

SUPPORTING STATEMENT

A. Justification:

1. The Commission established uniform technical standards for equipment operating under the FCC rules. The technical standards apply to any device capable of generating radiofrequency waves, and such devices include smartphones, tablets, personal computers, garage door openers, baby monitors, microwave ovens, *etc.*

To ensure that technical standards are applied uniformly, the Commission requires respondents to follow standardized measurement procedures and practices:

- (a) Section 2.948 of the Commission's rules, 47 CFR § 2.948 requires each Electro-Magnetic Compatibility (EMC) testing facility that performs equipment testing in support of any request for equipment authorization to file a test site description with a Commission-approved accreditation body.
- (b) The test site description and the supporting information provides documentation that the EMC testing facility complies with the testing standards used to make the measurements that support any request for equipment authorization.
- (c) Accreditation bodies, which review the test site capabilities of EMC testing facilities for compliance with the Commission's requirements, are subject to the requirements of 47 CFR §2.949. Any accreditation body seeking a recognition from the Commission must file a report of its qualifications with the Office of Engineering and Technology (OET). This information must include their qualification and experience performing these functions. Applicants are only required to file this information once.
- (d) 47 CFR Part 15 of the FCC's rules require that the responsible party (usually the manufacturer) for equipment subject to those rules (§15.117(g)(2)), insert in its files a statement explaining the basis on which the manufacturer relies to ensure that at least 97.5% of all production units of the test sample that are manufactured have a noise figure of no greater than 14 dB.

This information collection does not affect individuals or households. Respondents in this information collection are limited to certain EMC testing facilities, accreditation bodies, and equipment manufacturers. Thus, there are no impacts under the Privacy Act and a Privacy Impact Assessment is not required.

Statutory authority for this information collection is Sections 4(i), 302, 303(c), 303(f), 303(g) 303(r), and 309(a) of the Communications Act of 1934.

2. The Commission or the accreditation body uses the information collected from the testing facilities under these rules:

- (a) to ensure that the data are valid and that proper testing procedures are used; and
- (b) to ensure that potential interference to radio communications is controlled.

Also, the Commission uses the information collected from the manufacturers to investigate complaints of harmful interference or to verify the manufacturer's compliance with 47 CFR §15.117(g)(2) of FCC's rules.

3. This information collection includes reporting, recordkeeping and third-party disclosure requirements. The party(s) responsible for reporting the information may use any available media, including electronic filing of the required information.
4. No similar information is available from other sources.
5. The measurement techniques and standards are consistent with good engineering practice(s) and established standards, *e.g.*, ensuring calibration of equipment, ground plane viability, repeatability of results, *etc.* As such, the burden that the information collection requirements impose on both small and large businesses are minimal and consist solely of the time respondents require to document the standardized procedures and practices used in equipment testing and maintaining quality systems for accreditation, as defined in 47 CFR §§2.948 and 2.949.
6. The collection of information documenting conformance with 47 CFR §§2.948 and 2.949 is required:
 - (a) to minimize the potential risk of interference to other services using the RF spectrum and to maximize the use of this spectrum; and
 - (b) to ensure that the operation of equipment authorized under the FCC technical standards does not cause harmful interference to any other services.

The collection of information documenting conformance with 47 CFR §15.117(g) is required to ensure that the equipment manufactured provides acceptable quality of video signals for reception of broadcast TV.

If the information is not collected, there is potential for manufacturers of RF equipment to relax the quality control standards by which compliance with Commission technical regulations is measured.

The information collection requirements include:

- (a) **One-time filing requirements:** the Commission requires EMC testing facilities (see 1(a) and 1(b) above) to submit their test site description and the supporting information once, when they apply to be recognized to perform testing. The Commission requires accreditation bodies (see 1(c) above) to submit their qualification information once, when they apply to receive recognition from (OET) as an accreditation body.

- (b) **Two-year filing requirements:** the Commission requires EMC testing facilities to certify to the accreditation body at least every two years that the testing facility's equipment and test set-up have not changed. Accreditation bodies must provide the Commission any updates to this information.
- (c) **On-occasion filing requirements:** the Commission requires EMC testing facilities to re-submit their test site description and the supporting information any time the EMC testing facility makes modifications to the testing equipment or to the test set-up procedures. Accreditation bodies must provide the Commission any updates to this information.
- (d) **Recordkeeping requirements:** respondents must retain the test results and supporting data for as long as the EMC testing facility authorized under 47 CFR §2.948 continues to perform testing, as long as the recognized accreditation body continues accreditation under 47 CFR §2.949, or as long as any equipment authorized under 47 CFR §15.117 is manufactured.

7. 47 CFR §§2.948 and 2.949 require:

- (a) EMC testing facilities to provide information to accreditation bodies sufficient for the accreditation body to determine that the EMC testing facility is competent to make measurements of equipment subject to an equipment authorization.
- (b) EMC testing facilities to maintain current information, inform the accreditation body of any changes to its equipment or testing set-up for testing facilities, and undergo a re-evaluation of its accreditation at least every two years.
- (c) EMC testing facilities to maintain records of the tests that they perform, and provide this information to accreditation bodies and the Commission upon request.
- (d) Accreditation Bodies to provide information sufficient for the Commission to determine that the accreditation body is competent to accredit EMC testing facilities. Such information will document that the requirements for accreditation bodies established by the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) have been met.
- (e) Accreditation Bodies to provide the Commission with information about the EMC testing facilities that they have accredited, including providing updates when this information changes.

47 CFR § 15.117(g)(2) requires the manufacturer to insert in its files a statement explaining the basis on which the manufacturer relies to ensure that at least 97.5% of all production units of the test sample that are manufactured have a noise figure of no greater than 14 dB

8. A notice soliciting comment by the public was published in the *Federal Register* on May 26, 2016 (81 FR 33532). No comments were received in response to the *Federal Register* notice.

Furthermore, the Commission regularly interfaces with various national and international standards groups to keep abreast of new technology and to provide the industry with the opportunity to comment on the effect(s) that the Commission's requirements may have on the marketing of the RF equipment.

9. No payments or gifts are given to respondents.
10. There is a minimal exemption from the Freedom of Information Act (FOIA) 5 U.S.C. 552 (b) (4), 47 CFR §0.459(d) of the Commission's rules, that is granted for trade secrets, which may be submitted to the Commission as part of the documentation of the test results. No other assurances of confidentiality are provided to respondents.
11. This information collection does not include any requests for information of a sensitive nature; thus, there is no need for the Commission to provide any assurance of confidentiality.
12. The Commission estimates that there are 630 respondents, as follows:
- 600 EMC testing facilities,
 - 10 accreditation bodies, and
 - 20 entities that manufacture equipment subject to §15.117(g)(2) of the rules.

- (a) 47 CFR §2.948 – Information about EMC testing facilities making measurements of equipment that is subject to an equipment authorization under the Commission rules must be submitted to an accreditation body. The filings should include basic information about the location of the EMC testing facility and a listing the types of tests it can perform. The Commission estimates that 100 EMC testing facilities will have to file a new application per year.

Annual Hour Burden:

100 EMC testing facilities x 30 hours/test results description = **3,000 hours**

Of the remaining 500 EMC testing facilities (=600 total, less 100 new), about one half will have to update their information or file for renewal each year. Thus 250 (=500/2) respondents are expected to file such information.

Annual Hour Burden:

250 EMC testing facilities x 2 hours/filing = **500 hours**

Accreditation bodies must provide the Commission with information about the EMC testing facilities that they have accredited, including providing updates when this information changes. EMC testing facilities must also retain the test results and

supporting data for as long as the EMC testing facility continues to perform testing. There is no hour burden associated with these requirement.

- (b) 47 C.F.R. §2.949; *and also* 47 C.F.R. § 0.241(f) (delegating authority to the Chief of OET to enter into agreements with the National Institute of Standards and Technology and other accreditation bodies to perform accreditation of test laboratories pursuant to section 2.948) – Respondents are required to submit information required by the Commission only once, and to continue to maintain the standards of operation under which they were approved.

Annual Hour Burden:

1 accreditation body x 12 hours/accreditation body = **12 hours**

An accreditation body must retain accreditation records and supporting data as long as it continues to perform laboratory accreditation. There is no hour burden associated with this requirement.

- (c) 47 CFR §15.117(g)(2) – The noise figure for any television channel 14 to 69, inclusive, shall not exceed 14 dB. To ensure compliance with this requirement, the manufacturer of TV receivers must insert in company files a statement explaining the statistical methodology used to ensure that at least 97.5% of all production units of the test samples, which are manufactured, have a noise figure within the standard.

Annual Hour Burden:

20 manufacturers x 5 hours test result analyses/year = **100 hours**

Total Number of Respondents: 600 + 10 + 20 = 630 respondents

Total Number of Responses Annually:

100 new EMC testing facility applications + 250 existing EMC testing facility information updates/renewals + 1 new accreditation body application + 20 recordkeeping requirements = 371 responses

Total Annual Hourly Burden: 3,000+ 500 + 12 + 100 = 3,612 hours

13. There are no direct costs associated with the information collection.

- (a) The testing laboratories must purchase testing equipment in order to measure the performance of prototype (or “untested”) RF devices prior to equipment authorization.
- (1) The cost for establishing a testing laboratory would exist regardless of any FCC requirement, since manufacturers use testing laboratories to confirm the operation of their equipment.

- (2) The equipment referred to in this supporting statement is required for equipment authorization testing, and would be required regardless of any information collection requirement.
 - (3) Furthermore, the cost and hourly burden associated with the actual equipment authorization testing is included in the information collection for the Form 731 (OMB 3060-0057).
- (b) The accuracy of the measurements done by the testing laboratories is essential to advising testing laboratory clients of the performance of equipment proposed for authorization.
- (1) It is, therefore, good business practice to ensure that the testing laboratories meet the standards set by the Commission for test site performance.
 - (2) The information collected under the requirements as described in Section 2.948 describes the measurement facility used to perform equipment authorization testing, and includes:
 - (i) a physical description of the test site including photographs,
 - (ii) the test instrumentation used,
 - (iii) a list of the measurement equipment used,
 - (iv) information concerning the calibration of the measuring equipment, and
 - (v) other information critical to establishing a testing laboratory as meeting the requirements for testing for authorization of equipment.
- (c) The information required for approval as an accreditation body is established by the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC).
14. The Commission estimates that the cost to the Federal Government includes:
- 3 hours per new measurement facility evaluated, at an average salary level of \$50 per hour.
 - 3 hours x 100 test site descriptions (annually) x \$50 = **\$15,000.**
 - 0.5 hours per renewal application evaluated, at an average salary level of \$50 per hour.
 - 0.5 hours x 250 renewal applications x \$50 = **\$6,250.**
 - 10 hours per accreditation body evaluated, at an average salary level of \$70 per hour.
 - 10 hours x 1 accreditation bodies x \$70 = **\$700.**
- Total Cost to the Federal Government= \$15,000 + \$6,250 + \$700 = \$21,950.**

15. The Commission is reporting program changes/decreases to this information collection. The total number of respondents decreased from 1,225 to 630 (-595), the total annual responses decreased from 525 to 371 (-154) and the total annual burden hours decreased from 5,360 to 3,612 (-1,748). The adjustments/decreases are due to business consolidation and an overall maturation of the equipment testing and accreditation field.

16. The information collected is used to determine compliance with specific measurement standards. The data are not compiled, published, or otherwise reported to the public.

17. The Commission is not seeking OMB approval to not display the OMB expiration date for these requirements. The Commission publishes a list of OMB-approved information collections by OMB control number, title and OMB expiration date in 47 CFR 0.408 of the Commission's rules.

18. There are no exceptions to the certification statement.

B. Collection of Information Employing Statistical Methods:

The collection of information does not employ statistical methods.