FiRa Consortium Laboratory Program Manager

FIRAC-LPM v1.0

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Editor

Clint Chaplin

For additional information on FiRa Consortium documents, contact the FiRa Consortium Administration at admin@firaconsortium.org.

Revision History

Revision	Description	Date
0.1	Initial Draft.	30-Sept-2019
0.2	Revision based on group review	2-Oct-2019
1.0	Approved by CCWG	4-Nov-2019

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Introduction

This document was developed by the FiRa Consortium, a global organization leading the standardization of wireless access control and authorization technologies.

1.1 Document Convention

"Shall" and "shall not" identify requirements to be followed strictly to conform to the standard and from which no deviation is permitted. "Should" and "should not" indicate that one of several possibilities is recommended as particularly suitable, without mentioning or excluding others; that a certain course of action is preferred but not necessarily required; or (in the negative form) that a certain possibility or course of action is discouraged but not prohibited. "May" and "need not" indicate a course of action permissible within the limits of the standard. "Can" and "cannot" are used for statements of possibility and capability, whether material, physical, or causal.

The key words MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD, SHOULD NOT, RECOMMENDED, MAY, and OPTIONAL in this document are to be interpreted as described in [N-1].

Normative References

This section provides references to other specifications and standards that are considered of interest with respect to product or system implementations which are implemented based on this document.

Please note the following:

- Specific references will include revision indicator, version number, and publication date where available. In those cases, the reference is to that specific iteration of the document listed.
- Non-specific references will not include revision indicator, version number, or publication date. In those cases, the reference is to the latest published revision and version of the document listed.

The following documents contain provisions which, through reference in this text, are considered to be normative elements of this document. Normative elements are those elements setting out the provisions with which it is necessary to comply to be able to claim conformity with the specification.

[N-1] S. Bradner, *RFC 2119 Key Words for Use in RFCs to Indicate Requirement Levels*, Internet Engineering Task Force, March 1997.

[N-2] ISO/IEC, *17025 - General Requirements for the Competence of Testing and Calibration Laboratories*, ISO, 2005.

[N-3] International Laboratory Accreditation Cooperation, "ILAC Members by Economy," ILAC, [Online]. Available: http://ilac.org/ilac-membership/members-by-economy/.

[N-4] ISO/IEC, *17065 - Conformity Assessment - Requirements for Bodies Certifying Products, Processes and Services*, ISO, 2012.

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[N-5] List of Specifications for TBD1 Technology.

[N-6] List of Specifications for TBD2 Technology.

[N-7] FiRa Consortium Certification Logo Manual.

[N-8] FiRa Consortium Certification Logo Usage Guidelines.

Terms, Definitions, Symbols and Abbreviations

2.1 Abbreviations

This section intentionally left blank.

2.2 Acronyms

The acronyms used in this document are defined in Table 1.

Table 1 Table of Document Acronyms

Term	Description
AB	Accreditation Body
ACT	Analog Conformance Testing
ATL	Authorized Test Laboratory
BoD	Board of Directors
CPM	Certification Program Manager
CRN	Certification Reference Number
CCWG	Compliance & Certification Working Group
DCT	Digital Conformance Testing
DUT	Device Under Test
ECO	Engineering Change Order
ICS	Information Conformance Statement
ILAC	International Laboratory Accreditation Cooperation
ILCP	Interlab Comparison Program
ILCC	Interlab Comparison Coordinator
IOT	Interoperability Testing
IUT	Implementation Under Test, synonymous with Equipment Under Test – EUT or System Under Test – SUT
IXIT	Information Extra Information for Testing
LPM	Laboratory Program Manager
NDA	Non-Disclosure Agreement
ODM	Original Design Manufacturer
OEM	Original Equipment Manufacturer
PMD	Program Management Document
SDO	Standards Development Organization
SME	Subject Matter Expert
TEV	Test Equipment Vendors
TRSL	Test Requirements Status List
TWG	Technical Working Group

2.3 Definitions

The terms used in this document are defined in Table 2.

Table 2 Table of Term Definitions

Term	Description
Accreditation Body (AB)	Authoritative bodies that provide official recognition for laboratory organizations seeking to provide conformity assessment services.
Certification	The process by which a product is evaluated and authorized to carry a specific set of credentials that indicate that it is conformant with a set of standards and practices.

Term	Description
Certification Program Manager (CPM)	The entity authorized to act on behalf of the FiRa Consortium to perform and manage the day to day Certification processes.
Certified Product Listing	The list of certified products maintained on the FiRa Consortium website.
Compliance Folder	The set of evidence demonstrating a FiRa Consortium device's compliance to the Certification Criteria, which includes the PICS, test reports, technical documentation, change management documentation and certification information.
Compliant Portion	Only those specific portions of an FiRa Consortium device (hardware, software or the combination of the two) that are certified by the Certification Program and are within the bounds of the Compliant Scope.
Compliant Scope	The protocols, data formats and physical layer parameters needed for FiRa Consortium interoperability as defined in [NX]. The Compliant Scope does not contain enabling technologies or implementation of specifications defined outside of FiRa Consortium.
End Product	A fully integrated finished product that include a compliant portion.
Laboratory Program Manager (LPM)	The entity authorized to act on behalf of the FiRa Consortium to perform and manage the Authorized Test Laboratory Program.
Module	A sub-assembly that implements the FiRa Consortium protocol either in part or whole. The sub-assembly can be utilized in one or many end products.
Parent Product	The initial version of an end product that is presented for FiRa Consortium certification.
Test Plan	A list of test cases that are to be completed as part of the Certification Process.
Variant Product	A version of an end product that is based on a Parent Product which uses, to a great extent, the same hardware, software and firmware of the Parent. The initial certification of a Variant may re-use results from the certified parent product.

Roles and Responsibilities

3.1 Laboratory Program Manager

Laboratory Program Managers (LPM) are directly authorized by the FiRa Consortium Board of Directors. The organizational structure under which the LPMs operates will be reported openly to the FiRa Consortium membership and published.

Upon approval, the candidate entity is granted LPM status for the period of one (1) year. Approved LPMs are listed on the FiRa Consortium website. The LPM status is renewed on a yearly basis. Status is subject to revocation as determined by the FiRa Consortium Board of Directors for cause.

5.1.1 Overview

The FiRa Consortium Laboratory Program Manager (LPM) role is to be the primary interface between the Compliance & Certification Working Group and the ATLs. Specifically the LPM shall:

- Help the FiRa Consortium define and develop the FiRa Consortium ATL Program.
- Manage the ATL Program on behalf of the FIRA Consortium.
- Act as primary point of contact with ATLs for FiRa Consortium.
- Manage the FiRa Consortium's recognition status of the ATLs.
- Be a subject matter expert on testing FiRa Consortium technology.
- Provide updates to the PMDs for ATL selection and management.
- Assist Accreditation Body in performing onsite audits of ATLs as technical assessor.
- Manage an interlab comparison program for FiRa Consortium.
- Coordinate with Technical and Compliance & Certification Working Groups on technical and practical matters related to labs and testing.

- Coordinate with Certification Program Manager on laboratory matters related to certification.
- Collect technical and process feedback on program from ATLs.
- Manage an ATL task team within the Compliance & Certification Working Group.

5.1.2 Laboratory Program Manager Requirements

Each Laboratory Program Manager:

- Is an entity which successfully completes the process outlined in this section of the Program Management Document.
- Provides a service to the FiRa Consortium membership and non-member licensees.
- Is independent of any activities which may influence their judgement. If the entity is part of a larger organization, there must be documented separation between their activities and the business goals of the larger organization.
- Must protect the confidential information and proprietary rights of their clients.
- Must be free of undue internal/external pressures (commercial, financial or any other) that adversely impacts the quality of their work.
- Is free from involvement in any activities which might diminish confidence in their impartiality or integrity as a LPM.
- Is responsible for the accuracy of their work and their entries into the Authorized Test Lab list.
- Works with the CPM on ATL and TEV testing laboratory matters.
- Works with the various technical working groups and committees on specification issues
- Required to participate in FiRa Consortium technical and certification committee meetings on a regular basis.

5.1.3 Application Process

There are two paths for consideration of potential Laboratory Program Managers. The first is via identification and recruitment of specific entities by the FiRa Consortium through an RFP process. In this case the FiRa Consortium will notify the applicant(s) and request that that applicant supply all necessary information. The second is an unsolicited application from an interested party.

In both cases, the Candidate entity shall provide a CV or Resume which outlines their personnel qualifications, organizational affiliations, statements regarding objectivity and a letter from the candidate's employer (if applicable) in support of the application.

Upon receipt of the application(s) the FiRa Consortium Management Working Group will determine how to proceed with the candidate entity's application(s). If a business need exists and the application is found to have merit, the Management Working Group will determine what steps to follow in processing the application(s). If the application does not meet the requirements for selection or there is lack of market need the candidate will be notified. Candidates who are rejected at this step shall not re-apply for consideration for the role of LPM for a period of six (6) months unless invited by the FiRa Consortium Management Working Group.

As part of the selection process a personnel interview may be scheduled by the FiRa Consortium Management Working Group. The interview team will be selected based on knowledge of the FiRa Consortium Certification Processes and technical background on the supported technologies. Committee members shall not have any potential conflicts of interest in executing the interview process.

Upon completion of the personnel interview the FiRa Consortium Management Working Group will discuss the candidate's qualifications and make a decision on a recommendation to the FiRa Board of Directors for granting LPM status. The Board of Directors will make the final determination on granting LPM status. The candidate entity will be notified regarding the decision on their application. Successful candidates are authorized for a period of one (1) year which is renewable, see Section 5.1.6.

5.1.4 Qualifications

The LPM shall meet the following qualifications:

- Seven (7) years relevant professional work experience.
- Relevant technical degree or equivalent.
- Specific experience in test laboratory accreditation assessments.
- Knowledge of in product certification or type acceptance regimes.
- Experience in Quality Control and inter-laboratory comparison programs.
- Specific project management experience.
- Proficient in reading and writing English language documentation.
- Ability to clearly discuss technical issues with clients and other FiRa Consortium stakeholders.
- Capability to maintain confidential information through the availability of isolated and secure workspace and a plan for secure data storage.
- Required to participate in FiRa Consortiums Working Group meetings on a regular basis.

5.1.5 Service Level

The Laboratory Program Manager (LPM) is expected to provide professional and prompt service to the members of the FiRa Consortium. Acknowledgement of initial test lab applications should be made within seven (7) calendar days of the request. Responses to questions or other communication with the LPM should be made within seven (7) calendar days unless otherwise agreed with the test lab. Concerns with the service level of the LPM should be communicated to the Compliance & Certification Working Group Chair.

5.1.6 Renewal of Laboratory Program Manager Status

The Board of Directors may, at its discretion, request the active LPMs to submit the following information for each individual acting on behalf of the LPM entity:

- A current CV or Resume.
- A letter, in writing, outlining their continued commitment to the principles outlined in Section 5.1.2.
- A summary of their product certification activities over the previous year.

If requested, the Board of Directors will review the submitted documentation along with any other information provided by member companies which have utilized the services of the LPM in question during the past year.

LPM status is automatically renewed for serving LPMs for a subsequent year unless notification is provided by the Board of Directors that LPM status has been revoked.