Equipment Authorization Rules, Regulations & Procedures – A Test Lab's Perspective

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Overview of a Test Lab

• Each client, product and project is different

- Lab conducts research, consults with, and advises clients, before quotation
- It is necessary to do so, in order to obtain information to properly inform clients of the applicable standards and necessary requirements for compliance, especially RF exposure
- Information required to prepare an accurate quote for testing and certification of any product includes:
 - Technical specifications
 - Power, frequency, bandwidth & modulation, types of ports & antennas, etc. especially for receivers, transmitters & transceivers
 - Intended use & environment
 - Consumer, commercial/industrial, etc.
 - Implementation
 - Head/body/extremity worn; portable, mobile or fixed
 - Client's goals
 - Distribution and timing



Gathering Critical Documentation

Technical specifications identification

- Technical forms/documents, letters and administrative information
- Provided to the client in project quote and again before or at time of testing
- Initial documentation requested
 - Not required prior to testing
 - But requested early in the process to avoid unnecessary filing delays
 - Test lab reviews each document to ensure it meets FCC requirements, and is consistent with other documents and the test report(s)
- Clients are provided:
 - Letter Templates, FCC ID label sample, and user manual language requirements
 - Letters must be signed by the client's *listed contact* in the FCC Grantee Code database listing

More than any other reason, application filings are delayed because the test lab is waiting for information from the client



Test, Mitigate & Report

Test & record data

- Based on applicable FCC rules & regulations
- Defined by test procedures
- KDB Guidance & Permit But Ask
- Non-compliance mitigation and re-test
 - Changes must be documented
 - Attestation letter must be provided with the certification application

Reporting

- Create certification application test report
- Submit for review to internal Quality Control
- Provide draft copy to client and/or Telecom Regulatory Attorney for review and obtain sign-off



Certification Application Submission

TCB Exclusion List (updated periodically)

- List of equipment that can only be reviewed and approved by the FCC
- TCB's are authorized to review and approve many other types of equipment outside this list

Consistency across all exhibits

- 731 Form, test report(s), technical and administrative exhibits, FCC databases
- Expedites application review
- Inconsistencies, careless errors, lack of strict adherence to standard(s)
 - Invite more scrutiny and lengthens review and approval process unnecessarily



Certification Application Review

• FCC Review

- The TCB program has reduced the FCC's workload
- FCC is more responsive than in the past, with their focus on new and emerging technologies and those items on the TCB Exclusion List

TCB Review

- Test labs generally have established relationships with one or more TCB's
- This facilitates the review and approval process and provides better communications
- Most TCB's have a stated level of service which enables the lab to manage client expectations
- Test lab/TCB
 - Relationship should be clear and distinct, to avoid any conflict of interest or perception of impropriety
- Each application must stand on its own, and all necessary documents must be submitted
 - The reviewer will not reference other FCC applications for documentation

Test lab monitors application status, interfaces with reviewer and client/Telecom Regulatory Attorney to address any comments, and receives grant



Test Lab & TCB Selection

- Choosing a test lab is an important decision, and not one that should be decided based on cost alone
 - Risk of exposure of non-compliant products in the marketplace
 - Costs, time and setbacks of a recall
 - Potential fines and continuing scrutiny by the FCC
- Knowledgeable, respected TCB's do not take short-cuts or skim over applications
 - Reviewers acting on behalf of FCC
 - Reviewer's reputation and TCB's viability are jeopardized by careless or weak reviews that may lead to FCC dismissals

Non-compliance can be discovered at any time by the FCC, competitors, other test labs or TCB's, or the general public



Telecom Regulatory Attorney & Test Lab Interaction

Application for Certification

- Typically in cases of new & emerging technologies that may not qualify for existing rules, regulations and test procedures for whatever reason(s)
- Telecom Regulatory Attorney interfaces with FCC/TCB on all matters
- Test lab provides testing, test report & engineering services
- Telecom Regulatory Attorney calls upon test lab for additional support as needed

Request for Waiver

- Telecom Regulatory Attorney consults with test lab and client in support of existing or the development of new test procedures/configurations
- Test lab provides test results/test report & technical support for Request for Waiver
- Telecom Regulatory Attorney researches, develops and files Request for Waiver
- Post Certification Events
 - Telecom Regulatory Attorney is retained by client for the following events:
 - FCC/TCB Audit Sample is non-compliant
 - Public complaints of product interference
 - Competitor challenges product compliance



Resources

 OET Laboratory Division Equipment Authorization System (EAS) <u>https://fjallfoss.fcc.gov/oetcf/eas/index.cfm</u>

Left side of page includes links to Filing Options, Reports, and Miscellaneous, including Grantee Code and FRN management, certification application submission, FCC ID search, TCB listings, equipment class/rule parts, Knowledge Database (KDB), etc.

- FCC KDB <u>https://apps.fcc.gov/oetcf/kdb/index.cfm</u>
- OET EA Measurement Procedures <u>http://transition.fcc.gov/oet/ea/eameasurements.html</u>
- TCB Exclusion List <u>http://fjallfoss.fcc.gov/kdb/GetAttachment.html?id=38673</u>
- FCC Encyclopedia <u>http://www.fcc.gov/encyclopedia/equipment-authorization</u> Links to equipment authorization procedures, application and other information, EA related databases, publications, TCB documents, and many useful sites



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Questions & Comments



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