by other agencies, the FCC ID should be distinguishable from other information on the label. The proposed label with correct FCC ID number must be submitted with

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applications for equipment authorization, pursuant to Sections 2.963(d) (12), 2.975(a)(4), 2.983(f) and 2.1033(b) (7), and must be representative of the FCC ID label to be placed on the production product upon grant of an application.

The Applicant should not procure large quantities of the proposed FCC identification labels or label their equipment by any method (silk-screening, engraving, etc.) prior to receiving a grant of their application because of the following;

- a. An FCC ID listed in an application for equipment authorization that has been “Denied” cannot be used for future filings per section 2.926(d)(2);
- b. Products in applications that are “Dismissed” may not legally be sold per section 2.803;
- c. Corrections and/or revisions of proposed FCC ID labels submitted are often required.

See section 2.926(e) for information concerning FCC ID on labels of unauthorized product.

*** External Photos**

Good quality photos (1M pixel or greater) are required showing the exterior of the product from all sides. External photos cannot be kept confidential.

*** Internal Photos**


Good quality (1M pixel or greater) photos are required showing the inside of the product and both sides of all printed circuit boards. Confidentiality may be requested for internal photos if the user is unable to gain access to the interior of the product without damaging it.

*** Test setup photos**

Photos are required which show evidence of the cable and equipment configuration that produced the worst case of radiated and conducted emissions. Front and back photos are required. Four individual photos are typically used.

*** Operational Description**

Provide a brief description of the circuitry functions of the product describing how the product operates. The statement shall contain a description of the grounding system and antenna(s), if any, used with the product.

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*** Block Diagrams**

Provide a block diagram showing the frequency of all oscillators in the product. Indicate the signal path and frequency at each block including the tuning ranges and intermediate frequency(s) at each block.

*** Schematics**

Provide a schematic diagram of the product. Make sure schematics are formatted per the USA size (approximately 21.5cm x 28cm).

Additional Requirements for other than Part 11, 15 and 18 Products

Describe the type or types of emissions, frequency range of operations, range of operating power values or specific operating power levels including any processes to change the operating power. Provide the maximum power rating as defined in the FCC rules, any DC voltages applied to and DC currents into the circuitry of the final radio frequency amplifying device for normal operation over the power range. For digital modulation techniques products, provide a detailed description of the modulation system used, including the response characteristics (frequency, phase and amplitude) of any filters provided and a description of the modulating wave train.

*** Test Report**

An approved test report is required of the product that was tested (model and serial number), all the specific tests and measurements for the product which shows compliance with the specific FCC technical requirements. The test report must state the industry standard and test processes used, the date the test and measurements were made, the calibrated test equipment used to make the measurements and the location where the measurements were made. The test report must include calculations showing how the measurement results were converted for comparison with

the technical requirements, if applicable. The test report must state the accreditation status of the test facility, the accreditation certificate number or lab code and scope of accreditation.

*** User's Manual**

A copy of the user's manual is required for the product with all required FCC statements.

Parts List / Tune-up information

Provide information if it is applicable to the product.

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*** RF Exposure Information**

Provide detailed analysis documenting the product compliance with the requirements of 1.1310, 2.1091, and/or 2.1093 as applicable. Products categorically excluded from routine RF exposure must still file an analysis document indicating they comply with the RF exposure limits.

1.12. Things to be Considered

a. Confidentiality Requests

For any application file to be treated as confidential by the FCC, a section of the applicant’s cover letter exhibit or separate confidentiality justification letter exhibit must specifically request confidentiality and the reasons(s) in accordance with 47 CFR 0.457 and/or 0.459. The request must specify the application file(s) that are requested to be confidential. If a portion of a category of an application file contains both confidential and non-confidential information, split the file into two files and submit both with one identified as confidential.

Requesting an application file to be confidential does not guarantee the FCC will determine it remains confidential. The FCC determines which files are treated as confidential after the applicant makes a request for either short or long term confidentiality.

ACTA application files do not have a process to be treated as confidential, but the ACTA files are not easily accessed by anyone with internet access.

b. Response time for TCB requests for information

Applicants must respond to requests for information from BACL about a product certification application as soon as possible, but within 60 days, or the application will be denied without prejudice and returned. The application fee is not refundable.

c. Use of Agents

Applicants may authorize agents to act on their behalf. Applicants authorizing agents to perform such functions on their behalf remain responsible for the contents of their application and any actions of their agent. Any disagreement between the applicant and their agent is a civil matter to be resolved between the applicant and their agent. BACL reserves the right to contact applicants

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directly at any time, whether an agent is involved or not. When an attorney acts as an agent, BACL will acknowledge the attorney as required by Section 1.12 of the FCC Rules.

1.13. Technical Evaluation & Certification

A Technical Evaluator that is familiar with the particular product type and the rules for the specific certification sought will review the certification project file. If the test data and information submitted does not adequately document product compliance, additional test data or information may be requested. If the test data or information presented remains questionable, a product sample may be requested for testing.

Once the technical review and evaluation is complete and the BACL certifier determines the product satisfactorily complies with the regulatory standards and BACL requirements, the product will be certified.

1.14. ACTA & FCC Directory of BACL Certified Products

The product ID and information is entered into the ACTA or FCC database of certified products and authorization to market the product is issued to the applicant in the form of an ACTA or FCC Grant Certificate and Issuance Letter. Reference to the product certification may be made in product documentation, sales literature, advertising and retail materials upon receipt of the ACTA or FCC Grant Certificate from BACL. The ACTA and/or FCC ID number and related information will also be entered into the BACL Directory of Certified Products and available upon request.

1.15. Modifications of Certified Equipment

Modifications to certified products may require re-certification of the equipment. The applicant shall notify BACL before a certified product has been modified, to determine the validity of its certification. BACL will review and evaluate the modification and provide the applicant with a document stating the results.

1.16. Certification Retention and Audits

- a. Certificate holders shall assure that all production products certified by BACL continue to meet the applicable technical and procedural requirements of the FCC and BACL. BACL and the FCC will conduct post-markets surveillance test audits to assure continued compliance.

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- b. Subsequent production units must adhere to the technical characteristics and quality under which certification was originally issued. The certificate holder shall assure continued compliance with the technical standards and requirements by performing periodic testing.
- c. The FCC may request from the certificate holder, random product samples for post-certification audit testing, or as a result of complaints. If the sample fails the tests, the certificate holder will be required to take corrective action.
- d. Certificate holders shall retain copies of their certification submission for five years.

1.17. Withdrawal of Certification

- a. BACL may withdraw ACTA and FCC certifications within 30 days of the certification date. After 30 days only the FCC may withdraw ACTA and FCC certifications.
- b. Where, as a result of a post-market surveillance test audit or other information obtained by BACL or by the FCC, a certified product fails to meet the applicable technical or procedural requirements, or where there is reasonable evidence that a certified product is creating electromagnetic interference or not operating in accordance with the parameters described on the Certificate, BACL shall inform the FCC and the certificate holder. The certificate holder will be required to take remedial action.

1.18. Rights of Applicants of BACL Certified Products

- a. Applicants may always request in-depth information about any aspect of their pending certification, completed certification or any other related matter. BACL and the applicant will attempt to resolve any disputes or appeals that arise between the applicant and BACL. If resolution is not possible, the dispute will be appealed to the specific regulatory authority as the final arbiter.
- b. The FCC is final arbiter per 47 CFR § 2.962(h),
- c. The applicant and BACL will each have a reasonable time to provide comments before the regulatory authority reaches a final decision. Applicants, suppliers, or other parties with complaints about a BACL certification that have a right to receive related information, may request in-depth information about related aspects of their completed certification or other related matters.

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2. ISED FCB USER'S MANUAL

This following information is for applicants applying for an ISED Grant of Certification from BACL.

2.1. The ISED FCB program

Innovation, Science and Economic Development Canada recognizes FCB's (Foreign Certification Bodies) under the terms of an MRA (Mutual Recognition Agreement) to certify products to the Canadian regulatory requirements. This recognition applies to CB's (Certification Bodies) certifying radio apparatus and broadcasting equipment.

2.2. BACL's ISED FCB program

Manufacturers, agents and laboratories that process certification applications for manufacturers can submit their applications directly to BACL for radio apparatus which requires a certification from Innovation, Science and Economic Development Canada, prior to marketing their device in Canada. BACL's ISED FCB program can obtain the required grant faster than using the traditional ISED process for all Radio Standards Specifications (RSS) in Category I Equipment Standards List and all Broadcasting Technical Standards (BETS) in Category I Equipment Standards List.

An applicant or agent must file certain applications directly with the Bureau (Innovation, Science and Economic Development Canada's Certification and Engineering Bureau).

BACL as an ISED FCB cannot:

- a) Assign a new Company Number (CN) as specified in RSP-100.
- b) Waive any applicable requirements promulgated by the Department;
- c) Certify equipment for which there are no requirements promulgated by the Department; and
- d) Advertise its recognition status for certification activities that are outside of its scope of recognition.

2.3. The Certification Agreement

The applicant and BACL must execute a Certification Agreement (QA-FR-08), signed by an authorized representative of the applicant and BACL, Sunnyvale, CA agreeing to various terms

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and conditions for certification. The Certification Agreement requests product information, test data, product specifications and various information required in accordance with the certification scheme, liabilities, confidentiality, compliance, certification withdrawal/cancellation, changes, regulatory revisions to certified products, disputes & appeals, complaints, surveillance testing, payment and agreement period.

2.4. Choice of Test Laboratory for Product Testing

Applicants may use BACL or another test laboratory for product testing. Test laboratories should be accredited to ISO 17025:2005 by a national accreditation body such as A2LA, ACLASS, NVLAP, etc., or be recognized through an MRA (Mutual Recognition Agreement) and have the relevant test methods in their scope of accreditation to be considered competent to perform the specific tests and measurements. BACL must assess any outside test lab that was used to perform the product testing and provides a test report which is to be used for certification, that is not accredited or without the proper test scope for competency to perform the test and measurements. Applicants must assure their tested product is equivalent to their production product.

For certification of Canadian products per RSS-Gen, the test laboratory Open Area Test Site (OATS) or Anechoic test chamber must be on file with ISED as specified in RSS-Gen and CB-02 when tests require the use of such a site. Each test laboratory listed with the ISED must have an ISED OATS filing reference number.

A Technical Evaluation must be performed on the documentation provided to assure everything meets ISED requirements. A “Recommend Grant” Technical Evaluation Report is required to proceed to the Certifier. The Certifier reviews the documents and data and if everything meets requirements, completes a “Recommend Grant” Certification Checklist which Document Control uses to create the Grant Certificate and complete the certification. A Certificate and Issuance Letter is forwarded to the applicant.

2.5. Certification Fees

Certification Fees are set by BACL. All applicants are charged the same fee proportional to the scope of work, regardless of the number of certificates issued. Certification fees include a levy supporting BACL post market surveillance test audits. There are no additional fees for post market surveillance test auditing. Certification fees are subject to change without notice.

2.6. Payment Methods

Payment may be cash, credit card, cashier’s check, wire transfer, purchase order, etc. Remittance must be in US dollars drawn on a US bank and made payable to Bay Area Compliance

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Laboratories Corp. All fees are non-refundable once the application is accepted by BACL for processing.

2.7. Certification Requirements

- a. Certification of Category I radio or broadcast equipment, is required and subject to compliance with the applicable Radio Standards Specifications (RSS) or Broadcasting Technical Standards (BETS) in the “Category I Equipment Standards List.”
- b. RSS or BETS equipment that is intended to be connected to the public telecommunication network is also subject to a Declaration of Conformity and registration to the Terminal Attachment Program as described in Innovation, Science and Economic Development Canada’s DC-01.
- c. Radio or broadcast equipment imported only for demonstration or trial is not required to be certified, but does require an experimental radio or broadcast license. More information can be obtained from the Innovation, Science and Economic Development Canada office nearest to the demonstration or trial site.
- d. Radio equipment listed below requires the approval of other regulatory agencies before BACL can certify the product. In such cases, the other approvals must be included with the application.
 1. Emergency Location Transmitters (ELT’s) must be approved by AARD (Transport Canada Aircraft Certification Branch) before BACL can certify the product.
 2. Emergency Position Indicating Radio Beacons (EPIRB’s) used in the maritime service and Global Maritime Distress and Safety System (GMDSS) must be approved by AMSE (Transport Canada Marine Safety) before BACL can certify the product.
 3. Personal Locator Beacons (PLB’s) must be approved by NSS (National Search and Rescue Secretariat) before BACL can certify the product.
- e. A cover letter explaining the type of certification services requested and a brief description of the radio equipment;
- f. A completed and signed copy of RSP-100 Appendix A or similar document – Application and Agreement for Certification Services;
- g. A completed and signed original copy of RSP-100 Appendix B or similar document – Test Report Cover Sheet;

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- h. A detailed test report meeting the requirements of the applicable RSS or BETS standard;
- i. A completed and signed copy of Appendix A and B of RSS-102 – Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands);
- j. Photographs and literature of the new product;
- k. Schematic diagrams and block diagrams;
- l. A drawing, sample or illustration of the product label;
- m. The applicant must provide in writing the identity of a representative in Canada who is capable of responding to enquiries and who can provide post-certification audit samples at no cost to Innovation, Science and Economic Development Canada .

2.8. Certification Labeling Format

- a. Certified equipment shall be labeled in accordance with RSS-Gen using a unique certification number which consists of the Company Number (CN), which is assigned by Innovation, Science and Economic Development Canada ’s Certification and Engineering Bureau, followed by the Unique Product Number (UPN), which is assigned by the certificate holder.
- b. The certification number shall appear as follows:

“IC: XXXXXX-YYYYYYYYYYYY”

Where:

- The letters “IC” have no meaning or purpose except to identify the Innovation, Science and Economic Development Canada certification number;
 - “XXXXXX-YYYYYYYYYYYY” is the certification number;
 - “XXXXXX” is the Company Number (CN) assigned by Innovation, Science and Economic Development Canada , made of at most six (6) alphanumeric characters (A-Z, 0-9), including a letter at the end of the CN to distinguish between different company addresses;
 - “YYYYYYYYYYYY” is the Unique Product Number (UPN), made of at most eleven (11) alphanumeric characters (A-Z, 0-9) assigned by the applicant.
- c. The alphanumerical characters that are permitted in the CN and UPN are limited to capital letters (A-Z) and digits (0-9). An example of the new format for a company

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having a CN equal to “21A” and wishing to use a UPN of “WILAN3” would be: IC: 21A-WILAN3. The use of characters, such as “#”, “/” or “-“, in the certification number is not allowed. The use of “wild card” characters in the model number (for the purpose of identifying multiple models with one name) is not allowed.

- d. Equipment that has received certification but is not labeled with the applicant's name, model number and the certification number as outlined above is not considered certified.
- e. Category II equipment shall be labeled in accordance with the requirements of RSS-Gen.

2.9. Product Testing and Technical Brief

a. Product Testing

If product testing for field strength radiated measurement, and the conducted measurement of unwanted emissions into the AC power supply network requires the use of an Open Area Test Site (OATS) or Alternative Site, the testing laboratory must have filed a description of their test site with the ISED’s Certification and Engineering Bureau and obtained a reference number. Requirements associated with Open Area Test Sites can be found in RSS-GEN;

General Requirements and Information for the Certification of Radiocommunication Equipment. Detailed information on OATS filings can also be found at:
http://strategis.ic.gc.ca/epic/internet/inceb-bhst.nsf/vwGeneratedInterE/h_pe00039e.html.

b. Technical Brief

1. Certification shall be based on the assessment of a technical brief consisting of, as a minimum:
 - a. A letter describing the product and its specific use; a detailed description of the product and its application, including advertising literature, schematic diagrams of the RF circuitry and block diagrams of associated circuitry, the user and maintenance manuals must be provided with the submission;
 - b. The test report, which shall contain:
 - (i) The test report cover sheet equivalent to Appendix B of RSP-100 appropriately completed and signed; and
 - (ii) The results of measurements conducted on the device as described in the

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applicable technical standard(s). If used, a complete description of any alternative testing methods and the reasons for using it shall be provided when filing for equipment certification. If an alternative method is used, it is advisable to adopt a method used by a national or international organization; and

- (iii) Emission designator; the radio frequency emission type designator shall be stated in the test report; this designator should be of the type used by the ITU-R (International Telecommunication Union-Radio) Innovation, Science and Economic Development Canada Telecommunications Regulation Circular 43; ***Notes Regarding Designation of Emission (Including Necessary Bandwidth and Classification), Class of Station and Nature of Service*** (TRC-43) provides guidance; an emission designator calculator is available at the Web site:
http://strategis.ic.gc.ca/epic/internet/inceb-bhst.nsf/vwGeneratedInterE/h_pe00010e.html , and
- (iv) Supporting information; photographs of the internal circuit boards and external views of the product are required to precisely identify the equipment; the photographs shall be large enough to identify the major components.


2.10. Technical Evaluation & Certification

A Technical Evaluator that is familiar with the particular product type and the rules for the specific certification sought will review the certification project file. If the test data and information submitted does not adequately document product compliance, additional test data or information may be requested. If the test data or information presented remains questionable, a product sample may be requested for testing.

Once the technical review and evaluation is complete and the BACL certifier determines the product satisfactorily complies with the regulatory standards and BACL requirements, the product will be certified.

2.11. Listing of Product Certifications

- a. BACL requires a documented acknowledgement from the applicant indicating required technical information furnished in support of a certification application may be posted in the Radio Equipment List (REL) on Innovation, Science and Economic Development Canada's Spectrum Management and Telecommunications Web Site. The applicant may also provide a document that states any documents they would like to remain confidential. ISED will determine what if any documents remain confidential.

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- b. Innovation, Science and Economic Development Canada’s Certification and Engineering Bureau will record the certification details in the Innovation, Science and Economic Development Canada ’s Radio Equipment List (REL) based on the information received from the FCB certifying the product. A certified product shall not be distributed, leased, sold or offered for sale in Canada before the details of its certification have been added to the REL. BACL pays the listing fee on behalf of the applicant to the ISED’s Certification and Engineering Bureau before the equipment is added to the REL.
- c. Authorization to market the product is issued to the applicant in the form of a BACL Certificate and Issuance Letter. Reference to the product certification may be made in product documentation, sales literature, advertising and retail materials upon receipt of the ISED Grant Certificate from BACL.
- d. The IC ID number and related information will also be entered into the BACL Directory of Certified Products and available upon request.

2.12. Modifications of Certified Equipment

Modifications to certified radio apparatus or broadcast equipment may require re-certification of the equipment. The applicant shall notify BACL before certified equipment has been modified, to determine the validity of its certification. BACL will review and evaluate the modification and provide the applicant with a document stating the results.

2.13. Certification Retention and Audits

- a. Certificate holders shall assure that all production units certified by BACL continue to meet the applicable technical and procedural requirements. BACL and the ISED’s Certification and Engineering Bureau will conduct post-certification audits to assure continued compliance.
- b. Subsequent production units must adhere to the technical characteristics and quality under which certification was originally issued. The certificate holder shall assure continued compliance with the technical standards and requirements by performing periodic testing.
- c. ISED may request from the certificate holder, random radio apparatus or broadcast equipment samples for post-certification auditing, or as a result of radio or broadcast interference complaints. If the sample fails the audit, the certificate holder must take corrective action.
- d. If BACL has its CB recognition withdrawn or stops operating, Innovation, Science and Economic Development Canada requires certificate holders who have affected products still

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being distributed in the Canadian Market to transfer the product certificates to a recognized FCB or to the ISED’s Certification and Engineering Bureau within three months of notification from Innovation, Science and Economic Development Canada . Otherwise, their products will be removed from the Radio Equipment List. The affected certificate holders shall provide a copy of their original certification submission, which includes a technical brief to Innovation, Science and Economic Development Canada upon request. Certificate holders shall retain copies of their original certification submission for a period of ten years.

2.14. Withdrawal of Certification

- a. Where, as a result of a post-certification audit or other information obtained by BACL or by ISED, a certified device fails to meet the applicable technical or procedural requirements, or where there is reasonable evidence that a certified device is creating electromagnetic interference or not operating in accordance with the parameters described on the Certificate, BACL shall inform ISED and the certificate holder will be required to take remedial action.
- b. If the certificate holder does not take remedial action or their actions do not fix the problem, BACL will withdraw the certificate. BACL will inform the applicant and ISED about withdrawing the certification, the applicant must return the certificate to BACL and ISED will remove the product from the **Radio Equipment List**. ISED may also direct BACL to withdraw a certificate for cause.

2.15. Rights of Applicants of BACL Certified Products

Applicants may request in-depth information about their pending certification, certification or other related matters. BACL and the applicant will attempt to resolve any disputes or appeals between the applicant and BACL. If resolution is not possible, the dispute will be appealed to ISED as the final arbiter. ISED per CB-02 §6.1.3. The applicant and BACL will each have a reasonable time to provide comments before the regulatory authority reaches a final decision. Applicants, suppliers, or others with complaints about a BACL certification that have a right to receive related information, may request in-depth information about related aspects of their completed certification or other related matters.

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3. IMDA USER'S MANUAL

This following information is for applicants applying for an IMDA (Singapore) Grant of Certification from BACL.

3.1. The IMDA CB program

Info-Communications Development Authority (IMDA) Singapore recognizes Conformity Assessment Bodies (CAB's) under the terms of Mutual Recognition Agreements (MRA's) to certify products to the IMDA regulatory and administrative requirements. This recognition applies to CB's certifying radio and communication equipment for suppliers.

3.2. BACL's IMDA CB program

Suppliers of radio and communication equipment which require a certification from IMDA prior to marketing their device in Singapore can use BACL's IMDA CB program to obtain most of their required grant faster than using the traditional IMDA process. Agents and laboratories that process certification applications for suppliers can submit their applications directly to BACL.

An applicant or agent must file certain applications directly with IMDA.

BACL as an IMDA CB cannot:

- a) Grant a waiver of conformity to any of the applicable IMDA technical regulations
- b) Grant a change in ownership of certificates; and
- c) Perform equipment certification on types of telecommunications equipment that do not have the applicable IMDA technical regulations or specifications established and published.

3.3. The Certification Agreement

The applicant and BACL must execute a Certification Agreement (QA-FR-08), signed by an authorized representative of the applicant and BACL, Sunnyvale, CA agreeing to various terms and conditions for certification. The Certification Agreement requests product information, test data, product specifications and various information required in accordance with the certification scheme, liabilities, confidentiality, compliance, certification withdrawal/cancellation, changes, regulatory revisions to certified products, disputes & appeals, complaints, surveillance, agents, payment and agreement period.

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3.4. Choice of Test Laboratory

Applicants may use BACL or another test laboratory for their product testing. Test laboratories should be accredited to ISO 17025:2005 by a national accreditation body such as A2LA, ACLASS, NVLAP, etc., or be recognized through an MRA (Mutual Recognition Agreement) and have the relevant test methods within their scope of accreditation to be considered competent to perform the specific tests and measurements. BACL must assess any outside test lab that was used to perform the product testing and provides a test report which is to be used for certification, that is not accredited or without the proper test scope for competency to perform the test and measurements. Applicants must assure their tested product is equivalent to their production product.

3.5. Certification Fees


Certification Fees are set by BACL. All applicants are charged the same fee proportional to the scope of work, regardless of the number of certificates issued. Certification fees include a levy supporting BACL post market surveillance test audits. There are no additional fees for auditing. Certification Fees are subject to change without notice.

3.6. Payment Methods

Payment may be cash, cashier's check, wire transfer, purchase order, etc. Remittance must be in US dollars drawn on a US bank and made payable to Bay Area Compliance Laboratories Corp. All fees are non-refundable once the application is accepted by BACL for processing.

3.7. Certification Requirements

- a. An IMDA Application Form.
- b. An IMDA Specification Checklist, (if applicable)
- c. A test report of a unit representative of the final production model that passed all tests per specific IMDA technical regulation, by a test laboratory that is accredited to ISO/IEC 17025.
- d. Four color photographs of the front, rear, side and product label of the equipment that shows trade and product name.
- e. Technical documents consisting of a general description of the equipment, technical data, facilities supported by the equipment, sales brochures, and other related documents.

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3.8. Prohibited Equipment

BACL shall not certify equipment that has been declared prohibited equipment in the Third Schedule of the Telecommunication (Dealers) Regulations:

http://www.ida.gov.sg/idaweb/doc/download/12552/S_185.pdf

3.9. Technical Evaluation & Certification

A Technical Evaluator that is familiar with the particular product type and the rules for the specific certification sought will review the certification project file. If the test data does not adequately document product compliance, additional test data may be requested. If the test data presented remains questionable, a product sample may be requested for testing.

Once the technical review and evaluation is complete and the BACL certifier determines the product satisfactorily complies with the regulatory standards and BACL requirements, the product will be certified.

Authorization to market the product is issued to the applicant in the form of a BACL Certificate and Issuance Letter. Reference to the product certification may be made in product documentation, sales literature, advertising and retail materials upon receipt of the IDA Grant Certificate from BACL.

The IMDA ID number and related information will also be entered into the BACL Directory of Certified Products and available upon request.

3.10. Listing of IMDA Certifications

BACL shall maintain a list of all equipment certifications for IMDA and make the information available upon request. IMDA will list the product on their Telecoms Licensing System.

3.11. Modifications of Certified Equipment

Modifications to certified radio equipment may require re-certification of the equipment. The applicant shall notify BACL when certified equipment is going to be or has been modified, to confirm the validity of its certification. BACL will review and evaluate the modification and provide the applicant with a document stating the results.

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3.12. Certification Retention and Audits

- a. BACL has a record retention program that provides a minimum of five years records retention for documents related to the IMDA CB Program.
- b. Equipment Suppliers shall assure that all production units of certified equipment by BACL continue to meet the applicable technical and procedural requirements. BACL will conduct post-market surveillance test audits to assure continued compliance.
- c. Subsequent production units must adhere to the technical quality and characteristics under which certification was originally issued. The certificate holder shall assure continued compliance with the technical standards and requirements by performing periodic testing.
- d. BACL and/or IMDA may request from the certificate holder, random radio equipment samples for post-market surveillance testing, or as a result of radio complaints. If the sample fails the tests, the certificate holder will be required to take corrective action immediately. BACL must notify IMDA, the equipment supplier and the importing supplier of the failure within 14 days and provide a follow-up report within 30 days of the actions taken by the supplier to correct the nonconformance.
- e. Certificate holders shall retain copies of their original certification submission for a period of five years.

3.13. Withdrawal of Certification

- a. Where, as a result of a post-certification audit or other information obtained by BACL or by IMDA, a certified device fails to meet the applicable technical or procedural requirements, or where there is reasonable evidence that a certified device is creating electromagnetic interference or not operating in accordance with the parameters described on the Certificate, BACL shall inform IMDA and the certificate holder will be required to take remedial action.
- b. If the certificate holder does not take remedial action, or the remedial action does not correct the problem, BACL will inform the equipment supplier, the appropriate importing party and IMDA about withdrawing the certification. The equipment supplier must return the certificate to BACL and IMDA will remove the product from the Telecoms Licensing System. IMDA may also direct BACL to withdraw a certificate for cause.

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3.14. Rights of Applicants of BACL Certified Products

Applicants may always request in-depth information about any aspect of their pending certification, completed certification or any other related matters. BACL and the applicant will attempt to resolve any disputes or appeals that arise between the applicant and BACL. If resolution is not possible, the dispute will be appealed to the IMDA as the final arbiter. The applicant and BACL will each have a reasonable time to provide comments before the regulatory authority reaches a final decision. Applicants, suppliers, or other parties with complaints about a BACL certification that have a right to receive related information, may request in-depth information about related aspects of their completed certification or other related matters.

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4. MIC USER'S MANUAL

This following information is for applicants applying for an MIC (Japan) Grant of Certification from BACL.

4.1. The MIC CB program

Ministry of Internal Affairs and Communications (MIC) Japan recognizes Conformity Assessment Bodies (CAB's) under the terms of Mutual Recognition Agreements (MRA's) to certify products to the MIC regulatory and administrative requirements. This recognition applies to CB's certifying radio and telecommunications terminal equipment for suppliers.

4.2. BACL's MIC CB program

Suppliers of radio and telecommunications terminal equipment which require a certification from MIC prior to marketing their device in Japan can use BACL's MIC CB program to obtain most of their required grant faster than using the traditional MIC process. Agents and laboratories that process certification applications for suppliers can submit their applications directly to BACL.

BACL as an MIC CB cannot:

- a) Grant a waiver of conformity to any of the applicable MIC technical regulations
- b) Grant a change in ownership of certificates; and
- c) Perform equipment certification on types of telecommunications equipment that do not have the applicable MIC technical regulations or specifications established and published.

4.3. The Certification Agreement

The applicant and BACL must execute a Certification Agreement (QA-FR-08), signed by an authorized representative of the applicant and BACL, Sunnyvale, CA agreeing to various terms and conditions for certification. The Certification Agreement requests product information, test data, product specifications and various information required in accordance with the certification scheme, liabilities, confidentiality, compliance, certification withdrawal/cancellation, changes, regulatory revisions to certified products, disputes & appeals, complaints, surveillance, agents, payment and agreement period.

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4.4. Choice of Test Laboratory

Applicants may use BACL or another test laboratory for their product testing. Test laboratories should be accredited to ISO 17025:2005 by a national accreditation body such as A2LA, ACLASS, NVLAP, etc., or be recognized through an MRA (Mutual Recognition Agreement) and have the relevant test methods within their scope of accreditation to be considered competent to

perform the specific tests and measurements. BACL must assess any outside test lab that was used to perform the product testing and provides a test report which is to be used for certification, that is not accredited or without the proper test scope for competency to perform the test and measurements. Applicants must assure their tested product is equivalent to their production product.

4.5. Certification Fees


Certification Fees are set by BACL. All applicants are charged the same fee proportional to the scope of work, regardless of the number of certificates issued. Certification fees include a levy supporting BACL post market surveillance test audits. There are no additional fees for auditing. Certification Fees are subject to change without notice.

4.6. Payment Methods

Payment may be cash, cashier's check, wire transfer, purchase order, etc. Remittance must be in US dollars drawn on a US bank and made payable to Bay Area Compliance Laboratories Corp. All fees are non-refundable once the application is accepted by BACL for processing.

4.7. Certification Requirements

- a. A MIC Application Form.
- b. A MIC Specification Checklist, (if applicable)
- f. A test report of a unit representative of the final production model that passed all tests per specific MIC technical regulation, by a test laboratory that is accredited to ISO/IEC 17025.
- g. Four color photographs of the front, rear, side and product label of the equipment that shows trade and product name.
- h. Technical documents consisting of a general description of the equipment, technical data, facilities supported by the equipment, sales brochures, and other related documents.

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4.8. Prohibited Equipment

BACL shall not certify equipment that has been declared prohibited equipment.

4.9. Technical Evaluation & Certification

A Technical Evaluator that is familiar with the particular product type and the rules for the specific certification sought will review the certification project file. If the test data does not adequately document product compliance, additional test data may be requested. If the test data presented remains questionable, a product sample may be requested for testing.

Once the technical review and evaluation is complete and the BACL certifier determines the product satisfactorily complies with the regulatory standards and BACL requirements, the product will be certified.

Authorization to market the product is issued to the applicant in the form of a BACL Certificate and Issuance Letter. Reference to the product certification may be made in product documentation, sales literature, advertising and retail materials upon receipt of the MIC Grant Certificate from BACL.

The MIC ID number and related information will also be entered into the BACL Directory of Certified Products and available upon request.

4.10. Listing of MIC Certifications

BACL shall maintain a list of all equipment certifications for MIC and make the information available upon request. MIC will list the product on their database.

4.11. Modifications of Certified Equipment

Modifications to certified radio equipment may require re-certification of the equipment. The applicant shall notify BACL when certified equipment is going to be or has been modified, to confirm the validity of its certification. BACL will review and evaluate the modification and provide the applicant with a document stating the results.

4.12. Certification Retention and Audits

- a. BACL has a record retention program that provides a minimum of five years records retention for documents related to the MIC CB Program.

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- b. Equipment Suppliers shall assure that all production units of certified equipment by BACL continue to meet the applicable technical and procedural requirements. BACL will conduct post-market surveillance test audits to assure continued compliance.
- c. Subsequent production units must adhere to the technical quality and characteristics under which certification was originally issued. The certificate holder shall assure continued compliance with the technical standards and requirements by performing periodic testing.
- d. BACL and/or MIC may request from the certificate holder, random radio or telecom equipment samples for post-market surveillance testing, or as a result of complaints. If the sample fails the tests, the certificate holder will be required to take corrective action immediately. BACL must notify MIC and the equipment supplier of the failure within 14 days and provide a follow-up report within 30 days of the actions taken by the supplier to correct the nonconformance.
- e. Certificate holders shall retain copies of their original certification submission for a period of five years.

4.13. Withdrawal of Certification

- a. Where, as a result of a post-certification audit or other information obtained by BACL or by MIC, a certified device fails to meet the applicable technical or procedural requirements, or where there is reasonable evidence that a certified device is creating electromagnetic interference or not operating in accordance with the parameters described on the Certificate, BACL shall inform MIC and the certificate holder will be required to take remedial action.
- b. If the certificate holder does not take remedial action, or the remedial action does not correct the problem, BACL will inform the equipment supplier about withdrawing the certification. The equipment supplier must return the certificate to BACL and MIC will remove the product from their database. MIC may also direct BACL to withdraw a certificate for cause.

4.14. Rights of Applicants of BACL Certified Products

Applicants may always request in-depth information about any aspect of their pending certification, completed certification or any other related matters. BACL and the applicant will attempt to resolve any disputes or appeals that arise between the applicant and BACL. If resolution is not possible, the dispute will be appealed to the MIC as the final arbiter. The applicant and BACL will each have a reasonable time to provide comments before the regulatory authority reaches a final decision. Applicants, suppliers, or other parties with complaints about a BACL certification that have a right to receive related information, may request in-depth information about related aspects of their completed certification or other related matters.

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5. OFCA USER’S MANUAL

This following information is for applicants applying for an OFCA (Office of the Telecommunication Authority) Hong Kong Grant of Certification from BACL.

5.1. The OFCA FCB program

Hong Kong’s OFCA recognizes FCB’s under the terms of an MRA (Mutual Recognition Agreement) to certify products to OFCA requirements. This recognition applies to CB’s (Certification Bodies) certifying radio, marine and fixed network equipment.

5.2. BACL’s OFCA FCB program

Manufacturers, agents and laboratories that process certification applications for manufacturers can submit their applications directly to BACL for most radio, marine and fixed network equipment which requires a certification from OFCA, prior to marketing their device in Hong Kong. BACL’s OFCA FCB program can obtain most required certifications faster than using the traditional OFCA process for radio, marine and fixed network equipment.

BACL as an OFCA FCB cannot:

- Waive any applicable requirements promulgated by OFCA;
- Certify equipment for which there are no requirements promulgated by OFCA; and
- Advertise its recognition status for certification activities that are outside of its scope of recognition.

5.3. The Certification Agreement

The applicant and BACL must execute a Certification Agreement (QA-FR-08), signed by an authorized representative of the applicant and BACL, Sunnyvale, CA agreeing to various terms and conditions for certification. The Certification Agreement requests product information, test data, product specifications and various information required in accordance with the certification scheme, liabilities, confidentiality, compliance, certification withdrawal/cancellation, changes, regulatory revisions to certified products, disputes & appeals, complaints, surveillance testing, payment and agreement period.

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5.4. Choice of Test Laboratory for Product Testing

Applicants may use BACL or another test laboratory for their product testing. Test laboratories must be accredited to ISO 17025:2005 by a national accreditation body such as A2LA, ACLASS, NVLAP, etc., or be recognized through an MRA (Mutual Recognition Agreement), have the

relevant test methods within their scope of accreditation to be considered competent to perform the specific tests and measurements and must be recognized by OFCA (RTA or NIST Designation as a Phase I CAB). BACL cannot accept an outside test lab that was used to perform the product testing and provides a test report which is to be used for certification that is not accredited or without the proper test scope to perform the test and measurements or is not recognized by OFCA. Applicants must assure their tested product is equivalent to their production product.

A Technical Evaluator that is familiar with the particular product type and the rules for the specific certification sought will review the certification project application file. If the test data does not adequately document product compliance, additional test data may be requested. If the test data presented remains questionable, a product sample may be requested for testing.

5.5. Certification Fees

Certification Fees are set by BACL. All applicants are charged the same fee proportional to the scope of work, regardless of the number of certificates issued. Certification fees include a levy supporting BACL post market surveillance test audits. There are no additional fees for post market surveillance test auditing. Certification Fees are subject to change without notice.

5.6. Payment Methods

Payment may be cash, credit card, cashier's check, wire transfer, purchase order, etc. Remittance must be in US dollars drawn on a US bank and made payable to Bay Area Compliance Laboratories Corp. All fees are non-refundable once the application is accepted by BACL for processing.

5.7. Certification Requirements

- Product description and product literature with supporting information;
- A detailed test report meeting the requirements of the applicable HKTA standard(s);
- Photographs of internal circuit boards and external views;

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- Schematic diagrams and block diagrams;
- A drawing, sample or illustration of the product label;
- User and maintenance manuals.

5.8. Certification Number Format

Certified equipment shall be labeled using a unique 12-digit certification number as follows:

“ZZZZZYXXXXX”

Where:

- “ZZZZZ” is the code assigned by OFCA to the recognized FCB;
- “YY” is the year of issue;
- “XXXXX” is the serial number of the certificate issued during the calendar year.

5.9. Technical Evaluation & Certification

A Technical Evaluator that is familiar with the particular product type and the rules for the specific certification sought will review the certification project file. If the test data does not adequately document product compliance, additional test data may be requested. If the test data presented remains questionable, a product sample may be requested for testing.

Once the technical review and evaluation is complete and the BACL certifier determines the product satisfactorily complies with the regulatory standards and BACL requirements, the certification will be granted.

5.10. Listing of Product Certifications

- a. OFCA requires a documented acknowledgement from the applicant allowing OFCA to publish all their technical information on the OFCA Web Site.
- b. OFCA will record the details of certifications in the “List of certified telecommunications equipment list”, based on the information received from BACL. A certified product shall

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not be distributed, leased, sold or offered for sale in Hong Kong before the details of its certification have been added to the List.

- c. Authorization to market the product is issued to the applicant in the form of BACL Certificate and Issuance Letter. Reference to the product certification may be made in product documentation, sales literature, advertising and retail materials upon receipt of the OFCA Grant Certificate from BACL.
- d. The OFCA number and related information will also be entered into the BACL Directory of Certified Products and made available upon request.

5.11. Modifications of Certified Equipment

Modifications to certified equipment may require re-certification of the equipment. The applicant shall notify BACL before certified equipment has been modified, to determine the

validity of its certification. BACL will review and evaluate the modification and provide the applicant with a document stating the results.

5.12. Certification Retention and Audits

- a. Certificate holders shall assure that all production units of equipment certified by BACL continue to meet the applicable technical and procedural requirements. BACL will conduct post-market surveillance test audits to assure continued compliance.
- b. Subsequent production units must adhere to the technical characteristics and quality under which certification was originally issued. The certificate holder shall assure continued compliance with the technical standards and requirements by performing periodic testing.
- c. OFCA may request from the certificate holder, random product samples for post-certification audit testing, or as a result of complaints. If the sample fails the tests, the certificate holder will be required to take corrective action.
- d. Certificate holders shall retain copies of their original certification submission for a period of at least five years.

5.13. Withdrawal of Certification

- a. Where, as a result of a post-certification audit or other information obtained by BACL or by OFCA, a certified device fails to meet the applicable technical or procedural requirements,

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or where there is reasonable evidence that a certified device is creating electromagnetic interference or not operating in accordance with the parameters described on the Certificate, BACL shall inform OFCA and the certificate holder will be required to take remedial action.

- b. If the certificate holder does not take remedial action, or the remedial action does not fix the problem, BACL will inform the equipment supplier and OFCA about withdrawing the certification. The equipment supplier must return the certificate to BACL and OFCA will remove the product from the “List of Certified Telecommunications Equipment.” OFCA may also direct BACL to withdraw a certificate for cause.

5.14. Rights of Applicants of BACL Certified Products

Applicants may always request in-depth information about any aspect of their pending certification, certification or any other related matters. BACL and the applicant will attempt to resolve any disputes or appeals that arise between the applicant and BACL. If resolution is not possible, the dispute will be appealed to OFCA as the final arbiter. The applicant and BACL will each have a reasonable time to provide comments before the regulatory authority reaches a final decision. Applicants, suppliers, or other parties with complaints about a BACL certification that have a right to receive related information, may request in-depth information about related aspects of their completed certification or other related matters.

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6. Notified Body – EMC and Radio Equipment Directives

This following information is for applicants applying for an EU Type Examination Certificate through BACL’s Notified Body services.

6.1. The Notified Body program

The European Union recognizes Notified Bodies accredited by a Member State to assess products under the Radio Equipment and EMC Directives requirements. This recognition applies to NB’s (Notified Bodies) certifying radio apparatus and broadcasting equipment.

6.2. BACL’s NB program

Manufacturers, agents and laboratories that process certification applications for manufacturers can submit their applications directly to BACL for radio apparatus which requires assessment under the Radio Equipment and EMC Directives.

6.3. The Certification Agreement

The applicant and BACL must execute a Certification Agreement (QA-FR-08), signed by an authorized representative of the applicant and BACL, Sunnyvale, CA agreeing to various terms and conditions for certification. The Certification Agreement requests product information, test data, product specifications and various information required in accordance with the certification scheme, liabilities, confidentiality, compliance, certification withdrawal/cancellation, changes, regulatory revisions to certified products, disputes & appeals, complaints, surveillance testing, payment and agreement period.

6.4. Choice of Test Laboratory for Product Testing

Applicants may use BACL or another test laboratory for product testing. Test laboratories should be accredited to ISO 17025:2005 by a national accreditation body such as A2LA, ACLASS, NVLAP, etc., or be recognized through an MRA (Mutual Recognition Agreement) and have the relevant test methods in their scope of accreditation to be considered competent to perform the specific tests and measurements. BACL must assess any outside test lab that was used to perform the product testing and provides a test report which is to be used for certification, that is not accredited or without the proper test scope for competency to perform the test and measurements. Applicants must assure their tested product is equivalent to their production product.

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A Technical Evaluation must be performed on the documentation provided to assure everything meets the EMC or Radio Equipment directive requirements. A “Recommend Grant” Technical Evaluation Report is required to proceed to the Certifier. The Certifier reviews the documents and data and if everything meets requirements, completes a “Recommend Grant” Certification Checklist which Document Control uses to create the Grant Certificate and complete the certification. A Certificate and any relevant annexes are forwarded to the applicant.

6.5. Certification Fees

Certification Fees are set by BACL. All applicants are charged the same fee proportional to the scope of work, regardless of the number of certificates issued. Certification fees include a levy supporting BACL post market surveillance test audits. There are no additional fees for post market surveillance test auditing. Certification fees are subject to change without notice.

6.6. Payment Methods


Payment may be cash, credit card, cashier’s check, wire transfer, purchase order, etc. Remittance must be in US dollars drawn on a US bank and made payable to Bay Area Compliance Laboratories Corp. All fees are non-refundable once the application is accepted by BACL for processing.

6.7. Certification Requirements

- a. EMC Directive 2014/30/EU
 - i. Obtaining an EU Type examination Certificate from a NB under the EMC Directive is voluntary however, a manufacturer is responsible for ensuring and demonstrating the compliance of their product per Article 7: Obligations of manufacturers
- b. Radio Equipment Directive (RED) 2014/53/EU
 - i. If the manufacturer has applied harmonized standards, then EU-type examination is voluntary
 - ii. If the manufacturer has applied non-harmonized standards, they must follow the EU-type examination per Annex III Module B of the Radio Equipment Directive

6.8. Certification Documents

- a. A completed and signed copy of EU Type Examination Application Form;

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- b. A detailed test report(s) meeting the requirements of the applicable EN standards;
- c. Photographs and literature of the new product;
- d. Schematic diagrams and block diagrams;

6.9. Obligations of manufacturers

- a. EMC Directive 2014/30/EU: Chapter 2 Article 7:
 - i. When placing their apparatus on the market, manufacturers shall ensure that they have been designed and manufactured in accordance with the essential requirements set out in Annex I.
 - ii. Manufacturers shall draw up the technical documentation referred to in Annex II or Annex III and carry out the relevant conformity assessment procedure referred to in Article 14 or have it carried out.
- b. Radio Equipment Directive (RED) 2014/53/EU: Chapter II, Article 10:
 - i. When placing their radio equipment on the market, manufacturers shall ensure that it has been designed and manufactured in accordance with the essential requirements set out in Article 3.
 - ii. Manufacturers shall ensure that radio equipment shall be so constructed that it can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.
 - iii. Manufacturers shall draw up the technical documentation referred to in Article 21 and carry out the relevant conformity assessment procedure referred to in Article 17 or have it carried out.

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6.10. Modifications of Certified Equipment

Modifications to certified radio apparatus or broadcast equipment may require re-certification of the equipment. The applicant shall notify BACL before certified equipment has been modified, to determine the validity of its certification. BACL will review and evaluate the modification and provide the applicant with a document stating the results.

6.11. Certification Retention and Audits

- a. Manufacturers shall ensure that all production units certified by BACL continue to meet the applicable technical and procedural requirements.
- b. Subsequent production units must adhere to the technical characteristics and quality under which certification was originally issued. The certificate holder shall assure continued compliance with the technical standards and requirements by performing periodic testing.
- c. The EU commission may request from the certificate holder, random radio apparatus or broadcast equipment samples for post-certification auditing, or as a result of radio or broadcast interference complaints. If the sample fails the audit, the certificate holder must take corrective action.

6.12. Withdrawal of Certification

- a. In case during a review (For original certification, re-certification, change in apparatus....) the Technical Evaluator or Certifier notes any circumstances affecting the scope of or conditions for notification, any discrepancy or limitation, and decides to refuse, restrict, suspend or withdraw a certificate, the Technical Evaluator or Certifier involve in the process, informs the Quality Assurance Manager by sending a documented note and provides the supportive evidence.
- b. If the certificate holder does not take remedial action or their actions do not fix the problem, BACL will withdraw the certificate. BACL will inform the applicant and the EU Notifying Authority about withdrawing the certification, the applicant must return the certificate to BACL and BACL will remove the product from their Online Certification Directory.

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7. Revision History

7.1. Revision Description

Date	Changes made
09/10/2018	Revision History Added
10/02/2018	Changes to specific requirements in user manuals added in EPA and SCC
8/10/2019	Reaffirmed
10/12/2020	Updated formatting and added EMCD and RED

7.2. Annual Review

Year	Reviewed by	Date
2018	Kaveh Moraghebi	09/10/2018
2019	Bree Peng	8/10/2019
2020	Bree Peng	10/12/2020
2021		