

December 2020

SUPPORTING STATEMENT

A. Justification:

Information Collection Requirements:

The Commission is seeking a revision of the Equipment Authorization information collection in order to obtain the full three-year clearance from the Office of Management and Budget (OMB).

The December 2019 radiofrequency (RF) exposure Second Report and Order, ET Docket Nos. 03-137 and 13-184, FCC 19-126, included amendments to rule sections 1.1307, 2.1091, and 2.1093 requiring approval by OMB under the Paperwork Reduction Act. Revision to information collection effected by amendments to rule sections 2.1091 and 2.1093 is reported herein. Revision to information collection effected by amendments to rule section 1.1307 is reported separately under OMB 3060-0004.

In amendments to rule sections 2.1091 and 2.1093, the Commission revised its implementing rules to reflect modern technology and today's uses. We replaced a requirement which relied on consideration of the rule part under which the equipment would operate, the portion of the electromagnetic spectrum where the equipment is designed to operate, and technical characteristics of the equipment to determine if the equipment would be subject to routine environmental evaluation for RF exposure prior to equipment authorization. The rule modifications adopted a formula for evaluation of compliance with RF exposure limits and determination whether an environmental assessment would need to be prepared if the limits are exceeded. The amended rules provide more efficient, practical, and consistent RF exposure evaluation procedures and mitigation measures to help ensure compliance with the existing RF exposure limits.

Changes to rule sections 2.1091 and 2.1093 represent clarification or simplification of existing requirements and are not expected to significantly increase or decrease the estimated burden to respondents or to the Federal government. RF equipment manufacturers must comply with the requirements of rule sections 2.1091 and 2.1093 when submitting an application for certification under rule section 2.1033. The changes to rule sections 2.1091 and 2.1093 will not affect the number of respondents or number of responses associated with this information collection. Although the new rules will modify the way applicants evaluate RF compliance when they apply for equipment authorization, we believe that it will take, on average, the same time that it takes for applicants to make this evaluation under our existing rules. For this reason, we are making no changes to the burden estimates in parts 12-14, below.

The latest RF exposure Second Report and Order, ET Docket Nos. 03-137 and 13-184, FCC 19-126, amended rule sections 2.1091 by revising paragraphs (b), (c), (d)(1), and (d)(2) and 2.1093 by revising paragraphs (b), (c) and (d) to read as follows:

§ 2.1091 Radiofrequency radiation exposure evaluation: mobile devices.

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(b) For purposes of this Section, the definitions in Section 1.1307(b)(2) of this chapter shall apply. A mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the RF source's radiating structure(s) and the body of the user or nearby persons. In this context, the term "fixed location" means that the device is physically secured at one location and is not able to be easily moved to another location while transmitting. Transmitting devices designed to be used by consumers or workers that can be easily re-located, such as wireless devices associated with a personal desktop computer, are considered to be mobile devices if they meet the 20-centimeter separation requirement.

(c)(1) Evaluation of compliance with the exposure limits in Section 1.1310 of this chapter, and preparation of an EA if the limits are exceeded, is necessary for mobile devices with single RF sources having either more than an available maximum time-averaged power of 1 mW or more than the ERP listed in Table 1 of Section 1.1307(b)(3)(i)(C), whichever is greater. For mobile devices not exempt by Section 1.1307(b)(3)(i)(C) at distances from 20 centimeters to 40 centimeters and frequencies from 0.3 GHz to 6 GHz, evaluation of compliance with the exposure limits in Section 1.1310 of this chapter is necessary if the ERP of the device is greater than ERP_{20cm} in the formula below. If the ERP of a single RF source at distances from 20 centimeters to 40 centimeters and frequencies from 0.3 GHz to 6 GHz is not easily obtained, then the available maximum time-averaged power may be used (*i.e.*, without consideration of ERP) in comparison with the following formula only if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

$$P_{th}(\text{mW}) = ERP_{20cm}(\text{mW}) = \begin{cases} 2040 f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

(2) For multiple mobile or portable RF sources within a device operating in the same time averaging period, routine environmental evaluation is required if the formula in Section 1.1307(b)(3)(ii)(B) of this chapter is applied to determine the exemption ratio and the result is greater than 1.

(3) Unless otherwise specified in this chapter, any other single mobile or multiple mobile and portable RF source(s) associated with a device is exempt from routine environmental evaluation for RF exposure prior to equipment authorization or use, except as specified in Sections 1.1307(c) and 1.1307(d) of this chapter.

(d)(1) Applications for equipment authorization of mobile RF sources subject to routine environmental evaluation must contain a statement confirming compliance with the limits specified in Section 1.1310 of this chapter as part of their application. Technical information showing the basis for this statement must be submitted to the Commission upon request. In general, maximum time-averaged power levels must be used for evaluation. All unlicensed personal communications service (PCS) devices and unlicensed NII devices shall be subject to the limits for general population/uncontrolled exposure.

(2)(i) For purposes of analyzing mobile transmitting devices under the occupational/controlled criteria specified in Section 1.1310 of this chapter, time averaging provisions of the limits may be used in conjunction with the maximum duty factor to determine maximum time-averaged exposure levels under normal operating conditions.

(2)(ii) Such time averaging provisions based on maximum duty factor may not be used in determining exposure levels for devices intended for use by consumers in general population/uncontrolled environments as defined in Section 1.1310 of this chapter. However, “source-based” time averaging based on an inherent property of the RF source is allowed over a time period not to exceed 30 minutes. An example of this is the determination of exposure from a device that uses digital technology such as a time-division multiple-access (TDMA) scheme for transmission of a signal.

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Section 2.1093 is amended by revising paragraphs (b), (c), and (d) to read as follows:

§ 2.1093 Radiofrequency radiation exposure evaluation: portable devices.

* * * * *

(b) For purposes of this section, the definitions in Section 1.1307(b)(2) of this chapter shall apply. A portable device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that the RF source's radiating structure(s) is/are within 20 centimeters of the body of the user.

(c)(1) Evaluation of compliance with the exposure limits in Section 1.1310 of this chapter, and preparation of an EA if the limits are exceeded, is necessary for portable devices having single RF sources with more than an available maximum time-averaged power of 1 mW, more than the ERP listed in Table 1 of Section 1.1307(b)(3)(i)(C), or more than the P_{th} in the following formula, whichever is greater. The following formula shall only be used in conjunction with portable devices not exempt by Section 1.1307(b)(3)(i)(C) at distances from 0.5 centimeters to 20 centimeters and frequencies from 0.3 GHz to 6 GHz.

$$P_{th}(\text{mW}) = \begin{cases} ERP_{20\text{cm}}(d/20\text{ cm})^x & d \leq 20\text{ cm} \\ ERP_{20\text{cm}} & 20\text{ cm} < d \leq 40\text{ cm} \end{cases}$$

Where

$$x = -\log_{10}\left(\frac{60}{ERP_{20\text{cm}}\sqrt{f}}\right) \text{ and } f \text{ is in GHz;}$$

$$ERP_{20\text{cm}}(\text{mW}) = \begin{cases} 2040f & 0.3\text{ GHz} \leq f < 1.5\text{ GHz} \\ 3060 & 1.5\text{ GHz} \leq f \leq 6\text{ GHz} \end{cases}$$

d = the minimum separation distance (cm) in any direction from any part of the device antenna(s) or radiating structure(s) to the body of the device user.

(2) For multiple mobile or portable RF sources within a device operating in the same time averaging period, evaluation is required if the formula in Section 1.1307(b)(3)(ii)(B) of this chapter is applied to determine the exemption ratio and the result is greater than 1.

(3) Unless otherwise specified in this chapter, any other single portable or multiple mobile and portable RF source(s) associated with a device is exempt from routine environmental evaluation for RF exposure prior to equipment authorization or use, except as specified in Sections 1.1307(c) and 1.1307(d) of this chapter.

(d)(1) Applications for equipment authorization of portable RF sources subject to routine environmental evaluation must contain a statement confirming compliance with the limits specified in Section 1.1310 of this chapter as part of their application. Technical information showing the basis for this statement must be submitted to the Commission upon request. The SAR limits specified in Sections 1.1310(a) through (c) of this chapter shall be used for evaluation of portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz shall be evaluated in terms of the MPE limits specified in Table 1 of Section 1.1310(e)(1) of this chapter. A minimum separation distance applicable to the operating configurations and exposure conditions of the device shall be used for the evaluation. In general, maximum time-averaged power levels must be used for evaluation. All unlicensed personal communications service (PCS) devices and unlicensed NII devices shall be subject to the limits for general population/uncontrolled exposure.

(2) Evaluation of compliance with the SAR limits can be demonstrated by either laboratory measurement techniques or by computational modeling. The latter must be supported by adequate documentation showing that the numerical method as implemented in the computational software has been fully validated; in addition, the equipment under test and

exposure conditions must be modeled according to protocols established by FCC-accepted

numerical computation standards or available FCC procedures for the specific computational method. Guidance regarding SAR measurement techniques can be found in the Office of Engineering and Technology (OET) Laboratory Division Knowledge Database (KDB). The staff guidance provided in the KDB does not necessarily represent the only acceptable methods for measuring RF exposure or RF emissions, and is not binding on the Commission or any interested party.

(3) For purposes of analyzing portable RF sources under the occupational/controlled SAR criteria specified in Section 1.1310 of this chapter, time averaging provisions of the limits may be used in conjunction with the maximum duty factor to determine maximum time-averaged exposure levels under normal operating conditions.

(4) The time averaging provisions for occupational/controlled SAR criteria, based on maximum duty factor, may not be used in determining typical exposure levels for portable devices intended for use by consumers, such as cellular telephones, that are considered to operate in general population/uncontrolled environments as defined in Section 1.1310 of this chapter. However, “source-based” time averaging based on an inherent property of the RF source is allowed over a time period not to exceed 30 minutes. An example of this would be the determination of exposure from a device that uses digital technology such as a time-division multiple-access (TDMA) scheme for transmission of a signal.

(5) Visual advisories (such as labeling, embossing, or on an equivalent electronic display) on portable devices designed only for occupational use can be used as part of an applicant’s evidence of the device user’s awareness of occupational/controlled exposure limits. Such visual advisories shall be legible and clearly visible to the user from the exterior of the device. Visual advisories must indicate that the device is for occupational use only, refer the user to specific information on RF exposure, such as that provided in a user manual and note that the advisory and its information is required for FCC RF exposure compliance. Such instructional material must provide users with information on how to use the device and to ensure users are *fully aware* of and able to *exercise control* over their exposure to satisfy compliance with the occupational/controlled exposure limits. A sample of the visual advisory, illustrating its location on the device, and any instructional material intended to accompany the device when marketed, shall be filed with the Commission along with the application for equipment authorization. Details of any special training requirements pertinent to mitigating and limiting RF exposure should also be submitted. Holders of grants for portable devices to be used in occupational settings are encouraged, but not required, to coordinate with end-user organizations to ensure appropriate RF safety training.

(6) General population/uncontrolled exposure limits defined in Section 1.1310 of this chapter apply to portable devices intended for use by consumers or persons who are exposed as a consequence of their employment and may not be fully aware of the potential for exposure or

cannot exercise control over their exposure. No communication with the consumer including either visual advisories or manual instructions will be considered sufficient to allow consumer portable devices to be evaluated subject to limits for occupational/controlled exposure specified in Section 1.1310 of this chapter.

Information Collection Requirements which have already received OMB Approval:

The Commission sought revision of the Equipment Authorization information collection because the *Spectrum Horizons Order* (ET Docket No. 18-2; FCC 19-19) made specific frequencies above 95 GHz available for the operation of radiofrequency devices without a license, and such devices are subject to the certification process of the Commission's equipment authorization program. New Section 15.258 set forth provisions for unlicensed operations in the bands 116-123 GHz, 174.8-182 GHz, 185-190 GHz and 244-246 GHz.

The Commission had previously sought revision of the Equipment Authorization information collection because of a redesign of the electronic system that collects the information (Equipment Authorization System) that streamlines the processes for filing the information associated with applications for equipment Certification pursuant to subpart J of part 2 of the Commission rules. The new electronic system also allows the Commission to consolidate and combine information that is currently authorized separately.¹

The system is designed to process all data collection electronically and will eliminate repetitive information collection within applications and will permit parties to reference previously submitted information at the time of equipment authorization application. The justification has been revised to represent the updated information collected from different parties, to note that previously submitted information can be referenced in individual applications and to project the updated costs associated with testing the more complex devices that predominate the current environment.

The Commission rules require manufacturers of certain radio frequency (RF) equipment² to obtain equipment authorization approval prior to marketing their equipment. Manufacturers may then market their RF equipment based on a showing of compliance with the applicable technical standards. The Commission typically adopts or modifies its technical standards in response to new technologies and in conjunction with changes to spectrum allocations. Under the equipment authorization rules there are two types of authorization processes: Certification and Suppliers Declaration of Conformity. The technical rules for the services in which the equipment is proposed to operate will specify which type of equipment

authorization must be obtained before the equipment can be marketed. This information collection is

¹ The revised collection will include the information collection previously authorized under OMB Control Number 3060-0398 (§§. 2.948, 2.949 except for §15.117(g)(2)).

² See Section 2.803 (47 CFR § 2.803). The kinds of equipment that are being marketed include devices such as cellular telephones, tablets, remote control devices and scanning devices. However, the types of equipment that are manufactured may change in response to changing technologies and new spectrum allocations made by the Commission.

specific for equipment subject to Certification. Appendix A of this statement provides the current list of rules that require Certification. Applications for Certification are submitted on FCC Form 731.³

Accordingly, this information collection applies to RF equipment that:

- i. is currently manufactured, or may be manufactured in the future, and
- ii. operates under varying technical standards.

A party (e.g. an RF equipment manufacturer) seeking device Certification pursuant to § 2.911 must first obtain a grantee code. This is a one-time application, as the party may use the same grantee code in all of its subsequent equipment authorization applications. The party provides its contact information and the FCC Registration Number (FRN) to obtain the grantee code on the Grantee Code Application webpage of FCC Form 731.⁴ A grantee code is assigned pursuant to § 2.926(c) of the Commission rules, and any information changes (as described in § 2.929) must be updated on the electronic system.

A party seeking device Certification is required to submit its application to an FCC recognized Telecommunications Certification Body (TCB). The FCC recognizes TCBs pursuant to §§ 2.960 and 2.962. TCBs must be designated by appropriate designating authorities in the United States or through a mutual recognition agreement (MRA) for foreign countries where an MRA is in place, pursuant to § 2.960. A TCB's designation is only recognized when it is supported by an accrediting organization

meeting the requirements specified in § 2.960(c). Information about the TCBs including their scope of responsibilities pursuant to § 2.962, the TCB accrediting body (TCBA) and the TCB designating authority (TDA) is submitted by the parties on the specific webpages of FCC Form 731. The information about a TCB, TCBA or TDA is only collected when a new entity is added or there is change in the scope of the entity responsibilities. The information is used for verification and validation when a TCB submits information indicating approval of the application for grant of Certification.

TCBs have flexibility in the format they use to collect information for application for equipment Certification – e.g. they may require applicants to submit the required information in a format that mirrors FCC Form 731, or they may opt to use a customized format. In all cases, the information required is governed by the procedural rules in Part 2 and a showing of compliance with the FCC technical standards for the specific type of equipment that is the subject of the application.

TCBs process application as follows:

- (i) The TCB receives and reviews the information submitted by the party seeking Certification of an RF device.

³ The information collection for Suppliers Declaration for conformity is authorized under OMB Control Number 3060-0636.

⁴ Information collection for FCC Registration Number is authorized under OMB Control Number 3060-0917.

- (ii) The TCB enters the information on the appropriate FCC Form 731 webpage. The TCB submits the final recommendation on the disposal of the application. If the recommendation is to authorize the grant, a grant of certification is published through the system. If the recommendation is not to approve, this decision is noted in the system.

All applications for Certification require the product to be tested for rules compliance by measurement test firms (TF) accredited by test firm accreditation bodies (TFAB) that have been recognized by the FCC (see §§ 2.948 and 2.949, respectively). TF and TFAB information is submitted through FCC Form 731 webpages for such information for verification and validation when the TCB reviews the application. The information collection for TF and TFAB was previously approved under OMB Control Number 3060-0398.

An application for Certification must contain the following data, as is specified in § 2.1033:

- Information about the Grantee or their agents submitting the application on the Grantee's behalf.
- Information specific to the equipment including FCC Identifier, equipment class, technical specifications, etc.
- Attachments that demonstrate compliance with FCC rules may include any combination of the following based on the applicable FCC rule parts for the equipment for which authorization is requested:
 - Identification of equipment (§ 2.925);
 - Attestation statements that may be required for specific equipment;
 - External photos;
 - Block diagram of the device;
 - Schematics;
 - Test Report;
 - Test Setup Photos;
 - User's Manual;
 - Internal Photos;
 - Parts List / Tune Up Information;
 - RF Exposure Information;
 - Operational Description;
 - Cover Letters;
 - Software Defined Radio / Cognitive Radio Files;
 - Pre-approval guidance correspondence with TCB; and
 - Pre-approval inquiry correspondence with applicant

Applications for devices subject to multiple rule parts or to different requirements within the same rule part can be included in a single submission that provides whatever additional relevant information is necessary to show compliance with additional requirements. Applications subject to pre-approval guidance pursuant to § 2.964 must include the guidance correspondence.

Applications for devices operating under certain service rules (as specified in § 2.1033) must also include

information specified in the rule parts.⁵ This documentation, as well as any other information that demonstrates conformance with FCC Rules, may range from 100 to 1,000 pages, and is essential to control potential interference to radio communications. The FCC may use this information to investigate complaints of harmful interference.

The decision on the grant of application is made on the Equipment Authorization System electronically pursuant to §§ 2.915, 2.917 or 2.919. A Certification is subject to the limitations under § 2.927 and the grantee is responsible for ongoing compliance including record retention pursuant to §§ 2.931, 2.937 and 2.938.

The grantee is responsible to ensure that the device continues to comply with the rules. Device changes will require a new application for Certification pursuant to §§ 2.932 and 2.933, unless they can be classified as permissive changes under the rules for Class II or III permissive changes, as specified in § 2.1043(b). For a permissive change, the grantee is required to file supplementary information explaining the changes and must provide updated test information to a TCB for review. The TCB will then submit the data on the FCC Form 731 webpages for permissive changes. The only data required is that which supports the compliance of the changed functions. For changes which are considered Class I under §§ 2.1043(b) or 2.924 no further submissions are necessary although the applicant is responsible for keeping records of the changes.

Information on the procedures for equipment authorization applications can be obtained from the Internet at: <https://www.fcc.gov/engineering-technology/laboratory-division/general/equipment-authorization>.

The statutory authority for this collection of information is authorized under Sections 4(i), 301, 302, 303(e), 303(f), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 301, 302, 303(e), 303(f), and 303(r).

Most of the information collected in this collection will come from companies planning to commercialize the RF devices subject to the Commission rules. However, it is possible that a very small number of individuals may also submit information. Thus, the Commission has prepared a Privacy Impact Assessment statement published at <https://www.fcc.gov/general/privacy-act-information>.

2. The Commission will use the information gathered on the FCC Form 731 to determine compliance of the proposed equipment with the Commission's rules. Following authorization of the equipment for marketing, the information may also be used to determine:

- (a) Whether the operation of the equipment is consistent with the information supplied at the time of authorization;
- (b) Whether the equipment marketed complies with the terms of the equipment authorization;
- (c) Whether the test data prepared by the TF complies with the technical requirements;
- (d) Whether the TCB has reviewed the data properly prior to submitting the information for Certification; and

⁵ See 47 CFR Sections 2.1033(b)(9)-(14), 2.1033(c)(13)-(21) and 2.1033(d).

- (e) Whether the TF, TCB, TFAB, TCBA, or TDA continue to meet the quality and standards set forth in the FCC rules.

A TCB or the FCC may conduct post-market surveillance by requesting test samples from the applicant for further testing. Pursuant to § 2.945 the FCC may request a sample or a voucher for the equipment to be obtained from the marketplace to determine the extent to which production of such equipment continues to comply with the data provided by the applicant and TCB.

3. Since April 1998, the Commission has offered electronic submittal to the Commission of the FCC Form 731 and attachments. By rulemaking on July 8, 2004, the Commission started requiring electronic filing of this information.⁶ The FCC has determined that electronic submission of applications is the most efficient means of facilitating application entry, corresponding with an applicant, providing information on application status, and providing information on authorized equipment to the public. All the information required in this collection is filed on FCC Form 731 at <https://apps.fcc.gov/eas>.

The Commission believes that because equipment authorization applications are submitted by TCBs, who must be on the cutting edge of technology to perform their work. The Commission believes that they are therefore well equipped to make maximum use of electronic media and the Internet to file an application with the Commission. Thus, we believe that electronic filing does not impose an undue burden on such applicants.

4. No other entity is believed to require or to possess the subject information.

5. Small businesses that become involved in the manufacture of radio communications devices generally request authorization for marketing devices regulated under Part 15 of the FCC's rules. Many devices regulated under Part 15 are subject to Supplier's Declaration of Conformity.⁷ These equipment authorizations are the least burdensome of all of the equipment authorization procedures; for example, authorizations for such devices are not required to be submitted on FCC Form 731. This minimizes the burden on small businesses. Further, the measurement techniques and standards associated with our data collection requirements are consistent with the good engineering practices that we would expect of all applicants.

6. The information collected is necessary to determine the interference potential of equipment prior to marketing. By minimizing the detrimental effects of interfering devices on the radio spectrum, use of the radio spectrum can be maximized.

Applicants for Certification must submit application information to a TCB who will review and file the application information with the FCC for final disposition of the application. For the applicant, this

represents a "one-time filing requirement." The applicants are required to obtain a grantee code prior to any equipment authorization application only once for all their devices. They are required to retain the test results and supporting data for as long as the products are marketed.

⁶ *Modification of Parts 2 and 15 of the Commission's Rules for Unlicensed Devices and Equipment Approval*, Report and Order, ET Docket No. 03-201, FCC 04-165.

⁷ Sections 2.1071 – 2.1077 (47 CFR §§ 2.1071 – 2.1077).

In addition, the TFAB and TCBA are required to submit their qualification information once, when they apply to receive recognition from OET as an accreditation body. The TFs and TCBs are required to submit for accreditation to the appropriate accreditation bodies to demonstrate competency. The TFs and TCBs are required to submit information to their respective accreditation bodies about the test sites and support facilities that they use for compliance or surveillance testing to ensure that they meet the Commission standards. Further, the rules require TFs and TCBs should be reassessed by the accreditation body at least every two years to verify that the testing facility's equipment and test set-up have not changed. Accreditation bodies must provide the Commission any updates to this information.

7. No special circumstances exist.

8. The FCC published a 60-day *Federal Register* Notice on September 28, 2020 (85 FR 60783) to solicit public comment on this information collection. A copy is included with this submission. The Notice generated no public comments.

In addition, the Commission maintains dialogue with manufacturers and other members of the telecommunications industry, including NIST and other Federal agencies that oversee technological issues to ensure that the Commission staff remains abreast of new technologies and practices that might affect this information collection.

9. No payments or gifts are given to respondents.

10. Minimal exemption from the Freedom of Information Act (5 U.S.C. 552(b)(4) and FCC Rules under § 0.457(d)) is granted for trade secrets which may be submitted as attachments to the application Form 731. No other assurances of confidentiality are provided to respondents.

11. No questions of a sensitive nature are included on the Form 731.

12. The Commission has calculated the estimated burden for 24,873 responses from 11,305 respondents annually as follows:

- (a) 3,002 parties who obtain a new grantee code to file new applications for Certification in the future.
- (b) 40 TCBS to review the RF equipment authorization requests on behalf of the FCC.
- (c) One TF Accreditation Body or TCB Accreditation Body updating their information.
- (d) 50 new TFs requesting recognition.
- (e) 200 TFs updating their information.

- (f) 7,010 RF equipment and device manufacturers or importer who submit applications only to the TCBS for review and approval.

- (g) 1,002 parties submitting inquiries for guidance on the equipment authorization requirements (including Certification) or request for help with applications for Certification.

Total Number of Respondents: $3,002 + 40 + 1 + 50 + 200 + 7,010 + 1,002 = 11,305$

The respondents file several responses and applications for Certification.

- (a) 3,002 new grantee code filings.
- (b) 16,515 applications for Certification filed by TCBs on behalf of grantees and reviewed by the TCBs for determination.
- (c) 250 applications from TFs for renewal or new applications.
- (d) 1,000 surveillance reviews and reports maintained by TCBs.
- (e) 1 TF Accreditation Body or TCB Accreditation Body
- (f) 100 market surveillance requests by the FCC.
- (g) 4,005 inquiries submitted by parties seeking guidance on measurement procedures.

Total Number of Responses: $3,002 + 16,515 + 250 + 1,000 + 1 + 100 + 4,005 = 24,873$

The Commission estimates the total annual hourly burden ranges from a few minutes for application for grantee codes to more than 100 hours for testing a complex device subject to multiple rule parts due to the range of complexity of the required measurement test reports.

The Commission estimates the following burden based on the type of information collected:

- (a) The amount of time a grantee is required for initially registering with the Commission for a grantee code as 0.1 hours resulting in a total time of 300 hours of annual burden for 3,002 new applicants;
- (b) The amount of time that the RF equipment manufacturers will require to complete an application including testing is estimated to be 10 hours averaged over all types of applications resulting in annual burden of 165,150 hours for 16,515 applications;
- (c) The TFs and TCBs charge for their services to equipment manufacturers for testing the devices and reviewing the applications. The TFs and TCBs have to maintain their records for accreditation purposes. The Commission estimates that this record keeping will result in average burden of 40 hours for 250 TFs, 40 TCBs and 1 TF Accreditation Body or TCB Accreditation Body for a total of 11,640 hours;

- (d) The amount of time to submit an inquiry to the Commission and responding to any follow-up is estimated as 0.5 hours for a total of 2,002.5 hours of annual burden for the 4,005 inquirers;
- (e) The time spent by TCB to perform market surveillance is estimated as 20 hours on average for a device resulting in an annual burden of 20,000 hours for 1,000surveillance reviews and reports; and,
- (f) The time spent by TCBs and Test Firms to maintain and update their accreditation is estimated as 10 hours per renewal for a total burden of 2,510 hours for 251 entities.

Total Annual Hour Burden: 300.2 + 165,150 + 11,640 + 2,002.5 + 20,000 + 2,510 = 201,603 hours

13. The Commission rules require that all applications for certification must be tested for compliance by a TF and the application should be reviewed by TCBs for submission to the Commission for final disposal. These companies charge the applicants for their services and recover the costs incurred in performing the functions.

- a) Capital and start-up costs include the cost for hardware and software for providing the information to the Commission. The Commission estimates that all the entities in their routine business operation maintain systems that will support the information collection. The TFs and TCBs are expected to be in the business of conducting tests and invest in equipment to support testing of equipment. The grantees are required to maintain the information associated with their products and may store information in any format they choose.

The TCBs are required to collect the information specifically required by this information collection may collect the information in any form they choose. However, it is expected that they will likely invest in systems to make their process efficient. The Commission expects that the average cost attributable to information collection to be about \$ 10,000 per TCB for a total cost of \$ 400,000 for 40 TCBs.

- b) Overhead and maintenance costs include the cost for preparation of a test report demonstrating compliance of equipment proposed for marketing with the Commission's technical standards:
 - (i) A new grantee is required to pay \$ 70 fee to obtain a new grantee code. The Commission estimates 3002 new applicants annually. This fee is only required the first time an applicant requests a grantee code. The cost for grantees is:
3,002 applications x \$ 70 per application = \$ 210,140
 - (ii) The amount charged by a TF for testing a device depends on the complexity of tests involved. It is estimated that this cost may vary from \$ 500 for a very simple device to \$ 50,000 for a complex device. Based on the review of past applications the Commission estimates that on average TFs will charge \$ 2,000 per certification application for testing for compliance related to information collection for certification. Therefore, the total annual cost for

applicants for testing is estimated to be:

$$\mathbf{16,515 \text{ applications} \times \$ 2,000/\text{per application} = \$ 33,030,000}$$

(iii) Additional cost to an applicant include the cost of filing with a TCB. The cost for a TCB review can vary based on the device complexity. The Commission estimates the average cost per application as \$ 1,000:

$$\mathbf{16,515 \text{ applications} \times \$ 1,000/\text{per application} = \$ 16,515,000}$$

Total Annual costs for grantee code and certification applications:

$$\mathbf{\$ 210,140 + 33,030,000 + \$ 16,515,000 = \$ 49,755,140}$$

(c) **Total Annual and overhead Costs:** $\$ 400,000 + \$ 49,755,140 = \$ 50,155,140$

14. The Commission expects that of the 24,873 filed:

(a) Approximately 7,357 applications will be filed with the Commission consisting of 3,002 new grantee applications, 250 TF related applications, 4,005 inquiries and 100 surveillance related applications.

The Commission estimates that two groups of Commission staff will be involved in processing or review of parts of the application or surveillance.

(i) GS-7, Step 8 - Applications Examiners, who earn \$ 28.76 per hour, and

(ii) GS-14, Step 7 - Electronics Engineer, who earn \$ 69.75 per hour.

Of the 7,357 applications filed with the Commission, 3,002 applications for grantee code applications will be processed by the electronic system and will not require any staff processing time.

The 250 applications filed by the TFs will require an administrative review by GS-7 staff. It is estimated that each submission will require on average one hour per application review for a total of 250 hours of review. The total cost for staff review of TFs is expected to be:

$$\mathbf{250 \text{ applications} \times \text{one hour per application} \times \$ 28.76 \text{ per hour} = \$ 7,190}$$

The remaining 4,105 applications and reviews will be processed by GS-14 staff. It is expected that on average this review will require on average 3 hours per application for a total of 12,300 hours of review. The total cost for processing the application is expected to be:

$$\mathbf{4,105 \text{ applications} \times 3 \text{ hours/review} \times \$ 69.75 \text{ per hour} = \$ 858,971}$$

The cost to Federal Government for staff time: $\$ 7,190 + \$ 858,971 = \$ 866,161$

- (b) Approximately 17,515 applications consisting of 16,515 applications for certification and 1,000 surveillance requests will be filed with the 40 TCBs, acting on behalf of the Commission. These applications will be processed by the electronic system. The Commission estimates that the cost to the Federal Government for software and hardware to maintain these records is approximately \$100 per application:

The system cost to the Federal Government: $17,515 \text{ applications} \times \$ 100 = \$ 1,751,500$

Total Cost to Federal Government: $\$ 866,161 + \$ 1,751,500 = \$ 2,617,661$

15. The Commission is a reporting program change to this revised information collection. There are no changes to the total number of respondents, total annual responses and total annual burden hours, as a result of FCC 19-126.

There are no adjustments to this information collection.

16. The information that is submitted on FCC Form 731 is used to determine the compliance of equipment with applicable Commission technical standards and rules.

- (a) Some of the information submitted in the filings is held confidential and not published.
- (b) The non-confidential application information is available on the FCC website through various search mechanisms.
- (c) The searches may be viewed by accessing <https://apps.fcc.gov/eas>.

17. The Commission is requesting continued OMB approval to waive the requirement that we display the OMB expiration date on FCC Form 731 and related webpages. Granting this waiver will allow the Commission to continue using the electronic version of the form and webpages without update, upon re-approval of the form. An edition date will be used in lieu of the OMB expiration date. Finally, the Commission publishes a list of all OMB-approved information collections in § 0.408 of the Commission's rules.

18. There are no exceptions to the Certification Statement.

B. Collections of Information Employing Statistical Methods.

This information collection does not employ statistical methods.

Appendix A**Rule Parts Referencing Equipment Certification**

Rule Sections (47 CFR)	Reference
2.911, 2.1033, 2.1091, 2.1093	Applications
11.34	EAS Equipment acceptability for filing
15.201	Equipment Authorization Requirements
15.258(new)	Operation in the bands 116-123 GHz, 174.8-182 GHz, 185-190 GHz and 244-246 GHz
18.203	Equipment Authorization
20.19(b)	HAC Requirements
20.21(e)(2)	Signal Boosters
22.377	Certification of transmitters
24.51	Equipment Authorization (including 24.52 RF Hazards)
25.129	Equipment Authorization for portable earth-station transceivers
27.51	Equipment Authorization (including 27.52 RF Safety)
30.201	Equipment Authorization (30.201(c) refers to verification)
74.451	Certification of equipment - remote pickup
74.750	Low Power TV (type notified)
74.851	Certification of equipment – LPAS
80.203	Authorization of transmitters - maritime services (special manual or other type approval requirements)
87.147	Authorization of equipment - Aviation
90.203	Certification required - Private land mobile radio
95.335	Operation of non-certified transmitters prohibited - Personal Radio Service
95.361	Transmitter Certification - Personal Radio Service
95.561	FRS transmitter certification
95.761	RCRS transmitter certification
95.961	CBRS transmitter certification
95.1761	GMRS transmitter certification
95.1951	Certification - 200 MHz
95.2161	LPRS transmitter certification
95.2361	WMTS transmitter certification
95.2561	MedRadio transmitter certification
95.2761	MURS transmitter certification

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95.2961	PLB and MSLD transmitter certification
95.3161	OBU transmitter certification
95.3361	Certification - 76-81GHz Radar service
96.49	Equipment Authorization CBRS
97.315	Certification of external RF power amplifiers - Amateur Radio