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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 0, 2, 15, and 18

[ET Docket No. 15-170; RM-11673; FCC 15-92]

Equipment Authorization and Electronic Labeling for Wireless Devices

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: This document proposes updates to the rules that govern the evaluation and approval of RF devices. The Commission last comprehensively reviewed its equipment authorization procedures more than fifteen years ago. The RF equipment ecosystem has significantly expanded in that time, and the manner in which today's RF equipment is now designed, manufactured, and marketed – as well as the sheer number of devices subject to authorization – warrant the proposed rule modifications.

DATES: Comments must be filed on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and reply comments must be filed on or before **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

FOR FURTHER INFORMATION CONTACT: Brian Butler, Office of Engineering and Technology, (202) 418-2702, e-mail: Brian.Butler@fcc.gov., TTY (202) 418-2989.

ADDRESSES: You may submit comments, identified by ET Docket No. 15-170; RM-11673, by any of the following methods:

- Federal Communications Commission's Web Site: http://apps.fcc.gov/ecfs//. Follow the instructions for submitting comments.

- Mail: Brian Butler, Office of Engineering and Technology, Room 7-A267, 445 12th Street, SW, Washington, 20554.
- People with Disabilities: Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by e-mail: FCC504@fcc.gov or phone: 202-418-0530 or TTY: 888-835-5322.

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).

- Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
- Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
    - All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 888-835-5322 (tty).

For detailed instructions for submitting comments and additional information on the rulemaking process, see the SUPPLEMENTARY INFORMATION section of this document.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission Notice of Proposed Rule Making, ET Docket No. 15-170, FCC 15-92, adopted July 17, 2015, and released July 21, 2015. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center (Room CY-A257), 445 12th Street, SW., Washington, DC 20554. The full text may also be downloaded at: www.fcc.gov.

Synopsis

1. The telecommunications sector depends on the variety and utility of radiofrequency (RF) devices. The purpose of this Notice of Proposed Rulemaking (NPRM) is to update the rules that govern the evaluation and approval of RF devices. The proposals build on actions the Commission recently took to modify its equipment authorization processing rules.

2. The Commission proposed to combine two separate product approval programs – Declaration of Conformity and verification – into one product self-approval program. It also proposed to revise and clarify the rules that govern equipment certification, including those specifying when device changes necessitate a new FCC ID. These revisions would codify the current practices related to certification of modular transmitters for licensed services as well as the filing requirements for RF devices that incorporate multiple certified modular transmitters. They

would also replace requirements that apply only to devices specifically classified as "software defined radios" (SDRs) with broadly applicable rules, based in part on the current Commission practices regarding software control of radio parameters, and would eliminate restrictions on hardware modifications of SDR devices.

3. The Commission also proposed to codify procedures related to electronic labeling, streamline the rules for the measurement procedures that are used to demonstrate device compliance, and codify existing practices that protect the confidentiality of market-sensitive information. It proposed to eliminate unnecessary or duplicative rules and consolidate rules from various specific rule parts into the equipment authorization rules in part 2 of the Commission's rules and to discontinue the requirement that importers file information associated with FCC Form 740 with Customs and Border Protection for RF devices that are imported into the United States. Finally, the Commission sought comment on how to codify any filing or notification requirements that may be necessitated by the adoption of these proposals.

4. The Commission found that its proposals would better align its equipment authorization procedures with the current state of equipment development, design, and manufacturing practices, thus promoting significant cost savings, reducing the burdens, and avoiding any unnecessary delay associated with the equipment authorization process. It invited commenters to discuss the costs and benefits of the rule changes proposed in the NPRM, and provide relevant supporting data, along with additional suggestions for enhancing the benefits or reducing the costs associated with the proposals.

BACKGROUND

5. The Commission ensures compliance with its technical rules through the equipment authorization program for RF devices, which is codified in part 2 of the Commission's rules. Additionally, RF devices must comply with the Commission's technical and equipment authorization requirements before they can be imported to or marketed in the United States. The current RF equipment authorization procedures have evolved over the course of more than 40 years.

6. The NPRM is informed by the evolution of the RF device ecosystem. The development of highly integrated circuitry, software-based designs and new production procedures has resulted in the use of substantially more complex RF transmitters in increasingly compact devices. The transmitters may operate individually or simultaneously using multiple transmission modes. Certain of the transmitters may operate under rules for the various licensed radio services, while others operate under the unlicensed device rules, all within a single product. Such devices may be too small to fit a permanently attached label that includes the compliance information, particularly in the case where a finished product includes multiple modular transmitters with each one required to display certain information such as an FCC ID.

Unifying self-approval procedures

7. Currently, RF devices must be authorized in accordance with one of three procedures specified in subpart J of part 2–certification, Declaration of Conformity (DoC), and verification. DoC and verification are self-approval procedures in which the responsible party is required to take specific actions to ensure that its equipment complies with the Commission's rules. Unlike certification, these procedures do not require submittal of an application to the FCC or a Telecommunication Certification Body (TCB) and do not require the explicit grant of certification. Also, unlike a certified device, such equipment does not have an FCC ID, and is not listed in an FCC database. Under DoC, the responsible party must use a recognized accredited test laboratory when testing devices and include a compliance information statement with the product that identifies the product and a responsible party within the United States. Verification does not require the use of FCC-recognized test laboratories or the provision of a compliance information statement with the product

8. The number and variety of devices subject to DoC has grown significantly since the Commission last investigated the possibility of combining the DoC and verification procedures, and there are now comprehensive and widely used measurement procedures, significant testing expertise and capabilities for devices subject to DoC, and a greater comfort with the use of self-

approval procedures. At the same time, the development of highly integrated circuits to implement functions which were previously performed by discrete components has resulted in lower typical RF emissions from such devices. The Commission found little benefit in maintaining two distinct procedures or in maintaining the rigor of the Declaration of Conformity procedure given these changes, and recognized the potential for reducing costs for manufacturers. It tentatively concluded that a single process would simplify the equipment authorization requirements and reduce confusion as to which process may apply to any given device, while continuing to adequately ensure compliance with the rules, and sought comment on the proposed rule revisions.

9. The Commission proposed to incorporate certain elements of the existing Suppliers Declaration of Conformity (SDoC) process now used for Telephone Network Terminal Equipment into the new single process, which would apply to all equipment currently subject to the DoC and verification procedures. Under this proposal, the responsible party for equipment subject to rules other than part 68 would test equipment for compliance to specified standards or requirements and certify compliance to the public, by way of a statement supplied with the product, without securing an independent third-party review or approval of compliance. Unlike the existing part 68 SDoC rules, the Commission did not propose to require that the RF devices be registered in any database. The use of accredited testing facilities would not be required under our proposal. The NPRM sought comment on use of the specific term "Supplier's Declaration of Conformity" or "SDoC" for this new process.

10. The Commission proposed to modify its rules to remove the ambiguous reference to "tak[ing] necessary steps" as a potential alternative to testing. It also proposed to consolidate the existing §2.1073, "Responsibilities," into an expanded §2.909, "Responsible party;" and to consolidate existing §2.1075, which addresses records retention, into a revised § 2.938 that would apply broadly to all equipment subject to our equipment authorization procedures. It proposed to otherwise retain the other DoC rules (i.e. those within §§2.1071 through 2.1077) and to apply them

to the new approval procedure, and sought comment on proposed revisions to §2.1077 that would require all equipment to include a compliance statement with the product literature that identifies for consumers who is responsible for the device's compliance with the Commission's technical regulations. The NPRM also asked whether the Commission should require the compliance statement to include additional information when equipment has been modified, but is nevertheless still subject to the self-approval process.

11. The proposed rules would no longer require the use of a specific logo (§§15.19(b) and 18.209). In lieu of the logo requirement, the NPRM proposed to expand use of the statement of compliance with the part 15 rules that currently applies to devices subject to verification and certification (§15.19(a)) to include its use as part of the new procedure. It asked questions about the impact of such an approach, including reliance on the logo as a mark of device approval, use of the logo on a voluntary basis, and potential effect on the identification of unauthorized devices. Under parts 15 and 18 of the rules, a responsible party can opt for the certification process in lieu of required DoC for the approval of certain unintentional radiators (e.g., Class B personal computers and peripheral devices). The NPRM asked whether the Commission should allow devices that would be subject to the new SDoC requirements to optionally be certified.

A. Updating certification procedures

12. Certification differs from the other equipment authorization processes in that a grant of certification signifies that a Commission-qualified party other than the manufacturer or compliance testing laboratory has found that the equipment can be marketed in compliance with the technical and administrative requirements of the rule part(s) under which it will be operated. The procedure also requires submission of compliance information to a TCB as a part of the approval process, and the grant of certification and associated FCC ID is published on the Commission's public website. The Commission recently streamlined its certification procedures by modifying the

rules associated with the TCB review of certification applications. The NPRM focuses on simplifying and clarifying the procedures related to the filing of certification applications

13. Traditionally, most certifications were granted for complete devices (i.e. devices that do not require additional equipment to be capable of functioning). Increasingly, devices such as personal computers, mobile wireless devices, and utility meters embody complex designs and incorporate numerous previously certified modular transmitters made by other manufacturers. Modular transmitters are not intended for standalone use, and can be designed to broadly comply with the applicable Commission rules, or be certified for operation and/or installation in a host device based on compliance with certain specific conditions. In some cases, the compliance of an end product that incorporates certified modular transmitters may be based upon the original testing of the certified modular transmitters. In other cases, particularly where the new host device or end product has significant characteristics different from the original host device, further testing may be needed to ensure compliance of the new device or product. Additionally, manufacturers are increasingly designing transmitters that use software to set the operating parameters. Such RF-controlling software can allow adjustment of individual parameters or enable a device to operate in different modes, and the manufacturer may provide software upgrades in the field to enable new capabilities. We need to be assured that such devices only operate consistent with their certification. Also, software may be designed to only be modified by the grantee of certification or may be designed to permit third parties to enable new functions or frequency bands. Such trends are testing the limits of the Commission's existing certification rules, and formed the basis for the NPRM's proposals.

14. The Commission proposed to better accommodate these developments by amending its basic certification rule to acknowledge that certification may be obtained for three types of RF devices: a device capable of independent operation, (currently addressed by our certification rules), a modular transmitter that is designed for installation into a host device or as a

peripheral to another device, and a host device consisting of one or more modular transmitters certified by other parties. Additionally, the Commission proposed to permit certification of a group of related devices that are certified under a single FCC ID. It also proposed to streamline certain application procedures to reduce the need to file new applications in many cases.

a. Modular transmitters

15. The Commission proposed to broadly apply the current rule governing certification of modular transmitters that operate in part 15 unlicensed spectrum allocations to all RF devices regulated by the Commission. This change would acknowledge the increasing reliance on modular transmitters in RF devices designed for use in licensed radio services. The Commission's proposed part 2 rule provisions are consistent with this existing guidance in in KDB Publication 996369. The proposed new rules would broadly apply to modular transmitters used in any RF device and would also maintain certain specific requirements that are currently only applicable to modular transmitters used in unlicensed devices.

16. The Commission proposed to retain the concept of a "limited modular approval," under which the manufacturer demonstrates in the certification application that the transmitter will comply with our rules only under specific circumstances. The Commission proposed to incorporate the part 15 rules and the guidance in KDB Publication 996369 for limited modular approvals into the revised part 2 rule. In light of the comprehensive RF exposure rules that apply to all devices, the Commission also proposed to no longer specify a unique RF exposure requirement for modular transmitters. It also proposed to eliminate the rule provision that permits authorization of modular transmitters that are "split" into the "radio front end" (the radio elements) and the "transmitter control element" (the hardware on which the software that controls the radio operation resides), based on its determination that such a device configuration has not been widely implemented. Additionally, the Commission proposed to permit certification of modular transmitters that consist of a single chip which has been tested to demonstrate compliance in a typical installation provided

that the grantee includes detailed instructions for integration into other RF devices (i.e. host devices) to ensure that the ultimate configuration is consistent with the significant parameters for which it was tested. The Commission sought comment on all of these proposals.

17. The Commission anticipated the possible development of devices that are nothing more than physical platforms (form factors) into which individual modular transmitter components can be inserted in an almost limitless variety of combinations. The Commission proposed that an applicant for certification of a modular device or a form factor that includes its own RF characteristics provide design guidelines, interface specifications, and authentication requirements that would guarantee that a module can operate on the form factor only with other modules whose collective RF emissions meet the rules' requirements. The Commission sought comment on whether this regulatory regime would enable the development of this kind of product while ensuring compliance with the rules – including those related to interference, RF exposure, and hearing aid compatibility.

b. Devices with software-based capabilities

18. The SDR rules were intended to allow manufacturers to obtain approval for changes to the RF operating parameters of a radio resulting from software changes without the need to physically re-label a device with a new FCC ID number in the field. For a device to be certified as an SDR, in addition to demonstrating that the device complies with the applicable technical requirements, the applicant must also demonstrate that the device contains security features to prevent the loading of software that would allow the radio to operate in violation of the Commission's rules. The applicant generally has the option of whether to declare a device an SDR. Once the grantee of a device that is classified as an SDR makes any hardware modifications that require approval, the rules do not permit any subsequent software changes absent the filing of an application to obtain a new FCC ID.

19. The Commission found that the existing SDR rules have proven to be insufficiently flexible to meet the growing use of software-defined control elements in RF devices, and proposed to simplify the rules by removing the SDR designation from grants of certification and incorporating any necessary requirements for software control of RF parameters and software security for all devices in the general certification rules and guidance.

20. The proposals would modify the SDR-related requirements in part 2 of its rules based in part on the current Commission practices regarding software configuration control. To minimize the potential for unauthorized modification to the software that controls the RF parameters of the device, grantees would have to implement well-defined measures to ensure that certified equipment is not capable of operating with RF-controlling software for which it has not been approved. All manufacturers of devices that have software-based control of RF parameters would have to provide specific information about the software capabilities of their devices. The Commission proposed to require that an applicant for certification explicitly describe the RF device's capabilities for software configuration and upgradeability in the application for certification. This description would include all frequency bands, power levels, modulation types, or other modes of operation for which the device is designed to operate, including modes not enabled in the device as initially marketed. Also, an applicant for certification would have to specify which parties will be authorized to make software changes (e.g., the grantee, wireless service provider, other authorized parties) and the software controls that are provided to prevent unauthorized parties from enabling different modes of operation. This information would be included as part of the operational description information required in the application for certification. The Commission sought comment on these proposals.

2. Changes to certified equipment

21. Under the current rules, the grantee of an equipment authorization may market devices having different model/type numbers or trade names without additional authorization from

the Commission, provided that the devices are "electrically identical" and the equipment bears an FCC ID validated by a grant of certification. The Commission identified the concept of electrically identical as not appropriate to modern radio designs, discussed how strict application of this concept can result in outcomes that unnecessarily burden manufacturers and constrain design flexibilities, and proposed revisions to the rules.

22. Section 2.1043 categorizes three broad classes of permissive changes: Class I (changes are equipment modifications that do not degrade the characteristics associated with the initial grant of certification); Class II (changes that do degrade these performance characteristics); and Class III (modifications to devices originally specifically certified as SDRs). The NPRM noted that the proposal to eliminate an SDR-specific certification would eliminate the need to maintain the Class III category. For Class II changes (as well as Class III), the grantee can file an abbreviated application for certification under the same FCC ID. A change that falls outside the permissive change definitions requires a new FCC ID issued in conjunction with a new grant of certification based on a complete certification application.

23. The current rules require a grantee to obtain a new approval with a different FCC ID and label its equipment accordingly when minor electrical component changes are made that have no effect on the overall functionality or compliance of the device. Because modern equipment is often designed using chips with a high level of integrated functions and with the capability to use software to control and/or add functions that modify the RF parameters reported at the time of certification, a device may add a completely new set of RF operating parameters from the already approved device and still be "electrically identical" under the rules and, thus, can be authorized under one FCC ID. The NPRM proposed to replace the "electrically identical" benchmark with a new standard that considers how the device differs from what was evaluated at the time of equipment certification and whether those differences could affect how the modified device complies with our rules. The Commission sought comment on two proposed broad categories of

changes – those that do not require a new FCC ID and those that do. Under this regime, a manufacturer or other responsible party would evaluate the scope of changes and potentially test its modified device to determine the applicable change category.

24. The Commission proposed that certain changes in layout, included components, operating software, or variations in overall electrical or mechanical constructions that do not substantially change the overall function of the device do not require a new FCC ID. Within this category, the Commission proposed to retain a distinction between changes that may be made without an additional filing and those changes that require an application for certification. The Commission proposed to continue to permit Class I permissive changes for those changes that do not degrade the device parameters normally reported in an equipment authorization application (including a decrease in the fundamental emissions that does not increase spurious emissions; an improved spurious emission performance; minor variations in the enclosure or components; and software changes that do not affect RF parameters). The Commission emphasized that such changes could not cause the fundamental emissions to increase, the spurious emissions to deteriorate, RF exposure to increase or HAC ratings to change. Based on the negligible risk that these types of minor changes would make the device noncompliant with the rules, the Commission proposed that the manufacturer or responsible party perform the modifications without notifying the Commission or a TCB. The Commission also asked if there were other circumstances that may be covered by the proposed Class I permissive change procedures.

25. The Commission also proposed to modify its rules for Class II permissive changes that maintain the same FCC ID, but are, nonetheless, subject to filing and approval requirements. It proposed to permit changes that would increase the fundamental emissions or degrade spurious emissions or other parameters reported to the Commission from what was evaluated at the time of certification, as long as rules compliance is maintained and the overall layout, major frequency determining components and circuitry, or function of the device have not changed. Under this

proposal, any modification to component layout must have the same device circuit design as that approved initially, and the replaced components for RF determining functions must have similar capabilities. The Commission envisioned that parties would make these types of changes to enable new capabilities such as new frequency bands or transmission formats mostly through software changes. Application of this standard would allow for component changes, including depopulating certain components like power amplifiers from the RF section of a device, without requiring a new FCC ID.

26. When the grantee adds such capabilities through software changes it would be required to demonstrate the device controls that would prevent unauthorized software modifications by filing an application for certification, as a permissive change, under the same FCC ID. Such applications would need to clearly identify the changes made to the device and any revisions of the operational description associated with such changes, and demonstrate the modified device's compliance with the rules. If the grantee of a certified modular transmitter wants to use the transmitter in a manner for which it has not been approved, the grantee would have to also obtain a new grant of certification under the same FCC ID by filing an application with data that demonstrates compliance with all pertinent technical standards. The Commission also asked whether there other circumstances where changes would be allowed under the same FCC ID with the grant of a new certification.

27. The NPRM proposed to permit a group of devices that are essentially similar, based upon the overall design of the devices, their functions, components and layout, to be authorized as a "family of products" under the same FCC ID without having to obtain distinct approval from a TCB for each device. The Commission proposed to permit a manufacturer to determine what constitutes a family of products. It asked about appropriate review and oversight mechanisms, and proposed that a manufacturer include in its initial filing or updated filing specific information about the variations in the products within a family, and identify any variations due to

removal of some components. It asked whether it should also require the manufacturer to specify different model numbers for each variation of the product.

28. The Commission concluded that certain device modifications (such as major changes in the design, layout or replacement of the components) would be substantial enough to require a new FCC ID that has been validated by a new grant of certification. The Commission proposed to revise §2.1043 and remove the "electrically identical" definition from §2.924 of the rules, and to add rules that address the modular transmitters, software-defined radio, and device change matters discussed. The Commission sought comment on these proposals.

3. Responsible parties for certified equipment

29. The grantee of certification is responsible for the compliance of the certified equipment. When another party modifies a device through either hardware or software changes without the authority of the original grantee, or incorporates a certified device into another host device, that party becomes responsible for the modified device's compliance and must obtain a new FCC ID for its product. When a party other than the grantee of certification modifies a device under the authority of the original grantee, the party must obtain a new certification under either the original FCC ID with the original grantee's approval, or with a new FCC ID. The NPRM proposed to clarify the parties responsible for ensuring the compliance of devices in different scenarios, and to make sure that all devices requiring authorization have been properly tested for compliance and have a clearly-identified responsible party.

a. End products incorporating certified modular transmitters

30. Modular transmitters are certified as compliant with the Commission's rules based upon specific data about the intended device configuration and use that are provided by the grantee in its certification application. Limitations on the grant may be required to ensure that a particular host device, modular transmitter, or combination of modular transmitters used in an end product complies with the rules. Complications can arise when a certified modular transmitter has not been

certified for use with a specific host device or it is being used in a manner that was not evaluated at the time it was certified. The Commission proposed to continue to apply the general principle that a party that creates an end product is responsible for the compliance of the end product it creates, and to establish rules for two general scenarios involving end products that incorporate certified modular transmitters.

31. The NPRM outlined the following proposal for when the installation of a certified modular transmitter installed would not require a certification application: The Commission proposed to codify existing guidance, under which the party installing a certified modular transmitter (or multiple certified transmitters) into a device must follow all instructions provided by the manufacturer(s) concerning the installation of the modular transmitter(s), the type and layout of the transmit antenna(s), and any other steps that must be taken to ensure the compliance of the end product. A party using a certified modular transmitter in the authorized configuration, must first confirm that the host device was manufactured in compliance with its own equipment authorization and it must also ensure that the end product is of a type that has been tested for use under the modular transmitter's certification(s). If the host device already contains transmitters which may not have been certified separately, or the party is installing multiple certified modular transmitters, then each transmitter must have been certified for use in such a combination and the modular transmitters may only be installed in an approved configuration. If a certified modular transmitter is installed in a host and if the modular transmitter is installed in compliance with all of the conditions tested and established as part of certified modular transmitter's grant of certification, then a new certification would not be required for the resulting end product. The Commission further proposed to clarify that the installer is responsible for ensuring that the host device complies with the rules and was properly authorized prior to the installation of the modular transmitter. It also asked whether there are other conditions which should not require a new grant of certification.

32. The NPRM outlined the following proposal for governing the installation of a certified modular transmitter that would require additional certification application(s): Consistent

with the Commission's current guidance, when the certified modular transmitter or the combination of certified modular transmitters would result in a configuration that is not consistent with any of the modular transmitters' certifications; or host device-specific tests are required, the installer would have to ensure that the end product is tested to demonstrate compliance with all applicable technical requirements. Such tests must be conducted with the installed configuration of certified modular transmitters including any host-based non-certified modular transmitters and the grant of certification of certified modular transmitter (or the host, when applicable) must be updated accordingly.

33. The Commission proposed to codify two filing options to ensure that an end product is properly authorized in compliance with its rules. First, the installer could apply for a grant of certification for the complete end product (i.e. the host device and the certified transmitter(s)). Under this scenario, if the installing party has obtained the consent of the original certified modular transmitter grantee(s), then its application could reference the test data associated with the modular transmitter(s)' current certification, and provide supplemental test data as necessary. The original grantee of certification would continue to be responsible for compliance of its certified modular transmitter(s) and the end product manufacturer would be responsible for compliance of the additional capabilities of the certified modular transmitter(s) approved under the new FCC ID and for the end product.

34. Under the second scenario, the grantee(s) of the certified modular transmitter(s) could modify the original grant(s) of certification to allow for such an integration into a host device under the original FCC ID(s). In this case, the original grantee of the certified modular transmitter would submit a new certification application with any supplemental data necessary to demonstrate that the previously certified modular transmitter or that certain combinations of modular transmitters would comply with the rules when appropriately installed in the specific host device. Depending on the nature and scope of the modifications, the original grantee would either retain the existing FCC ID for the certified modular transmitter and submit a new certification application

pursuant to §2.1043, or it would submit a new certification application pursuant to §2.1033 and receive a new FCC ID.

35. This NPRM also seeks comment on how to address certified modular transmitters that are sold directly to consumers to be integrated into host devices or independently combined. The NPRM noted that application of the proposed rules would make the consumer, acting as the integrator, the responsible party for these end products, and identified practical difficulties with such an approach. It proposed to designate the certified modular transmitter grantee or the host provider as responsible for the end products that are intended for assembly by consumers, and asked whether it should place limits or conditions on grants of certification when equipment may be directly sold to consumers for assembly or integration. The Commission suggested that such conditions could require detailed instructions to the end user for proper installation and use of the device, as well as the inclusion of certain electrical or mechanical locks to limit authorized operation. It asked if there were other conditions that would help ensure compliant operation in such cases.

36. The NPRM addressed a specific scenario that may occur when a modular transmitter's authorized parameters may be modified via hardware or software changes, resulting in the filing of a permissive change application for certification for the modular transmitter. Under the Commission's proposal, when certifications have already been granted for end products that reference the original modular transmitter certification, then the existing certification for the end product would remain valid without further action. It sought comment on ways both manufacturers of certified end products and the FCC can better distinguish among the different versions of certified modular transmitters that may be incorporated into their products from that point forward, and asked if anything, short of requiring a permissive change application for certification of the end product, should be done to track whether authorized version(s) of certified modular transmitters have been incorporated in end products. The Commission also asked how it could ensure that the manufacturer of the end product is using the version of the certified modular transmitter which was

approved with the original filing and whether it should continue to rely on the manufacturers of end products to make sure that their products continue to comply if there are variations in the certified modular transmitters.

37. The Commission recognized that adoption of its proposals could require parties to perform additional compliance testing on the end product with one or a combination of modular transmitters installed. However, it tentatively concluded that such costs would be outweighed by the benefits of more clearly defining responsibilities prior to certification and marketing products, which, in turn would better ensure compliance with the Commission's rules. The Commission also sought comment on whether the proposal represented the least burdensome and most efficient way to meet these goals.

b. Modification of certified equipment by third parties

38. The Commission proposed to eliminate exceptions to the principle that certified devices could not be modified by third parties unless the third party receives its own certification. It proposed to revise §2.909(d), which allows a new party that performs device modifications without the consent of the original grantee to become responsible for the compliance by labeling the device with a statement indicating it was modified, with the requirement that the party obtain a new grant of certification. It would have to specify a new FCC ID unless the consent of the original is obtained. The Commission asked whether the new procedure should also apply to parties that currently market devices with modified certification labels.

39. The Commission proposed, for certified device operating under all rule parts, to require that any party making changes without the authorization of the original grantee of certification must obtain a new grant of certification and a new FCC ID. This would codify a uniform application process for instances where parties other than the original grantee wish to make changes to certified devices, and would remove the current distinctions in § 2.1043(d) and (f) of the rules.

40. The Commission also proposed that an application from a third party that would

result in a new FCC ID for a previously-approved device must include documentation substantiating that the original grantee has given permission for the new applicant to reference its original filing, and asked what documentation should be considered sufficient for this purpose. It proposed to require the submission of a new application without references to the original grant of certification when changes are made without the original grantee's approval.

41. The Commission also proposed to permit third-party RF-controlling software modifications to previously certified devices under the same procedures that currently apply to grantee modifications of SDRs. The Commission also proposed to incorporate the technical requirements currently specified in the current SDR rule (which was proposed to be deleted) into its broadly applicable application processing rule.

c. Repaired and refurbished devices

42. The Commission proposed to formally adopt its current practice whereby a third party that repairs or refurbishes certified equipment to the device's original specification does not need to submit an application for certification if the equipment continues to operate as specified in its current grant. If a party does not return the equipment to its original specification, it would be considered to be a modification to a certified device. Third parties that repair or refurbish certified equipment to the device's original specification without the grantee's permission would have to file an application for certification or take other action to ensure that the Commission could readily identify the third party and confirm that the repair would not constitute an impermissible modification. The Commission further proposed that activities routinely performed by users or personnel at retail stores, such as battery pack replacement and hard drive and memory installation, would not be considered modifications of the device's grant of certification. It asked whether there were other types of refurbishing services (such as repair of broken controls) that would make its proposed requirements unduly onerous.

d. Imported equipment

43. The Commission's rules currently prohibit the importation of devices that require

an authorization, and for which no specific authorization has been obtained. Under the current rules, the importer of a certified device is not the party responsible for compliance with its rules. The Commission proposed to require that all applications for certification include the contact information of a party located in the United States that is responsible for compliance, and asked whether there were other options (including rules amendments) that would provide it with jurisdiction over the party responsible for the compliance of the equipment. The Commission also addressed the entry into U.S. markets of non-compliant devices when a foreign-based entity markets and ships a device directly to a United States customer without an intervening importer. It asked if it should consider the company that ships a non-compliant device into the U.S. as an importer under FCC rules, and questioned whether it should treat the United States customer who orders a non-compliant device as an importer in violation of its rules. The Commission proposed to enforce its importation rules against both the seller and the buyer.

4. Information included with applications for certification

44. The Commission proposed to streamline §2.1033 of the rules by combining the duplicative information requirements listed in the two sections of the rule that list the information that must be included with applications for certification and reorganizing the information required only in specific rule parts or for specific types of operation into a more logical structure. The Commission also proposed to modify its requirements for submission of device's operational description to include information about software used to control RF parameters and security to ensure unauthorized modification. It proposed to allow a third party that makes changes to certified devices or files applications that rely on pre-existing certifications to reference portions of the original grant of certification that are consistent with the device as integrated in its end product. The Commission further proposed to permit the new responsible parties to refer to test data submitted in the original grantee's filing, and sought comment on what additional portions of the original grant of certification the applicant would it be appropriate to incorporate by reference into the new application for certification. The Commission also asked if there are any portions of the

application that the new responsible party always be required to submit, how to codify such requirements, and whether there are certain parts of the original application that the new responsible parties could refer to without the grantee's permission.

45. The Commission proposed to stop allowing filing of applications for certification or acceptance of requests to update documentation in their application file when such actions are not required, except as allowed under our permissive change rules. The Commission recognized that there may be interest in continuing to allow this practice. It asked questions about how it would codify rule to support such filings, including how to define the scope of permitted modifications and the role of TCBs and Commission oversight under such provisions.

5. Confidentiality of certification applications

46. A TCB is required to upload all the information associated with a certification application to the Commission's Equipment Authorization System (EAS). When an equipment certification is granted in EAS, all application material is generally made available on the FCC website. Commencement of marketing can only begin after the grant of equipment certification and associated materials have been published on our website. Some of this information may be held confidential, under the Commission's current rules and procedures as described in the NPRM. The Commission proposed to modify these rules and procedures.

47. Short-term confidentiality allows for the preparation for marketing of devices without disclosure of sensitive information to the public prior to actual sale, and is typically requested for information that will become discoverable once sales commence and the product and its related literature can be physically examined – e.g. external photos, internal photos, and user manuals. The Commission proposed to codify the short-term confidentiality procedure for the types of information described in the Commission's June 15, 2004 public notice, DA 04-1705, concerning short-term confidentiality requests. It would grant short-term confidentiality upon the applicant's request for 45 days or an earlier date if specified by the applicant, which may be

extended with serial requests to a maximum of 180 days. The applicant would not need to provide a specific justification for its request. The Commission would immediately end the short-term confidentially period if the device is marketed to the public or otherwise publicized by the applicant or by an entity acting on the applicant's behalf prior to the expiration of this period. The Commission may nevertheless reveal the information at any time if a request for inspection is filed and granted under §0.461 of the rules, our general provision that governs the release of information not routinely available for public inspection.

48. The Commission proposed to require an applicant to identify the specific exhibits associated with an application for certification for which short-term confidentiality is requested, and not to grant confidentiality for information such as test reports and test set-up information that demonstrates that the product complies with the Commission's technical rules. However, it asked whether there would be benefits in making all application exhibits automatically considered part of a short-term confidentiality request, and asked whether 45 days with extensions up to 180 days total is the proper length of time to allow short-term confidentiality. Furthermore, the Commission also proposed to codify its current policy that the applicant must give notice to the TCB issuing the grant of certification prior to the device being marketed to the public or otherwise publicized so that the short-term confidentiality period may be immediately terminated. The Commission asked whether, as an alternative proposal, short-term confidentiality should automatically be granted for some or all exhibits without being specifically requested by the applicant, and, if so, which application exhibits should be given short-term confidentiality.

49. Long-term confidentiality is intended to safeguard trade secrets, is intended for information that is not readily discoverable upon release of the device, and can last indefinitely. Long-term confidentiality is governed by §§0.457(d) and 0.459 of the rules, which provides for information to be held confidential by the Commission unless a request for inspection is filed and granted per §0.461 of the rules, and requires a specific application seeking that material be given

long-term confidential treatment. The Commission proposed to provide long-term confidentiality automatically (i.e. without specific justification), based on the fact that the vast majority of equipment authorization applications are accompanied by requests for long-term confidentiality for certain types of exhibits and that the requests are regularly granted, for the following types of exhibits: (1) schematics, (2) block diagrams, (3) operational descriptions, and (4) parts list/tune-up information. It asked whether some of the exhibits should not be automatically be given long-term confidential treatment, and whether other exhibits beyond those listed be given long-term confidentiality. The Commission noted that its proposal is consistent with the process reform goal 5.42 in the FCC staff report in GN Docket 14-25.

50. Finally, the Commission stated that it believes that its proposals for short- and long-term confidentiality would comply with its obligations under the Freedom of Information Act (FOIA) and the Trade Secrets Act, and sought comment on that conclusion.

6. Timeframe for Requesting Review of Certification Grants

51. The Commission proposed to adopt rules to specify that the "release date" for the grant of a certification is the date that the grant is published on the Commission's website. It stated that it believes that the date that the grant is published on its website is the appropriate public notice date as it is the date that the grant of the certification becomes known to the public and is the effective date of the certification grant. While this release date should be the date that will appear on any electronic or hard copies of the grant, the Commission proposed to specify the date of publication on our website to avoid any confusion should a mistake or other circumstance occur in which the dates do not match.

52. The Commission stated that its proposals regarding confidentiality could affect the ability of parties to contest a certification grant, and asked whether the information that is always made immediately available provides notice to the public of the substance of a final Commission action that is adequate to determine whether and how to contest a grant. It asked whether, if it

adopts the proposal to codify the current practice for granting short-term confidentiality, to require the applicant requesting confidentiality place a summary or a redacted version of the exhibits for which they are requesting short-term confidential treatment on our website at the time of the grant. The Commission also asked about issuance of a "provisional" certification grant for a device which otherwise is deemed to meet all the certification requirements that could be used for legal importation and distribution through the supply chain of devices prior to sale. When the device is sold to the public, the final certification grant would be made public, and that would constitute the public notice date. It asked if a different consideration should hold for determining the start of the thirty-day period in which the Commission can set aside an action on its own motion. Lastly, the Commission proposed that it could specify that a provisional grant constitutes a "grant" for purposes of its importation rules. It sought comment on all of these proposals, as well as any other options it should consider.

B. Updating procedures applicable to both certification and self-approval

1. Labeling

53. The Commission proposed to amend its regulations to comply with the provisions of the Enhance Labeling, Accessing, and Branding of Electronic Licenses Act (E-LABEL Act), which requires it to make regulations (or take other appropriate action) "to allow manufacturers of radiofrequency devices with display the option to use electronic labeling for the equipment in place of affixing physical labels to the equipment." In addition, the Commission proposed to amend its labeling regulations to address devices that are too small to be legibly labeled with an FCC ID. The NPRM discussed rules that impose different labeling requirements on radio devices, including §2.925, §15.19, and other rule sections that require warning labels or other information to be attached to particular types of devices. It also discussed how the Commission's rules and guidance already permit electronic labeling in certain circumstances, including per KDB Publication 784748.

54. Consistent with the E-LABEL Act, the Commission proposed to add a new rule to codify electronic labeling procedures. The rule would generally allow a radiofrequency device with

an integrated electronic display to electronically display any labels required by our rules. This would include the FCC ID, as well as any warning statements or other information that our rules require to be placed on a physical label on the device. The rule would require that this electronic labeling information be secured in order to prevent modification by a third party. The NPRM discussed how the proposal is consistent with a 2012 petition for rulemaking filed by the Telecommunications Industry Association (TIA) asking the Commission to permit the use of electronic labels as a substitute for physical labels, and concluded that the proposed rules would effectively satisfy TIA's request and thus makes the rulemaking petition moot.

55. The Commission noted that the E-LABEL Act applies to devices that have "the capability to digitally display required labeling and regulatory information," and proposed that if a device cannot display the labeling and regulatory information to the intended recipient in a manner that effects its purpose, it would not be considered to be capable of "digitally displaying the required labeling and regulatory information" as required by E-LABEL Act. The Commission proposed that the user be provided with prominent instructions on how to access the required labeling and regulatory information, in either the packaging material or another easily accessible format, at the time of purchase, and that these instructions be available on the product-related website, if one exists. The Commission also proposed that accessing the labeling and regulatory information not require any special codes or permissions. Furthermore, the Commission proposed that accessing the labeling and regulatory information should require no more than three steps. The Commission's proposal would not allow other forms of electronic labeling such as Radio Frequency Identification (RFID) tags or Quick Response (QR) codes to substitute for the on-screen information display, or otherwise permit displays that require the use of special accessories, supplemental software, or similar plug-ins. When the labeling information is electronically displayed, it must be clearly legible without the aid of magnification. The Commission also proposed to continue to require that devices that rely on a wireless or remote connection and have

no display have a physical label, and stated that it believes this conclusion is consistent with the explicit terms of the E-LABEL Act which specifically refers to devices with an electronic display. It asked whether, alternatively, it should allow such devices to use an electronic label that is accessible via the connected smartphone, web interface, or other network connection, and if so, what additional requirements on how the labeling requirement is implemented would be needed. The Commission asked whether there are any additional requirements that it should include in the rule to make the labeling and regulatory information more accessible

56. To provide information prior to purchase, to avoid a hazard or when devices are imported, the Commission proposed that devices displaying labeling and regulatory information electronically must also place this information either on the product packaging or on a (removable) physical label placed on the device at the time of importation, marketing, and sales. The Commission tentatively concluded that its proposal would comply with the E-LABEL Act because devices with electronic displays are not usually capable of electronically providing this information in an effective manner when the devices are typically inside packaging and uncharged. The devices therefore do not have "the capability to digitally display required labeling and regulatory information" in the context for which the requirement exists. The Commission sought comment on this proposal.

57. The Commission stated that its proposed rules were not intended to change existing requirements to place warning statements or other information on device packaging or in user manuals or make information available at the point of sale, and tentatively concluded that such requirements are outside the scope of the E-LABEL Act. The Commission did not propose to require parties to display any information that is not already required by the rules as part of an electronic label, nor to eliminate the ability of manufacturers to continue to physically label devices if they wish to do so. It also sought comment on the costs and benefits of its proposals.

58. The NPRM discussed other labeling rules that ensure that important safety-of-life

information or warnings about illegal use of equipment is made prominently available to users of equipment, such as those contained in §§ 15.121, 87.147, and 95.1402 of rules. The Commission asked whether provision of these types of warning statements using an electronic display would provide the information to the intended recipient in an "effective" manner when safety or illegal activity is at issue, or would the size and/or makeup of displays on these devices make visual communication of these warnings ineffective. It asked whether continuing to require physical labels for these warnings would be consistent with the E-LABEL Act and, if so, which physical labeling requirements the Commission should maintain.

59. The Commission also addressed how the FCC ID may be communicated for small devices. The Commission current rules requires that the FCC ID on the label of a certified device be large enough to be readily legible, but does not specify what the device manufacturer should do if the device is too small to display a legible label. It proposed to codify the guidance in KDB Publication 784748, which states that the FCC ID may be placed in the device user manual if the device is too small for the FCC ID to be readable (smaller than 4-6 point font size).

60. The Commission proposed to eliminate the requirement for part 15 devices to be labeled with the FCC logo, and observed that doing so would make a pending request by the Information Technology Industry Council (ITI) moot. The Commission stated that it intends for its labeling rules to match the equipment authorization rules that it ultimately adopts, and invited commenters, in discussing other elements of its proposals, to identify the implications for device labeling and propose any further rule modifications that may be necessary.

61. The Commission proposed to move the existing rule concerning labeling of modular transmitters from part 15 to part 2 of its rules. It also sought comment on how its proposed modifications to the rules governing modular transmitters would affect our labeling requirements and on alternative approaches that would still accomplish the goal of providing sufficient identification of a certified modular transmitter. For example, the NPRM asked if a modified label

should be allowed to be placed on the host device that reads "contains FCC ID xxxyyy changed from FCC ID aaabbb."

2. Measurement procedures

62. The Commission proposed to modify §2.947(a)(3) to specifically reference the advisory information available in its online KDB publications. The Commission noted that devices increasingly have to demonstrate compliance with service-specific procedures described in other parts of our rules, stated that it intends to consolidate references to measurement procedures into part 2, to the extent practicable, and asked if, until this consolidation can occur, it should further modify §2.947 to state that other rule parts may specify additional measurement procedures.

63. The Commission made further proposals related to the measurement procedures for RF devices operating under the part 15 rules described in §§15.31, 15.32, 15.33, and 15.35; and the part 18 rules as described in §18.311, with §18.309. The Commission proposed to revise these sections in a manner that references procedures that will be published by OET as KDB Publications and to provide clarifying text. The Commission asked about further consolidating these rules to simply cross-reference §2.947.

64. The Commission also sought comment on whether the measurement procedures specified in §15.31(a)(3) and (4) (referencing ANSI C63.4-2014 and ANSI C63.10-2013) are sufficient to address compliance testing for devices subject to the part 15 requirements, such that it could remove specific measurement procedures in §15.31-15.35. It proposed to modify §15.35 to clarify the measurement detector functions and bandwidth requirements and to replace an old reference to CISPR Publication 16 in §15.35 with an updated reference to the measurement instrumentation procedures in ANSI C63.4-2014. It proposed to eliminate the note associated with §15.35(a) that affords specific treatment of certain pulse modulated devices and instead rely on the emission measuring instrumentation specifications in ANSI C63.4-2014. It proposed to introduce measurement procedures for the certification of composite systems in the part 2 rules that are

similar to those contained in §§15.31(h) and 15.31(k), while retaining certain specific requirements in the part 15 rules. The Commission asked whether there are alternatives to its proposed rules for measurement procedures that would better promote clarity and accommodate future technological developments and sought comment on the relative costs and benefits its proposals and any alternatives.

65. The Commission noted the ongoing development of a new standard, ANSI C63.26, by ANSI-ASC C63, and asked whether references to the applicable measurement procedures in ANSI C63.26 could potentially replace measurement procedures in part 2 for RF power output, modulation characteristics, occupied bandwidth, spurious emissions at antenna terminals, field strength of spurious radiation, frequency stability, and frequency spectrum. It asked if references to part 2 (and, by extension, ANSI C63.26) could replace the specific measurement procedures and details that are presently contained in many of the individual service rules and whether the measurement procedures in part 2 would need to be changed in order to clarify these procedures. It asked parties to take the ANSI C63.26 standards development into account when drafting their comments and asked if there are any other actions that will help it reference the best and most up-to-date standards for making measurements on equipment used in the Commission's licensed radio services.

3. Rule consolidation and modification

66. The Commission proposed to delete § 2.1043(g) through (l) because these provisions address changes to previously approved broadcast equipment that are no longer necessary because such equipment is now subject to verification. It proposed to add a new paragraph to §2.1043 advising that parties may modify previously-approved broadcast transmitters, provided the modified transmitter complies with our authorization procedures or is otherwise shown to comply with the part 73 rules. It proposed to state that a previously approved broadcast transmitter that was later modified must either be labeled with a statement indicating that it was

modified after approval, or the original FCC ID number must be permanently covered or removed. The Commission proposed to retain these provisions in §2.1043(e) (re-designated as §2.1043(h)) because they provide a means for non-manufacturer amateur radio users to modify equipment that had previously been certified or type accepted, and sought comment on whether the rule should be amended for clarity or consistency between parts 2 and 97 of the rules.

67. The Commission proposed to delete §2.813 of the rules, because there are no provisions in part 27 comparable to the former part 74 rules that this rule was written to govern. It also proposed to delete §15.239(d) of the rules, which permits an educational institution to conduct experimentation in the 88-108 MHz band using a custom-built telemetry intentional radiator after submission of an operational description. It observed that the Commission's general experimental licensing rules provide an effective means for such experimentation.

C. Importation rules

68. Subpart K of part 2 of the rules sets out the conditions under which RF devices that are capable of causing harmful interference to radio communications may be imported into the United States. The Commission identified several proposals to lessen or eliminate the filing burdens associated with the importation rules, as described.

1. Importation Declaration

69. The Commission proposed to eliminate §§2.1205 and 2.1203(b) to remove filing requirements that are now associated with FCC Form 740, and to discontinue that form. Section 2.1203 of the Commission's rules states that no RF device may be imported unless the importer or ultimate consignee (or their designated customs broker) declares that the device meets the conditions of entry set forth in our importation rules subpart. Section 2.1205 provides two ways to make this declaration: an electronic FCC declaration submitted to CBP in addition to the electronic entry summary required by CBP; and FCC Form 740, attached to the CBP-required entry papers.

The NPRM discussed how compliance with the importation rules is implicitly addressed by the information already required by CBP, and how the Commission believes that by modifying its importation rules and procedures in this manner it will be able to reduce substantial administrative burdens while retaining sufficient enforcement tools to ensure that parties continue to comply with the Commission's equipment authorization and importation requirements. It sought comment on these proposals, as well as on additional rule modifications that would support its goals.

70. The Commission asked commenters to consider its proposals in light of the potential use of provisional grants. It asked whether there are there additional steps, such as self-certification or required recordkeeping that would be necessary to ensure that parties continue to comply with the Commission's overall part 2 importation, and how such considerations would be affected if the Commission were to require the identification of a domestic responsible party.

2. Modification of Customs bonded warehouse requirement

71. The Commission proposed to remove the explicit bonded warehouse requirement in §2.1201(c). It discussed how the issuance of provisional grants of certification (as discussed above) could reduce or eliminate the need for using bonded warehouses and, if so, whether it would effectively meet manufacturers' importation and marketing needs. The Commission asked whether it should retain the option to use a bonded warehouse for any imported devices which are unauthorized and that have not received such provisional approval; and, if not, what it should do to ensure that unauthorized devices are not widely distributed.

3. Increasing the number of trade show devices

72. The Commission proposed to modify §2.1204(a)(4) by increasing the number of devices that can be imported for demonstration purposes at a trade show from 200 to 400 for devices that are used in licensed services and from 10 to 400 for other products, thus applying a single limit to all types of devices for trade show demonstration purposes. It stated that it believes

the current limit is insufficient to accommodate the needs of modern trade shows and conventions, and that the increased limit will reduce the administrative burden on both manufacturers and importers. It sought comment on the proposal, and the relative costs and benefits.

4. Excluded devices

73. The Commission proposed to remove the list of battery-powered unintentional radiators that are exempt from complying with the importation conditions contained in §2.1202(a), based on its belief that the examples are outdated and that such devices are now significantly more sophisticated and often contain circuitry that increases the risk of harmful interference.

5. Devices imported for personal use

74. The Commission proposed to expand its exception on devices imported for personal use by modifying its existing personal use exception for up to three devices to encompass devices that use both licensed and unlicensed frequencies. It asked if there are targeted exceptions within the Commission's existing rules that should also be updated or removed. It asked whether the three-device limit is still appropriate, and if a different limit would provide adequate protection against harmful interference without unduly restricting individuals' personal use importation.

D. Updating and modifying rule sections

75. The Commission proposed to comprehensively reorganize and simplify part 2, Subpart J of the rules as shown in the proposed rule section, and to make modifications to other related rule sections, to account for the proposals in the NPRM. It recognized that there are many additional references to the equipment authorization procedures throughout the Commission's rules, and proposed to make the necessary conforming revisions, such as updating specific rule section cross-references, modifying outdated terminology. The Commission listed in a separate appendix of the NPRM, these rule sections by number, and invited commenters to identify any additional rules that would require such revisions.

E. Transition period

76. The Commission proposed to make any rule changes adopted as a result of the NPRM effective immediately upon their publication in the Federal Register, but to permit manufacturers to continue to self-approve products using the existing DoC or verification procedures for up to one year from the effective date of the rules if they so choose.

Incorporation by Reference

77. The OFR recently revised the regulations to require that agencies must discuss in the preamble of the rule ways that the materials the agency incorporates by reference are reasonably available to interested persons and how interested parties can obtain the materials. In addition, the preamble of the rule must summarize the material. 1 CFR 51.5(b). In accordance with OFR's requirements, the discussion in this section summarizes ANSI standards. Copies of the standards are also available for purchase from these organizations: The Institute of Electrical and Electronic Engineers (IEEE), 3916 Ranchero Drive, Ann Arbor, MI 48108, 1–800–699–9277, *http://www.techstreet.com/ieee*; and the American National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, NY 10036, (212) 642–4900, *http://webstore.ansi.org/ansidocstore*.

78. (1) ANSI C63.4–2014: ''American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz,'' ANSI approved June 13, 2014, Section 4 IBR proposed for §15.35(a).

79. This standard, ANSI C63.4–2014, contains methods, instrumentation, and facilities for measurement of radiofrequency (RF) signals and noise emitted from electrical and electronic devices in the frequency range of 9 kHz to 40 GHz, as usable, for example, for compliance testing to U.S. (47 CFR part 15) and Industry Canada (ICES–003) regulatory requirements.

80. (2) ANSI C63.10–2013, ''American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices,'' ANSI approved June 27, 2013, Section 5.7

IBR proposed for §15.31(m) and Section 5.5 IBR proposed for §15.33(a).

81. This standard, ANSI C63.10–2013, contains standard methods and instrumentation and test facilities requirements for measurement of radio frequency (RF) signals and noise emitted from unlicensed wireless devices (also called unlicensed transmitters, intentional radiators, and license-exempt transmitters) operating in the frequency range 9 kHz to 231 GHz.

Section 15.38 of the Commission's rules, 47 CFR §15.38, would likewise be updated to reflect these incorporations by reference.

PROCEDURAL MATTERS

F. Ex parte rules – Permit-but-disclose

82. The proceeding this NPRM initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with § 1.1206(b). In proceedings governed by §1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and

memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules.

G. Paperwork Reduction Act

83. This document contains proposed modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), the Commission seeks specific comment on how we might further reduce the information collection burden for small business concerns with fewer than 25 employees.

Initial Regulatory Flexibility Analysis

84. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Notice of Proposed Rule Making (NPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM provided in the item. The Commission will send a copy of the NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[2]

A. Need for, and Objectives of, the Proposed Rules.

[1] See 5 U.S.C. 603. The RFA, see 5 U.S.C. 601 – 612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Public Law 104-121, Title II, 110 Stat. 857 (1996).

[2] See 5 U.S.C. 603(a).

85. The purpose of this Notice of Proposed Rulemaking (NPRM) is to update the rules that govern the evaluation and approval of radiofrequency (RF) devices. The Commission ensures compliance with its technical rules through the equipment authorization program for RF devices; the technical rules are the means by which the Commission carries out its responsibilities under section 302 of the Communications Act of 1934, as amended, which permits the Commission to make reasonable regulations governing the interference potential of devices that emit RF energy and can cause harmful interference to radio communications. By updating our rules, we can continue to ensure that hundreds of millions of radio transmitters, consumer products, and other electronic devices will continue to share the airwaves successfully. Our objective is to enable innovation and growth in the development and use of RF devices by providing a clear path for products to demonstrate compliance with the FCC rules so that they may be brought to the market expeditiously.

86. The NPRM addressed the types of authorization procedures used to approve equipment, the effect of changes to authorized equipment, and the responsibilities of parties for complying with our rules. It also addresses the importation of radio devices. The Commission last comprehensively reviewed its equipment authorization procedures more than fifteen years ago.[3] The changes in the way today's equipment is designed, manufactured, and marketed – as well as the sheer number of such devices that need to be authorized – warrant modifications to the rules that specify the equipment subject to our equipment authorization procedures and responsibilities of the various stakeholders. Our proposals complement the recent actions taken by the Commission to modify the equipment authorization rules that address the obligations of Telecommunication Certification Bodies (TCBs) that certify RF equipment and the laboratories that test equipment

[3] See Amendment of Parts 2, 15, 18 and Other Parts of the Commission's Rules to Simplify and Streamline the Equipment Authorization Process for Radio Frequency Equipment, ET Docket No. 97-94, Report and Order (Equipment Authorization Procedures Order), 13 FCC Rcd 11415 (1998).

subject to the certification process.[4]

Legal Basis.

87. The proposed action is taken pursuant to sections 1, 4(i), 7(a), 301, 303(f), 303(g), 303(r), 307(e), 332, and 622 of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 157(a), 301, 303(f), 303(g), 303(r), 307(e), 332, and 622; and §§0.31(g), 0.31(i), and 0.31(j) of the Commission's rules, 47 CFR 0.31(g), 0.31(i), and 0.31(j).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules will Apply.

88. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.[5] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[6] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[7] A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[8] The Commission has not developed a definition of small entities applicable to RF Equipment manufacturers. The most analogous definition of small

[4] See Amendment of Parts 0, 1, 2, and 15 of the Commission's Rules regarding Authorization of Radiofrequency Equipment and Amendment of Part 68 regarding Approval of Terminal Equipment by Telecommunications Certification Bodies, Report and Order (TCB Order), ET Docket No. 13-44, FCC 14-208, 29 FCC Rcd 16335 (2014). The TCB Order largely addressed the processes by which certification applications are to be evaluated.

[5] See 5 U.S.C. 603(b)(3).

[6] See 5 U.S.C. 601(6).

[7] See 5 U.S.C. 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. 632). Pursuant to 5 U.S.C. 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register."

[8] 15 U.S.C. 632.

entity is that which is contained in the rules applicable to manufacturers of "Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing." This NPRM add addresses the repair of devices that are subject to the Commission's equipment authorization rules. For this, we also include small entities associated with an additional category, "Communication Equipment Repair and Maintenance," in our analysis.

89. Radio and Television and Wireless Communications Equipment Manufacturing. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment."[9] The SBA has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees. According to Census Bureau data for 2007, there were a total of 939 establishments in this category that operated for part or all of the entire year. Of this total, 912 had less than 500 employees and 17 had more than 1000 employees.[10] Thus, under that size standard, the majority of firms can be considered small.

90. Communication Equipment Repair and Maintenance. This industry comprises establishments primarily engaged in repairing and maintaining communications without retailing new communication equipment, such as telephones, fax machines, communications transmission equipment, and two-way radios.[11] The SBA has developed a size standard for this industry which is

[9] The NAICS Code for this service 334220. See 13 CFR 121.201. See also http://factfinder.census.gov/servlet/IBQTable?_bm=y&-fds_name=EC0700A1&-geo_id=&-_skip=300&-ds_name=EC0731SG2&-_lang=en

[10] *See* http://factfinder.census.gov/servlet/IBQTable?_bm=y&-geo_id=&-fds_name=EC0700A1&-_skip=4500&-ds_name=EC0731SG3&-_lang=en

[11] http://wwww.census.gov/cgi-bin/sssd/naics/naicsrch.

that any firm whose annual receipts are $11 million or less is defined as a small business.[12] Census Bureau data for 2007 indicated that in this industry, 1,415 firms operated for the entire year. Of these firms, 1,273 operated with annual receipts of less than $10 million dollars. Based on this date, the Commission concludes that the majority of firms operating in this industry is small.[13]

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities.

91. Currently, the Commission ensures that RF equipment complies with its technical requirements by specifying that devices must be authorized in accordance with one of three procedures specified in subpart J of part 2 of the rules – certification, Declaration of Conformity (DoC), and verification. The NPRM proposes to update the certification process and replace the DoC and verification processes with a single process.

92. Certification is typically applied to RF equipment employing new technology for which the testing methodology is relatively complex or not well defined, or that otherwise is considered to have the highest risk of interference.[14] TCBs approve equipment under the certification procedure based on review of an application that provides test reports and all of the other information specified in the Commission's rules. Certified devices are uniquely identified by an FCC Identifier (FCC ID), which must be included on the device label.[15] All certified equipment is listed in a Commission database that includes the application for certification, test report and other material. [16]

93. DoC and verification are self-approval procedures in which the responsible party is

[12] 13 CFR 121.201, NAICS Code 811213.

[13] http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_81SSSZ4&prodType=table.

[14] See 47 CFR 2.907.

[15] See 47 CFR 2.925 and 2.926. The FCC ID consists of two elements – a grantee code and an equipment product code.

[16] The Commission's Equipment Authorization System (EAS) can be accessed at https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm .

required to take specific actions to ensure that its equipment complies with our rules. DoC and verification procedures are permitted for certain types RF devices that operate under part 15 or part 18 of our rules. DoC requires the responsible party, in addition to taking the necessary steps to ensure that the equipment complies with the appropriate technical standards, to use a recognized accredited test laboratory when testing devices.[17] The responsible party also must include a compliance information statement with the product that identifies the product and a responsible party within the United States.[18] Under verification, the responsible party must also take the necessary steps to ensure that the equipment complies with the appropriate technical standards, but there are no requirements to use recognized test laboratories and supply a compliance information statement with the product.[19] Unlike certification, the DoC and verification procedures do not require submittal of an application to the FCC or a TCB, the explicit grant of approval, or submission of a test device (unless specifically requested by the Commission). Also, unlike certified devices, this equipment does not have an FCC ID, and is not listed in an FCC database.

94. The Commission notes that the current state of RF equipment production makes the existing distinctions between the two self-approval processes less meaningful, and, thus, the NPRM proposes to combine elements of DoC and verification into a single self-approval process for equipment that has a strong record of compliance and for which there is minimal risk of causing harmful interference (tentatively identified as a "Supplier's Declaration of Compliance" or "SDoC"). Our objective is to recognize our increased comfort with self-approval procedures by streamlining the procedures and eliminating those elements that serve to increase the costs of

[17] See 47 CFR 2.906. The party responsible for compliance is defined in 47 CFR 2.909.

[18] See 47 CFR 2.1077, 15.19(a)(3), and 18.209(b). Only parts 15 and 18 equipment is currently covered by DoC. For example, part 15 devices subject to the DoC rules must be labeled with the following statement: "This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation." See also 47 CFR 2.1075 and 2.946 (describing circumstances in which the responsible party must submit to the Commission records of the original design drawings and specifications, the procedures used for production inspection and testing, a report of RF emission measurements, the compliance information statement, and a sample of the device).

[19] See 47 CFR 2.909(b), 2.946, 2.953, 2.955, and 2.956.

complying with our rules and that provide benefits that are of only marginal utility.

95. The Commission believes that our actions will minimize the compliance costs borne by small entities by, for example, eliminating the mandate to use accredited laboratories that is currently associated with the DoC rules, removing the requirement to display the FCC logo on the equipment identification label, and, potentially, allowing devices that are currently subject to certification to be authorized under the new SDoC procedures. The Commission recognizes that manufacturers of devices currently subject to verification may be subject to some minimal additional requirements under SDoC, most notably that the manufacturers include a written compliance statement with the literature furnished to the user that serves to identify the party responsible for the device's compliance with the Commission's regulations. The Commission nevertheless believes that, on the whole, the use the SDoC process will also make it easier for manufacturers to comply with recordkeeping and reporting requirements because we will for the first time adopt a single, streamlined self-approval process that is easy to understand, simple to apply, and that is better aligned with existing international processes. We anticipate minimal costs associated with modifying existing processes and procedures to comply with the proposed rule, and that any such costs will be quickly recouped by the savings realized under use of the new SDoC procedures.

96. The NPRM also proposes amendments to the certification rules that are intended to provide RF equipment manufacturers with a clear understanding of the application requirements and their compliance responsibilities for a variety of design scenarios. Among other things, we propose to permit certification of modular transmitters for licensed services, and to clearly specify the rules for integration of certified modular transmitters and for when the host devices may be subject to certification. We propose to clearly codify requirements related to an RF device's capabilities for software configuration and upgradeability in the application for certification. We further propose that an applicant for certification must specify which parties will be authorized to make software changes (e.g., the grantee, wireless service provider, other authorized parties) and

the software controls that are provided to prevent unauthorized parties from enabling different modes of operation. We do not anticipate that these changes will introduce new costs and, in many cases, will allow device manufacturers greater flexibility in how they comply with our rules and more certainty that their applications will not be returned or rejected.

97. We are also proposing to streamline certain application procedures which we believe will reduce the need to file new applications in many cases. In this regard, the NPRM includes proposals to revise and clarify the rules that govern equipment certification, including specifying when device changes necessitate a new FCC ID. Such actions will serve to reduce or eliminate existing compliance requirements for device manufacturers. Additionally, we are making proposals that address confidentiality, public notice of grants, the RF device importation rules, and the measurement procedures that are used to demonstrate device compliance. These proposals are designed to reduce overall compliance burdens by better aligning the production, importation and device marketing interests and practices of device manufacturers with our equipment authorization procedures and fundamental interest in ensuring that hundreds of millions of radio transmitters, consumer products, and other electronic devices continue to share the airwaves successfully.

98. Finally, recently adopted legislation (the E-LABEL Act) requires the Commission to, within nine months after the law's passing, "promulgate regulations or take other appropriate action, as necessary, to allow manufacturers of radiofrequency devices with display the option to use electronic labeling for the equipment in place of affixing physical labels to the equipment."[20] We propose to amend our regulations to comply with the provisions of this legislation. In addition, we propose to amend our labeling regulations to address devices that are too small to be legibly labeled with an FCC ID.

F. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

[20] Enhance Labeling, Accessing, and Branding of Electronic Licenses Act of 2014, Public Law 113-197 (Nov. 26, 2014).

99. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."[21]

100. As discussed, the overall approach we have taken is to propose to clarify, consolidate, and simplify our equipment authorization of compliance and reporting requirements where possible. Such proposals include, but are not limited to, eliminating use of accredited labs under the SDoC procedure, streamlining importation requirements by, for example, eliminating the use of FCC Form 740, and providing for confidentiality in some cases without the need to file specific confidentiality requests. Given our interest in evaluating the interference potential of devices that emit RF energy and can cause harmful interference to radio communications, we believe that these steps should apply to all device manufacturers, including small entities. In crafting this regulatory relief, we have not identified any additional steps that we could take with respect to small entities that could not also be applied to all device manufacturers.

101. The NPRM also recognizes that there may be existing processes that we have proposed to streamline or eliminate that certain device manufacturers may still find beneficial. These include, for example, filing for certification of devices that may be approved under the SDoC procedures, and placing the FCC logo on devices that would no longer require such marking. Although one approach would be to retain any requirement that has been identified as having value, we have tentatively rejected that approach. Instead, we propose to allow but not require parties to engage in such practices if they find them useful. By doing so, we will not unnecessarily burden

[21] 5 U.S.C. 603(c)(1) through (c)(4).

small entities that no longer wish to retain such practices.

102. As directed by the E-LABEL Act, we proposed to add a new section to our rules to codify electronic labeling procedures.[22] The new rule will generally allow a radiofrequency device with an integrated electronic display to electronically display any labels required by our rules. This will include the FCC ID required by our certification rules as well as any warning statements or other information that our rules require to be placed on a physical label on the device. The rule will require that this electronic labeling information is secured in order to prevent modification by a third-party. While the E-LABEL Act is not directed at small entities, we recognize that the use of electronic labeling can potentially decrease costs for all device manufacturers because it will provide a means by which manufacturers will no longer have to affix permanent labels to devices. We nevertheless recognize that small entities may not wish to incur the costs associated with changing their processes to produce electronic label displays. As such, we are not proposing to require parties to display any information as part of an electronic label not already required by our rules, nor are we proposing to eliminate the ability of manufacturers to continue to physically label devices if they wish to do so.

F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules

103. None.

Ordering Clauses

104. Pursuant to sections 1, 4(i), 7(a), 301, 303(f), 303(g), 303(r), 307(e), 332, and 622 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151, 154(i), 157(a), 301, 303(f), 303(g), 303(r), 307(e), 332, and 622, and §§ 0.31(g), 0.31(i), and 0.31(j) of the Commission's rules, 47 CFR 0.31(g), 0.31(i), 0.31(j), this Notice of Proposed Rulemaking IS ADOPTED.

105. The Petition for Rulemaking filed by the Telecommunications Industry Association

[22] See proposed amendment of 47 CFR 2.935 in proposed rules.

(RM-11673) on August 6, 2012 is DISMISSED.

106. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis to the Chief Counsel for Advocacy of the Small Business Administration.

List of Subjects

47 CFR Part 0

Organization and functions (Government agencies), Reporting and recordkeeping requirements.

47 CFR Part 2

Communications equipment, Reporting and recordkeeping requirements.

47 CFR Part 15

Communications equipment, Incorporation by reference, Radio, Reporting and recordkeeping requirements.

47 CFR Part 18

Radio, Reporting and recordkeeping requirements, Scientific equipment.

FEDERAL COMMUNICATIONS COMMISSION

Gloria J. Miles
Federal Register Liaison Officer.

For the reasons set forth in the preamble, the Federal Communications Commission proposes to amend parts 0, 1, 2, 15 and 18 of title 47 of the Code of Federal Regulations as follows:

PART 0 -- COMMISSION ORGANIZATION

1. The authority citation for part 0 continues to read as follows:

Authority: Sec. 5, 48 Stat. 1068, as amended; 47 U.S.C. 155, 225, unless otherwise noted.

2. Section 0.457 is amended by revising paragraph (d)(1)(ii) to read as follows:

§ 0.457 Records not routinely available for public inspection.

* * * * *

(d) * * *

(1) * * *

(ii) Applications for equipment authorizations and materials relating to such applications are not routinely available for public inspection prior to the effective date of the authorization. The effective date of the authorization will, upon request, be deferred to a date no earlier than that specified by the applicant.

(A) Following the effective date of the equipment authorization, material in the application and related materials (including technical specifications and test measurements) will be made available for public inspection by placement in the Commission's public database except as specified in paragraphs (d)(1)(ii)(B), (C), and (D) of this section.

(B) Portions of applications for equipment certification of scanning receivers and related materials will not be made available for inspection.

(C) Exhibits from an equipment authorization application that set forth schematics, block diagrams, operational descriptions, or parts lists/tune-up procedures will not be made available for public inspection except upon grant of a request under § 0.461.

(D) Upon requests by the applicant, the following exhibits from an equipment authorization application will not be made available for public inspection for a period of 45 days after the

effective date of the equipment authorization except upon grant of a request under § 0.461 external photos, test setup photos, user's manual, and internal photos. The 45-day time period may be extended in 45-day increments up to a maximum of 180 days upon request. These exhibits will immediately be made available to the public if the device is marketed to the public or otherwise publicized by the applicant or by an entity acting on the applicant's behalf prior to the expiration of this period. The applicant must notify the Telecommunication Certification Body (TCB) issuing the equipment authorization prior to the device being marketed to the public or otherwise publicized.

* * * * *

PART 2—FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

3. The authority citation for part 2 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

4. Section 2.1(c) is amended by revising the definition of "Software defined radio" to read as follows:

§ 2.1 Terms and definitions.

*** * * * ***

Software defined radio. A radio that includes a transmitter in which the operating parameters of frequency range, modulation type or maximum output power (either radiated or conducted), or the circumstances under which the transmitter operates in accordance with Commission rules, can be altered by making a change in software without making any changes to hardware components that affect the radio frequency emissions.

* * * * *

§2.813[Removed]

5. Remove § 2.813.

6. Section 2.901 is revised to read as follows:

§ 2.901 Basis and purpose.

(a) In order to carry out its responsibilities under the Communications Act and the various treaties and international regulations, and in order to promote efficient use of the radio spectrum, the Commission has developed technical standards for radio frequency equipment and parts or components thereof. The technical standards applicable to individual types of equipment are found in that part of the rules governing the service wherein the equipment is to be operated. In addition to the technical standards provided, the rules governing the service may require that such equipment be authorized under a Supplier's Declaration of Conformity or receive a grant of certification from a Telecommunication Certification Body.

(b) The following sections describe the procedure for a Supplier's Declaration of Conformity and the procedures to be followed in obtaining certification and the conditions attendant to such a grant.

§2.902 [Removed]

7. Remove § 2.902.

8. Section 2.906 is revised to read as follows:

§2.906 Supplier's Declaration of Conformity.

(a) Supplier's Declaration of Conformity is a procedure where the responsible party, as defined in § 2.909, makes measurements to insure that the equipment complies with the appropriate technical standards. Submittal to the Commission of a sample unit or representative data demonstrating compliance is not required unless specifically requested pursuant to § 2.945.

(b) Supplier's Declaration of Conformity attaches to all items subsequently marketed by the manufacturer, importer, or the responsible party which are identical, as defined in §2.908, to the sample tested and found acceptable by the manufacturer.

(c) The responsible party may, if it desires, apply for Certification of a device subject to the Supplier's Declaration of Conformity. In such cases, the rules governing certification will apply to that device.

9. Section 2.907 is revised to read as follows:

§ 2.907 Certification.

(a) Certification is an equipment authorization approved by the Commission, or issued by a Telecommunication Certification Body (TCB) and authorized under the authority of the Commission, that is based on representations and test data submitted by the applicant or parties authorized by the applicant.

(b) Certification attaches to all units subsequently marketed by the grantee which are identical, as defined in §2.908, to the sample tested except for changes or other variations authorized by the Commission or a TCB pursuant to §§ 2.924 and 2.1043.

(c) Certification may be obtained for a device capable of independent operation, a device or a group of devices authorized under a single FCC Identifier, a modular device capable of operation only upon installation into another device, or an end product containing one or more devices that were previously certified.

10. Section 2.909 is revised to read as follows:

§ 2.909 Responsible party.

(a) For radio frequency equipment subject to certification, the party responsible for the compliance of the equipment with the applicable standards is specified as follows:

(1) The party to whom that grant of certification is issued (i.e., the grantee) is the responsible party.

(2) When a new grant of certification is based on an existing grant of certification, the party to whom the new grant of certification is issued is the responsible party for the equipment produced under new certification; the original grantee remains responsible for equipment produced under the original grant of certification.

(3) If the equipment is assembled from components that includes certified modular transmitter(s) authorized pursuant to § 2.1042, then the assembler is responsible for following the installation guidelines provided by the grantee of each modular transmitter and for obtaining additional

approvals necessary for the overall compliance of the final end product, and the party who obtained the grant of certification for the modular transmitter(s) remains the responsible party for those transmitters. However, the assembler or integrator may become the new grantee for individual modular transmitters or the assembled product by submitting an application for certification pursuant to §2.1033. The host device may also be subject to Supplier's Declaration of Conformity procedures as described in paragraph (b) of this section.

(4) Retailers, original equipment manufacturers or assemblers may enter into an agreement with the responsible party designated in paragraph (a)(1) or (2) of this section to assume the responsibilities to ensure compliance of equipment and become the new responsible party by applying for a grant of certification to request a new FCC Identifier.

(5) If the radio frequency equipment is modified by any party not working under the authority of the responsible party, the party performing the modifications, if located within the U.S., or the importer, if the equipment is imported subsequent to the modifications, becomes the new responsible party. The new responsible party must file for a new grant of certification pursuant to §2.1033.

(b) For equipment subject to Supplier's Declaration of Conformity the party responsible for the compliance of the equipment with the applicable standards is set forth as follows:

(1) The manufacturer or, if the equipment is assembled from individual component parts and the resulting system is subject to authorization under a Supplier's Declaration of Conformity, the assembler. If the resulting system is subject to certification, the assembler becomes responsible party as required in paragraph (a) of this section.

(2) If the equipment, by itself, or a system assembled from individual parts and the resulting system is subject to the Supplier's Declaration of Conformity procedures and that equipment is imported, the importer.

(3) Retailers or original equipment manufacturers may enter into an agreement with the responsible party designated in paragraph (b)(1) or (2) of this section to assume the responsibilities to ensure compliance of equipment and become the new responsible party.

(4) The importer of equipment subject to Supplier's Declaration of Conformity procedures may, upon receiving a written statement from the manufacturer that the equipment complies with the appropriate technical standards, rely on the manufacturer or independent testing agency to verify compliance. The test records required by §2.938 must be in the English language and made available to the Commission upon a reasonable request, in accordance with §2.945(c). If the radio frequency equipment is modified by any party not working under the authority of the responsible party, the party performing the modifications, if located within the U.S., or the importer, if the equipment is imported subsequent to the modifications, becomes the new responsible party.

(c) If the end product or equipment is subject to both certification and Supplier's Declaration of Conformity, all the requirements of paragraphs (a) and (b) of this section apply.

(d) A party that repairs or refurbishes certified equipment with the permission of the grantee is not required to obtain a new grant of certification if the equipment continues to conform to the specifications of its previously approved grant of certification. Repairs or refurbishment of equipment performed by a party not acting under the permission of the grantee are modifications that will make the repairing/refurbishing party responsible for the compliance of the equipment pursuant to paragraph (a)(5) of this section, and will require the party to obtain a new grant of certification for the equipment. Replacement or installation of parts that are commonly changed by users, retailers or refurbishers, such as battery packs, hard drives, memory or enclosures which do not impact device compliance and as permitted in §2.1043(b)(1) , would not be considered modifications to a device.

(e) In the case of transfer of control of equipment, as in the case of sale or merger of the responsible party, the new entity shall bear the responsibility of continued compliance of the equipment.

11. Remove the undesignated center heading preceding § 2.911.

12. Section 2.911 is amended by redesignating paragraphs (d)(3) and (4) as paragraphs (d)(4) and (5) and by adding paragraph (d)(3) to read as follows:

§ 2.911 Application requirements.

*** * * * ***

(d) * * *

(3) The applicant shall provide the contact information of a party located in the United States that is responsible for compliance.

* * * * *

13. Section 2.924 is revised to read as follows :

§ 2.924 Use of a single FCC Identifier for equipment having multiple trade names, models or type numbers, or functional similarities.

(a) The responsible party may market devices having different model/type numbers or trade names without additional authorization, provided that such devices are identical and the equipment bears an FCC Identifier validated by a grant of certification. For the purposes of this section, a device will be considered to be identical if no changes are made to the authorized device, or if the changes were made to the device pursuant to §2.1043.

(b) A family of products (a group of devices that are clearly similar, based upon the overall design of the devices, their functions, components and layout, may be viewed as being a single authorized device or a series of similar devices that have been subjected to minor modifications) may be marketed pursuant to one grant of certification under a single FCC Identifier. For a device to be certified as a family of products, the initial application for certification shall contain a declaration of the intent to include and/or to develop a family of products. Each variation of the

product shall be evaluated for compliance and include appropriate data (e.g. radio frequency exposure or Hearing Aid Compatibility) as required by the Commission's rules for each model variation.

14. Section 2.925 is revised to read as follows:

§2.925 Identification of equipment.

(a) Each equipment covered in an application for equipment authorization shall bear a label listing the following:

(1) FCC Identifier consisting of the two elements in the exact order specified in §2.926. The FCC Identifier shall be preceded by the term FCC ID in capital letters on a single line.

(2) Any other statements or labeling requirements imposed by the rules governing the operation of the specific class of equipment, except that such statement(s) of compliance may appear on a separate label at the option of the applicant/grantee.

(3) The information required may be provided electronically pursuant to § 2.935

(4) Equipment subject only to registration will be identified pursuant to part 68 of this chapter.

(b) Any device subject to more than one equipment authorization procedure may be assigned a single FCC Identifier. However, a single FCC Identifier is required to be assigned to any device consisting of two or more sections assembled in a common enclosure, on a common chassis or circuit board, and with common frequency controlling circuits. Devices to which a single FCC Identifier has been assigned shall be identified pursuant to paragraph (a) of this section.

(1) Separate FCC Identifiers may be assigned to a device consisting of two or more sections assembled in a common enclosure, but constructed on separate sub-units or circuit boards with independent frequency controlling circuits. The FCC Identifier assigned to any transmitter section shall be preceded by the term TX FCC ID, the FCC Identifier assigned to any receiver section shall be preceded by the term RX FCC ID and the identifier assigned to any remaining section(s) shall be preceded by the term FCC ID.

(2) Where terminal equipment subject to part 68 of this chapter, and a radiofrequency device

subject to equipment authorization requirements are assembled in a common enclosure, the device shall be labeled in accordance with the requirements published by the Administrative Council for Terminal Attachments and shall also display the FCC Identifier in the format specified in paragraph (a) of this section.

(3) For a transceiver, the receiver portion of which is subject to Supplier's Declaration of Conformity pursuant to § 15.101 of this chapter, and the transmitter portion is subject to certification, the FCC Identifier required for the transmitter portion shall be preceded by the term FCC ID.

(c) In order to validate the grant of certification, the label shall be permanently affixed to the equipment and shall be readily visible to the purchaser at the time of purchase unless the label is in electronic form pursuant to §2.935.

(1) As used here, permanently affixed means that the required information is etched, engraved, stamped, indelibly printed, or otherwise permanently marked on a permanently attached part of the equipment enclosure. Alternatively, the required information may be permanently marked on a nameplate of metal, plastic, or other material fastened to the equipment enclosure by welding, riveting, etc., or with a permanent adhesive. Such a nameplate must be able to last the expected lifetime of the equipment in the environment in which the equipment will be operated and must not be readily detachable.

(2) As used here, readily visible means that the required information must be visible from the outside of the equipment enclosure. It is preferable that it be visible at all times during normal installation or use, but this is not a prerequisite for grant of equipment authorization.

(d) Modular transmitters certified pursuant to §2.1042 must be equipped with either a permanently affixed label or must be capable of electronically displaying its FCC Identifier pursuant to §2.935.

(1) If using a permanently affixed label, the modular transmitter must be labeled with its own FCC Identifier, and, if the FCC Identifier is not visible when the modular transmitter is installed

inside another device, then the outside of the device into which the modular transmitter is installed must also display a label referring to the enclosed modular transmitter. This exterior label can use wording such as the following: "Contains certified modular transmitter FCC ID: XYZMODEL1" or "Contains FCC ID: XYZMODEL1." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the modular transmitter which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment certification.

(2) If the modular transmitter uses an electronic display of the FCC Identifier, the information must be readily accessible and visible on the modular transmitter or on the device in which it is installed. If the modular transmitter is installed inside another device, then the outside of the device into which the modular transmitter is installed must display a label referring to the enclosed modular transmitter or provide the information electronically pursuant to §2.935. This label can use wording such as the following: "Contains certified modular transmitter(s) FCC ID: XYZMODEL1." Any similar wording that expresses the same meaning may be used. The user manual must include instructions on how to access the electronic display. A copy of these instructions must be included in the application for equipment authorization.

(3) If a party installing a certified modular transmitter obtains a new grant of certification for the modular transmitter, it can use an exterior label or provide the information electronically pursuant to § 2.935 using wording such as "Contains certified modular transmitter FCC ID:XYXMODEL1 changed to FCC ID:ABCXXXX". Any similar wording that expresses the same meaning may be used.

(e) Where it is shown that a permanently affixed label is not desirable or is not feasible, an alternative method of positively identifying the equipment may be used if approved by the Commission. The proposed alternative method of identification and the justification for its use must be included with the application for equipment authorization.

Note to paragraph (e): As an example, it would be possible to show that an alternate method of identification would be necessary for a device intended to be implanted within the body of a test animal or person.

(f) The FCC Identifier including the term FCC ID shall be in a size of type large enough to be readily legible, consistent with the dimensions of the equipment and its label. However, the type size for the FCC Identifier is not required to be larger than eight-point. If a device is so small that it is impractical to label it with the FCC Identifier in a font that is four-point or larger, and the device does not have a display that can show electronic labeling, then the FCC Identifier shall be placed in the user manual and must also either be placed on the device packaging or on a removable label attached to the device.

15. Remove the undesignated center heading preceding § 2.927.

16. Section 2.927 is amended by revising paragraph (a) to read as follows:

§ 2.927 Limitations on grants.

(a) A grant of certification is valid only when the device is labeled in accordance with § 2.925 and remains effective until set aside, revoked or withdrawn, rescinded, surrendered, or a termination date is otherwise established by the Commission.

* * * * *

17. Section 2.931 is revised to read as follows:

§ 2.931 Responsibilities.

(a) The responsible party warrants that each unit of equipment marketed under its grant of certification and bearing the identification specified in the grant will conform to the unit that was measured and that the data (design and rated operational characteristics) filed with the application for certification continues to be representative of the equipment being produced under such grant within the variation that can be expected due to quantity production and testing on a statistical basis.

(b) A party integrating and marketing end products by installing or assembling certified modular transmitters into a host device must follow all the instructions that are provided concerning the installation of the modular transmitter, the type and layout of the transmit antenna, and any other steps that must be taken to ensure the compliance of the end product. The installer must ensure that the host device is of a type that is permissible for use under the approved modular transmitter(s) certification. If the installer confirms that the requirements are met, then no further equipment authorization is required except for retention of records pursuant to § 2.938. If the installer cannot show that these requirements are met or end product specific compliance requirements are specified, then the integrator/installer must perform additional testing to demonstrate that the end product complies with all applicable technical requirements, including RF exposure and Hearing Aid Compatibility (HAC), as appropriate, with the installed combination of modular transmitters. When additional testing is required, the installer must obtain a new grant of certification for the end product pursuant to § 2.1033, or alternatively either the installer or the grantee of certification for the modular transmitter must file additional test data to supplement to the original modular transmitter's test data pursuant to § 2.1043(e) or file for an application for a new equipment certification for the modular transmitter pursuant to § 2.1033.

(c) A party marketing a certified modular transmitter(s) to be installed by the end user must demonstrate compliance with all Commission requirements under all the likely installation and use configurations an end-user may deploy pursuant to § 2.1042(b)(6). The evaluation must ensure that the final assembly will comply with all the applicable rules for such assembly.

(d) In determining compliance for devices subject to Supplier's Declaration of Conformity, the responsible party warrants that each unit of equipment marketed under the Supplier's Declaration of Conformity procedure will be identical to the unit tested and found acceptable with the standards and that the records maintained by the responsible party continue to reflect the equipment being produced under such Supplier's Declaration of Conformity within the variation that can be expected due to quantity production and testing on a statistical basis.

(e) For equipment subject to Supplier's Declaration of Conformity, the responsible party must reevaluate the equipment if any modification or change adversely affects the emanation characteristics of the modified equipment. The responsible party bears responsibility for continued compliance of subsequently produced equipment.

§ 2.932 [Removed]

18. Remove §2.932.

§ 2.933 [Removed]

19. Remove § 2.933.

20. Add § 2.935 to read as follows:

§2.935 Electronic labeling of radiofrequency devices.

Any radiofrequency device equipped with an integrated electronic display screen may display on the electronic display the FCC Identifier, any warning statements, or other information that the Commission's rules would otherwise require to be shown on a physical label attached to the device.

(a) Devices displaying their FCC Identifier, warning statements, or other information electronically must make this information readily accessible on the electronic display. Users must be provided with prominent instructions on how to access the information in the operating instructions, inserts in packaging material, or other easily accessible format at the time of purchase. The access instructions must also be available on the product-related website, if such a website exists, and a copy of these instructions must be included in the application for equipment certification.

(b) Devices displaying their FCC Identifier, warning statements, or other information electronically must permit access to the information without requiring special codes, accessories or permissions and the access to this information must not require more than three steps in the menu.

(c) The electronically displayed FCC Identifier, warning statements, or other information must be

displayed electronically in a manner that is clearly legible without the aid of magnification.

(d) The necessary label information must be programmed by the responsible party and must be secured in such a manner that third-parties cannot modify it.

(e) Devices displaying their FCC Identifier, warning statements, or other information electronically must also display this information on the product packaging or on a physical label placed on the product at the time of importation, marketing, and sales. If a physical label is used, it may be a removable label, or, for devices in protective bags, a label on the protective bag. Any removable label shall be of a type intended to survive normal shipping and handling and must only be removed by the customer after purchase.

21. Section 2.938 is revised to read as follows:

§ 2.938 Retention of records.

(a) For equipment subject to the equipment authorization procedures in this part, the responsible party shall maintain the records listed as follows:

(1) A record of the original design drawings and specifications and all changes that have been made that may affect compliance with the standards and the requirements of § 2.931.

(2) A record of the procedures used for production inspection and testing to ensure conformance with the standards and the requirements of § 2.931.

(3) A record of the test results that demonstrate compliance with the appropriate regulations in this chapter.

(b) For equipment subject to Supplier's Declaration of Conformity procedures, the responsible party shall, in addition to the requirements in paragraph (a) of this section, maintain a record of the measurements made on an appropriate test site that demonstrates compliance with the applicable regulations in this chapter. The record shall:

(1) Indicate the actual date all testing was performed;

(2) State the name of the test laboratory, company, or individual performing the testing. The Commission may request additional information regarding the test site, the test equipment or the

qualifications of the company or individual performing the tests;

(3) Contain a description of how the device was actually tested, identifying the measurement procedure and test equipment that was used;

(4) Contain a description of the equipment under test (EUT) and support equipment connected to, or installed within, the EUT;

(5) Identify the EUT and support equipment by trade name and model number and, if appropriate, by FCC Identifier and serial number;

(6) Indicate the types and lengths of connecting cables used and how they were arranged or moved during testing;

(7) Contain at least two drawings or photographs showing the test set-up for the highest line conducted emission and showing the test set-up for the highest radiated emission. These drawings or photographs must show enough detail to confirm other information contained in the test report. Any photographs used must clearly show the test configuration used;

(8) List all modifications, if any, made to the EUT by the testing company or individual to achieve compliance with the regulations in this chapter;

(9) Include all of the data required to show compliance with the appropriate regulations in this chapter;

(10) Contain, on the test report, the signature of the individual responsible for testing the product along with the name and signature of an official of the responsible party, as designated in §2.909; and

(11) A copy of the compliance information, as described in §2.1077, is required to be provided with the equipment.

(c) The provisions of paragraph (a) of this section shall also apply to a manufacturer of equipment produced under an agreement with the original responsible party. The retention of the records by the manufacturer under these circumstances shall satisfy the grantee's responsibility under paragraph (a) of this section.

(d) For equipment subject to more than one equipment authorization procedure, the responsible party must retain the records required under all applicable provisions of this section.

(e) For equipment subject to rules that include a transition period, the records must indicate the particular transition provisions that were in effect when the equipment was determined to be compliant.

(f) For equipment subject to certification, records shall be retained for a one year period after the marketing of the associated equipment has been permanently discontinued, or until the conclusion of an investigation or a proceeding if the responsible party (or, under paragraph (c) of this section, the manufacturer) is officially notified that an investigation or any other administrative proceeding involving its equipment has been instituted. For all other records kept pursuant to this section, a two-year period shall apply.

(g) If radio frequency equipment is modified by any party other than the original responsible party, and that party is not working under the authorization of the original responsible party, the party performing the modifications is not required to obtain the original design drawings specified in paragraph (a)(1) of this section. However, the party performing the modifications must maintain records showing the changes made to the equipment along with the records required in paragraphs (a)(3) of this section. A new equipment authorization may also be required.

21. Section 2.941 is amended by revising paragraph (a) to read as follows:

§2.941 Availability of information relating to grants.

(a) Grants of equipment authorization are available in the Commission's public database.

* * * * *

§ 2.944 [Removed]

22. Remove § 2.944.

23. Section 2.947 is amended by revising paragraph (a)(3) and adding paragraph (f) to read as follows:

§ 2.947 Measurement procedure.

(a) * * *

(3) Any measurement procedure acceptable to the Commission may be used to prepare data demonstrating compliance with the requirements of this chapter. Advisory information regarding measurement procedures can be found in the Commission's Knowledge Database, which is available at www.fcc.gov/labhelp/.

* * * * *

(f) A composite system is a system that incorporates different devices contained either in a single enclosure or in separate enclosures connected by wire or cable. If the individual devices in a composite system are subject to different technical standards, each such device must comply with its specific standards. In no event may the measured emissions of the composite system exceed the highest level permitted for an individual component. Testing for compliance with the different standards shall be performed with all of the devices in the system functioning. If the composite system incorporates more than one antenna or other radiating source and these radiating sources are designed to emit at the same time, measurements of conducted and radiated emissions shall be performed with all radiating sources that are to be employed emitting.

25. Remove the undesignated center heading preceding § 2.951.

§ 2.951[Removed]

26. Remove § 2.951.

§ 2.952 [Removed]

27. Remove § 2.952.

§ 2.953 [Removed]

28. Remove §2.953.

§ 2.954 [Removed]

29. Remove § 2.954.

§ 2.955 [Removed]

30. Remove §2.955.

31. Section 2.1033 is revised to read as follows:

§ 2.1033 Application for grant of certification.

(a) An application for certification shall be filed electronically through the Commission's Equipment Authorization System (EAS) with all required information. Items that do not apply shall be so noted. Except as otherwise noted in this section, all applications for certification shall be accompanied by documentation containing the following information:

(1) The full name, mailing address, electronic mail address, and telephone number of the responsible party for certification.

(2) FCC Identifier and label information as required pursuant to § 2.925.

(i) For devices where the FCC Identifier label is presented electronically, the application must include instructions for accessing the information.

(ii) [Reserved]

(3) A copy of the installation and operating instructions. A draft copy of the instructions may be submitted if the actual document is not available. The actual document shall be furnished to the FCC when it becomes available and prior to marketing the end product. The user's manual or instruction manual for an intentional or unintentional radiator shall prominently caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

(i) If the application is for a modular transmitter, the installation instructions must clearly document the proper procedures for installing the modular transmitter as well as any limitations on the end product necessary to ensure compliance. If the conditions of use require any specific instructions to the end user, this information must also be included in the manual in a conspicuous location.

(ii) In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual

in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

(iii) The manual must include all the necessary advisories and information to be provided to the users as specified in the rules in this chapter.

(4) A brief description of the circuit functions, a functional block diagram of the RF circuitry of the device along with a statement describing how the device operates including software or firmware used to control such functions. This statement should contain a description of the ground system and antenna, if any, used with the device.

(i) For devices including modular transmitters which are software defined radios and use software to control the radio or other parameters subject to the Commission's rules, the description must include details of the equipment's capabilities for software modification and upgradeability, including all frequency bands, power levels, modulation types, or other modes of operation for which the device is designed to operate, whether or not the device will be initially marketed with all modes enabled. The description must state which parties will be authorized to make software changes (e.g., the grantee, wireless service providers, other authorized parties) and the software controls that are provided to prevent unauthorized parties from enabling different modes of operation. Manufacturers must describe the methods used in the device to secure the software in their application for equipment authorization and must include a high level operational description or flow diagram of the software that controls the radio frequency operating parameters. The applicant must provide an attestation that only permissible modes of operation may be selected by a user.

(ii) For modular transmitters that can be placed in a physical platform that will not itself be certified (i.e. a form factor), the description must include reference designs for the physical platform and a showing of how the modular transmitter will meet the requirements of such designs.

(5) A schematic diagram showing the frequency of all oscillators in the device. The signal path

and frequency shall be indicated at each applicable location. The tuning range(s) and intermediate frequency(ies) shall be indicated.

(6) A report of measurements showing compliance with the pertinent FCC technical requirements. This report shall identify the test procedure used (e.g., specify the FCC test procedure, or industry test procedure that was used), the date the measurements were made, the location where the measurements were made, and the device that was tested (model and serial number, if available). The report shall include sample calculations showing how the measurement results were converted for comparison with the technical requirements.

(i) For devices required to provide radiofrequency exposure evaluation pursuant to the requirements of this chapter, the report must identify the evaluation procedures and include all the necessary measurements or calculations necessary to demonstrate compliance. If the test reports are provided to show compliance of host products incorporating specific certified modular transmitters approved pursuant to § 2.1042, the information must include host-specific testing and appropriate guidance to ensure that the device will operate in a compliant manner.

(ii) For devices operating in licensed radio services the following must be provided:

(A) The data required by §§ 2.1046 through 2.1057, inclusive, measured in accordance with the procedures set out in § 2.1041.

(B) Type or types of emission.

(C) The dc voltages applied to and dc currents into the several elements of the final radio frequency amplifying device for normal operations over the power range.

(D) The tune up procedure over the power range or at specific operating power levels.

(E) Range of operating power values or specific operating power levels, and description of any means provided for variation of operating power.

(7) Frequency or frequency range.

(8) Maximum power rating as defined in the applicable part(s) of this chapter.

(9) A sufficient number of photographs to clearly show the exterior appearance, the construction,

the component placement on the chassis, and the chassis assembly. The exterior views shall show the overall appearance, the antenna(s) used with the device (if any), the controls available to the user, and the required identification label in sufficient detail so that the name and FCC Identifier can be read. In lieu of a photograph of the label, a sample label (or facsimile thereof) may be submitted together with a sketch showing where this label will be placed on the equipment.

(i) For devices where the FCC Identifier label is presented electronically, the application must include a screen shot or equivalent representation of the display containing the information and the steps required to access that display.

(ii) [Reserved]

(10) If the equipment is certified as a modular transmitter pursuant to § 2.1042 and can only be certified for a specific host or can be approved for limited types of use, a list of such limitations.

(11) If the equipment for which certification is being sought must be tested with peripheral, accessory devices or host devices connected or installed, a brief description of those peripherals or accessories. The peripheral or accessory devices shall be unmodified, commercially available equipment.

(12) At least one drawing or photograph showing the test set-up for each of the required types of tests applicable to the device for which certification is requested. These drawings or photographs must show enough detail to confirm other information contained in the test report. Any photographs used must clearly show the test configuration used.

(13) All applications must be accompanied by the anti-drug abuse certification required under § 1.2002 of this chapter.

(b) In addition to the information listed in paragraph (a) of this section, the following information must be submitted for specific categories of devices:

(1) For equipment subject to the provisions of part 15 of this chapter, the application shall indicate if the equipment is being authorized pursuant to the transition provisions in § 15.37 of this chapter.

(2) Applications for the certification of scanning receivers shall include a statement describing the methods used to comply with the design requirements of all parts of § 15.121 of this chapter. The application must specifically include a statement assessing the vulnerability of the equipment to possible modification and describing the design features that prevent the modification of the equipment by the user to receive transmissions from the Cellular Radiotelephone Service. The application must also demonstrate compliance with the signal rejection requirement of § 15.121 of this chapter, including details on the measurement procedures used to demonstrate compliance.

(3) Applications for certification of transmitters operating within the 59.0-64.0 GHz band under part 15 of this chapter shall also be accompanied by an exhibit demonstrating compliance with the provisions of § 15.255 (g) of this chapter.

(4) For equipment employing digital modulation techniques, a detailed description of the modulation system to be used, including the response characteristics (frequency, phase and amplitude) of any filters provided, and a description of the modulating wavetrain, shall be submitted for the maximum rated conditions under which the equipment will be operated.

(5) The application for certification of an external radio frequency power amplifier under part 97 of this chapter need not be accompanied by the data required by paragraph (a)(6)(ii)(A) of this section. In lieu thereof, measurements shall be submitted to show compliance with the technical specifications in subpart C of part 97 of this chapter and such information as required by § 2.1060.

(6) An application for certification of an AM broadcast stereophonic exciter-generator intended for interfacing with existing certified, or formerly type accepted or notified transmitters must include measurements made on a complete stereophonic transmitter. The instruction book must include complete specifications and circuit requirements for interconnecting with existing transmitters. The instruction book must also provide a full description of the equipment and measurement procedures to monitor modulation and to verify that the combination of stereo exciter-generator and transmitter meet the emission limitations of § 73.44 of this chapter.

(7) Applications for certification required by § 25.129 of this chapter shall include any additional equipment test data and information required by that section.

(8) Applications for certification of equipment operating under part 20 of this chapter, that a manufacturer is seeking to certify as hearing aid compatible, as set forth in § 20.19 of this chapter, shall include a statement indicating compliance with the test requirements of § 20.19 of this chapter and indicating the appropriate M-rating and T-rating for the equipment. The manufacturer of the equipment shall be responsible for maintaining the test results.

(9) Applications for certification of equipment operating under part 27 of this chapter, that a manufacturer is seeking to certify for operation in the:

(i) 1755-1780 MHz, 2155-2180 MHz, or both bands shall include a statement indicating compliance with the pairing of 1710-1780 and 2110-2180 MHz specified in §§27.5(h) and 27.75 of this chapter.

(ii) 1695-1710 MHz, 1755-1780 MHz, or both bands shall include a statement indicating compliance with §27.77 of this chapter.

(iii) 600 MHz band shall include a statement indicating compliance with §27.75 of this chapter.

(10) Applications for certification of U-NII devices in the 5.15-5.35 GHz and the 5.47-5.85 GHz bands must include a high level operational description of the security procedures that control the radio frequency operating parameters and ensure that unauthorized modifications cannot be made.

(11) Applications for certification of equipment operating under part 90 of this chapter and capable of operating on the 700 MHz interoperability channels (See § 90.531(b)(1) of this chapter) shall include a Compliance Assessment Program Supplier's Declaration of Conformity and Summary Test Report or, alternatively, shall include a document detailing how the applicant determined that its equipment complies with § 90.548 of this chapter and that the equipment is interoperable across vendors.

(c) A single application for certification may be filed to authorize an end product that incorporates devices subject to certification under multiple rule parts or under multiple sections

within a rule part. The application must include all the information required in this section for each applicable rule parts or sections within a rule part. The end product must be labeled with a single FCC Identifier if a single application is filed. Separate applications must be filed if different FCC Identifiers will be used for each device in the end product.

(d) A single application for certification may be filed to authorize a family of products, as described in §2.929(b), under a single FCC Identifier. The devices must be clearly similar, based upon their overall design of the devices, their functions, components and layout. The applicant for certification must provide a clear description of the devices that would be included in the family of products and the differences between them.

(e) A grant of certification must be modified by a new application whenever there is a change in the design, circuitry, construction or other characteristics of a device reported at the time of previous certification (including the original application and any subsequent updates as permitted by the provisions of §2.1043). The application must include:

(1) A description of the changes;

(2) Documentation pursuant to paragraph (a) or (h) of this section to update any of the originally submitted information that was affected by the modification of the device; and

(3) If the application includes a request to change the FCC Identifier, an applicant that is not the original grantee must provide documentation that the original grantee has given the new applicant permission to reference the original filing, if applicable.

(f) A grant of certification must be modified by a new application whenever there is a change in the FCC Identifier without changes in design, circuitry or construction of the certified device(s). The application is not required to include the measurement or test data specified in paragraph (a) of this section, although such data may be later requested by the TCB or the Commission. The following information shall be filed with such application:

(1) An application that is not from the original grantee must provide with its application documentation confirming the grantee's consent to reference the original filing.

(2) The original identification used on the equipment prior to the change in identification.

(3) The date of the original grant of the equipment authorization.

(4) How the equipment bearing the modified identification differs from the original equipment.

(5) Whether the original test results continue to be representative of and applicable to the equipment bearing the changed identification.

(6) The photographs required by paragraph (a)(9) of this section showing the exterior appearance of the equipment, including the operating controls available to the user and the identification label. Photographs of the construction, the component placement on the chassis, and the chassis assembly are not required to be submitted unless specifically requested by the Commission.

(g) A grant of certification must be modified by a new application whenever an assembler or integrator incorporates one or more certified modular transmitters into a new host device where additional testing and a new FCC Identifier is requested. In such cases, the requirements of paragraph (e) of this section apply.

(h) For certified modular transmitters that are incorporated in additional devices authorized under new FCC Identifier(s), the following applies: if the original grantee of certification receives approval for a change pursuant to § 2.1043(c) subsequent to the grant of an application for a new FCC Identifier, and the change will be incorporated into the equipment bearing the new FCC Identifier, then the grantee that received approval for a new FCC Identifier must also file for change in its equipment pursuant to § 2.1043(c).

32. Add § 2.1042 to read as follows:

§ 2.1042 Certified modular transmitters.

(a) A certified modular transmitter consists of a radiofrequency transmitter device that is incorporated or attached to another product, host, or a device for data and power and that satisfies the requirements to obtain a modular transmitter certification. A certified modular transmitter may also consist of a single chip package, provided it is authorized in accordance with all the requirements of this subpart.

(b) Modular transmitters must meet the following requirements to obtain a modular transmitter certification:

(1) The radio elements of the modular transmitter must have their own shielding. The physical crystal and tuning capacitors may be located external to the shielded radio elements.

(2) The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that it will comply with the requirements of the rules under conditions of excessive data rates or over-modulation.

(3) The modular transmitter must have its own power supply regulation.

(4) The modular transmitter must be tested in a stand-alone configuration, i.e., it must not be inside another device during testing for compliance with the rules.

(5) The modular transmitter must comply with any specific rules or operating requirements that ordinarily apply to a complete transmitter and the manufacturer must provide adequate instructions along with the modular transmitter to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization.

(6) If a modular transmitter is to be installed by the end-user, compliance with all Commission requirements must be demonstrated by the responsible party under all the likely installation and use configurations an end-user may deploy. Any RF exposure evaluation must include various likely user configurations, including those expected to create the greatest RF exposure.

(7) A modular transmitter operating under part 15 of this chapter must comply with the antenna and transmission system requirements of §§ 15.203, 15.204(b) and 15.204(c) of this chapter. The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the modular transmitter and the antenna, including the cable). An antenna can be a trace on circuit board when all the characteristics are properly defined. The "professional installation" provision of § 15.203 of this chapter is not applicable to modular transmitters but can apply to limited modular approvals under paragraph (b) of this section.

(8) A modular transmitter operating under part 15 of this chapter must comply with the AC line

conducted requirements found in § 15.207 of this chapter unless it is battery powered. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see § 15.27(a) of this chapter). The length of these lines shall be the length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified and commercially available (see § 15.31(i) of this chapter).

(c) A limited certification may be granted for a modular transmitter that does not comply with all of the requirements listed in paragraph (b) of this section, e.g., shielding/enclosures, minimum signaling amplitude, buffered modulation/data inputs, or power supply regulation, if the manufacturer can demonstrate by alternative means in the application for equipment certification that the modular transmitter meets all the applicable requirements under the operating conditions in which the transmitter will be used. A limited certification may also be granted in those instances where compliance with RF exposure rules is demonstrated only for limited applications or specific product configurations and installation or user requirements. The applicant for certification must state how control of the end product into which the modular transmitter will be installed will be maintained such that full compliance of the end product is always ensured. Applications for certification for either a new device or changes to an existing device must be filed pursuant to § 2.1033 or 2.1043 if there are changes in the applicable conditions or limitations.

(d) Multiple certified modular transmitters when integrated into an end product and the end product itself must comply with all Commission requirements, including RF exposure requirements pursuant to §§ 1.1307 of this chapter, 2.1091, and 2.1093. The end product manufacturer must perform additional compliance testing with all certified modular transmitters installed and operating in anticipated configurations to ensure the end product's compliance. The party integrating the modular transmitters into an end product will be responsible for the

compliance of the end product pursuant to § 2.909(a).

(e) Manufacturers of any radio including certified modular transmitters which includes a software defined radio must take steps to ensure that only software that has been approved with a particular radio can be loaded into that radio. The software must not allow the installers or end-user to operate the transmitter with operating frequencies, output power, modulation types or other radio frequency parameters outside those that were approved. Manufacturers may use means including, but not limited to the use of a private network that allows only authenticated users to download software, electronic signatures in software or coding in hardware that is decoded by software to verify that new software can be legally loaded into a device to meet these requirements.

33. Section 2.1043 is revised to read as follows:

§ 2.1043 Changes in certified equipment.

(a) Changes may be made to certified equipment in accordance with the provisions of this section.

(b) New FCC Identifier Not Required. Two classes of permissive changes are permitted; in both cases, the responsible party must continue to use the original FCC Identifier when it makes changes.

(1) Class I permissive changes. A grantee may make minor variations in a device's enclosure or component layout without obtaining an updated grant of certification from a TCB as long as the grantee ensures that the device continues to comply with all applicable rules. A grantee of certification does not need to obtain an updated grant of certification from a TCB for changes to a certified device that do not cause the fundamental emissions to increase, the spurious emissions to deteriorate (i.e. increase in amplitude), RF exposure to increase, changes any other characteristics to be reported to the Commission or that do not add new capabilities such as new frequency bands or transmission formats.

(2) Class II permissive changes. A grantee of certification must submit an application to obtain an updated grant of certification from a TCB for changes that increase the fundamental emissions (e.g., the power level or radiated field strength), cause the spurious emissions to deteriorate (i.e.,

increase in amplitude), affect a device's compliance with the RF exposure, change the hearing aid compatibility (HAC) ratings or change any characteristics to be reported to the Commission. A grantee must obtain an updated grant of certification for the addition of new device capabilities through software changes, such as the addition of new frequency bands or transmission formats, and must demonstrate the controls it will use to prevent unauthorized software modifications. All requests for changes pursuant to this paragraph (a) must be accompanied by the anti-drug abuse certification required under § 1.2002 of this chapter.

(c) New FCC Identifier Required. An application for grant of certification with a new FCC Identifier must be submitted when significant changes in the design, layout or functionality of a previously certified device are made. In addition, a party requesting a new FCC Identifier for a previously certified device or that modifies and becomes the responsible party for a previously certified device must submit a new application for certification using a new FCC Identifier.

(d) Changes to certified equipment described in paragraph (b) of this section may be made by the original grantee of certification or a party acting under the authority of the grantee of certification. When a party other than the grantee of certification applies for a change pursuant to paragraph (b)(2) of this section, it must include documentation with its request confirming the grantee's consent.

(e) When a grantee applies for an updated grant of certification pursuant to paragraph (b)(2) of this section and TCB approves such application, the TCB issuing the update shall supply the Commission, through the EAS, a description of the changes, complete information showing changes from that originally submitted to the Commission, and the results of tests of the characteristics affected by such change. The modified equipment shall not be marketed under the existing grant of certification prior to acknowledgement by the Commission on the Commission's public database that the change is acceptable.

(f) For modular devices that are incorporated in additional devices authorized as permissive changes under the original FCC Identifier(s), if the original grant of certification has prior

permissive change approvals pursuant to paragraph (b)(2) of this section all configurations used and marketed must be tested.

(g) For assemblers or integrators incorporating one or multiple certified modular transmitters into a new host device, authorized under the original grant of certification where an additional certification filing is required, the requirements of § 2.1033(e) apply.

(h) Equipment that has been certified or formerly type accepted for use in the Amateur Radio Service pursuant to the requirements of part 97 of this chapter may be modified without regard to the conditions specified in paragraph (b)(1) of this section, provided the following conditions are met:

(1) Any person performing such modifications on equipment used under part 97 of this chapter must possess a valid amateur radio operator license of the class required for the use of the equipment being modified.

(2) Modifications made pursuant to this paragraph (h) are limited to equipment used at licensed amateur radio stations.

(3) Modifications specified or performed by equipment manufacturers or suppliers must be in accordance with the requirements set forth in paragraph (b)(1) of this section.

(4) Modifications specified or performed by licensees in the Amateur Radio Service on equipment other than that at specific licensed amateur radio stations must be in accordance with the requirements set forth in paragraph (b)(1) of this section.

(5) The station licensee shall be responsible for ensuring that modified equipment used at his station will comply with the applicable technical standards in part 97 of this chapter.

(i) Transmitters that have been certified or formerly type accepted for use in the Broadcast services may be modified without regard to the conditions specified in paragraphs (b) and (c) of this section, provided that the modified equipment continues to comply with all other equipment authorization and part 73 of this chapter. If a previously approved broadcast transmitter is

modified, it must either be labeled with a statement indicating that it was modified after approval or the original FCC Identifier must be permanently covered or removed.

34. The undesignated heading preceding § 2.1071 is revised as follows:

Supplier's Declaration of Conformity

35. Section 2.1071 is revised to read as follows:

§ 2.1071 Cross reference.

The general provisions of this subpart shall apply to equipment subject to a Supplier's Declaration of Conformity.

36. Section 2.1072 is revised to read as follows:

§ 2.1072 Limitation on Supplier's Declaration of Conformity.

(a) The Supplier's Declaration of Conformity signifies that the responsible party, as defined in §2.909, has determined that the equipment has been shown to comply with the applicable technical standards if no unauthorized change is made in the equipment and if the equipment is properly maintained and operated. Compliance with these standards shall not be construed to be a finding by the responsible party with respect to matters not encompassed by the Commission's rules.

(b) A Supplier's Declaration of Conformity by responsible party, as defined in §2.909, is effective until a termination date is otherwise established by the Commission.

(c) No person shall, in any advertising matter, brochure, etc., use or make reference to a Supplier's Declaration of Conformity in a deceptive or misleading manner or convey the impression that such a Supplier's Declaration of Conformity reflects more than a determination by the manufacturer, importer, integrator, or responsible party, as defined in §2.909, that the device or product has been shown to be capable of complying with the applicable technical standards of the Commission's rules.

§ 2.1073[Removed]

37. Remove §2.1073.

38. Section 2.1074 is revised to read as follows:

§ 2.1074 Identification.

Devices subject only to Supplier's Declaration of Conformity must be uniquely identified by the party responsible for marketing or importing the equipment within the United States. However, the identification shall not be of a format which could be confused with the FCC Identifier required on certified equipment. The responsible party must maintain adequate identification records to facilitate positive identification for each device.

§ 21075 [Removed]

39. Remove §2.1075.

40. Section 2.1077 is revised to read as follows:

§ 2.1077 Compliance information.

(a) If a product must be tested and authorized under a Supplier's Declaration of Conformity, a compliance information statement shall be supplied with the product at the time of marketing or importation, containing the following information:

(1) Identification of the product, e.g., name and model number;

(2) A compliance statement as applicable, e.g. for devices subject to part 15 of this chapter, as specified in §15.19(a)(3) of this chapter, that the product complies with the rules; and

(3) The identification, by name, address and telephone number, of the responsible party, as defined in §2.909. The responsible party for a Supplier's Declaration of Conformity must be located within the United States.

(b) If a product is assembled from modular components (e.g. enclosures, power supplies and CPU boards) that, by themselves, are authorized under a Supplier's Declaration of Conformity and/or a grant of certification, and the assembled product is also subject to authorization under a Supplier's Declaration of Conformity but, in accordance with the applicable regulations, does not require additional testing, the product shall be supplied, at the time of marketing or importation, with a compliance information statement containing the following information:

(1) Identification of the assembled product, e.g., name and model number.

(2) Identification of the modular components used in the assembly. A modular component authorized under a Supplier's Declaration of Conformity shall be identified as specified in paragraph (a)(1) of this section. A modular component authorized under a grant of certification shall be identified by name and model number (if applicable) along with the FCC Identifier number.

(3) A statement that the product complies with part 15 of this chapter.

(4) The identification, by name, address and telephone number, of the responsible party who assembled the product from modular components, as defined in §2.909. The responsible party for a Supplier's Declaration of Conformity must be located within the United States.

(5) Copies of the compliance information statements for each modular component used in the system that is authorized under a Supplier's Declaration of Conformity.

(c) The compliance information statement shall be included in the user's manual or as a separate sheet. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form. The information may be provided electronically as permitted in §2.935.

41. Section 2.1201 is amended by revising paragraph (b) and removing paragraph (c) to read as follows:

§2.1201 Purpose.

* * * * *

(b) The rules in this subpart set out the conditions under which radio frequency devices as defined in §2.801 that are capable of causing harmful interference to radio communications may be imported into the U.S.A.

42. Section 2.1202 is revised to read as follows:

§ 2.1202 Exclusions.

The provisions of this section do not apply to the importation of:

(a) Unintentional radiators which are exempted from technical standards and other requirements as specified in §15.103 of this chapter.

(b) Radio frequency devices manufactured and assembled in the U.S.A. that meet applicable FCC technical standards and which have not been modified or received further assembly.

(c) Radio frequency devices previously properly imported that have been exported for repair and re-imported for use.

(d) Subassemblies, parts, or components of radio frequency devices unless they constitute an essentially completed device which requires only the addition of cabinets, knobs, speakers, or similar minor attachments before marketing or use. This exclusion does not apply to computer circuit boards that are actually peripheral devices as defined in §15.3(r) of this chapter and all devices that, by themselves, are subject to FCC marketing rules.

43. Section 2.1203 is revised to read as follows

§2.1203 General requirement for entry into the U.S.A.

(a) No radio frequency device may be imported into the Customs territory of the United States unless the importer or ultimate consignee, or their designated customs broker, determines that the device meets one of the conditions for entry set out in this section.

(b) Failure to satisfy at least one of the entry conditions for importation of radio frequency devices may result in refused entry, refused withdrawal for consumption, required redelivery to the Customs port, and other administrative, civil and criminal remedies provided by law.

(c) Whoever makes a determination pursuant to paragraph (a) of this section must provide, upon request made within one year of the date of entry, documentation on how an imported radio frequency device was determined to be in compliance with Commission requirements.

44. Section 2.1204 is amended by revising paragraphs (a)(1), (a)(4)(i), and (a)(7) to read as follows:

§ 2.1204 Import conditions.

(a) * * *

(1) The radio frequency device is compliant and has either received a grant of certification or the responsible party has performed a Supplier's Declaration of Conformity. However, a radio frequency device that has been issued a provisional grant of certification may be imported prior to the issuance of a grant of certification provided that the importer maintains sufficient control over the device to ensure that it is not marketed as defined in § 2.803(a) prior to the receipt of the grant of certification.

* * * * *

(4) * * *

(i) 400 or fewer units, provided the product is designed solely for operation within one of the Commission's authorized radio services for which an operating license is required to be issued by the Commission; or

* * * * *

(7) Three or fewer devices are being imported for the individual's personal use and are not intended for sale.

* * * * *

§ 2.1205 [Removed]

45. Remove § 2.1205.

PART 15—RADIO FREQUENCY DEVICES

46. The authority citation for part 15 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, 304, 307, 336, 544a, and 549.

47. Section 15.1 is amended by revising paragraph (c) to read as follows:

§15.1 Scope of this part.

*** * * * ***

(c) Unless specifically exempted, the operation or marketing of an intentional or unintentional radiator that is not in compliance with the administrative and technical provisions in this part,

including prior equipment authorization, as appropriate, is prohibited under section 302 of the Communications Act of 1934, as amended, and subpart I of part 2 of this chapter. The equipment authorization procedures are detailed in subpart J of part 2 of this chapter.

48. Section 15.19 is amended by revising paragraph (a) and by removing and reserving paragraph (b) to read as follows:

§ 15.19 Labeling requirements.

(a) In addition to the requirements in part 2 of this chapter, a device subject to certification, or Supplier's Declaration of Conformity shall be labeled as follows:

(1) Receivers associated with the operation of a licensed radio service, e.g., FM broadcast under part 73 of this chapter, land mobile operation under part 90 of this chapter, etc., shall bear the following statement in a conspicuous location on the device:

> This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

(2) A stand-alone cable input selector switch, shall bear the following statement in a conspicuous location on the device:

> This device complies with part 15 of the FCC Rules for use with cable television service.

(3) All other devices shall bear the following statement in a conspicuous location on the device:

> This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

(4) Where a device is constructed in two or more sections connected by wires and marketed together, the statement specified under paragraph (a) of this section is required to be affixed only to the main control unit.

(5) When the device is so small or for such use that it is impracticable to label it with the statement specified under paragraph (a) of this section in a font that is four-point or larger, and

the device does not have a display that can show electronic labeling, then the information required by this paragraph (a) shall be placed in the user manual and must also either be placed on the device packaging or on a removable label attached to the device.

* * * * *

49. Section 15.25 is amended by revising paragraphs (b) and (c) to read as follows:

§15.25 Kits.

*** * * * ***

(b) At least two units of the kit shall be assembled in exact accordance with the instructions supplied with the product to be marketed. If all components required to fully complete the kit (other than those specified in paragraph (a) of this section which are needed for compliance with the technical provisions and must be included with the kit) are not normally furnished with the kit, assembly shall be made using the recommended components. The assembled units shall be certified or authorized under the Supplier's Declaration of Conformity procedure, as appropriate, pursuant to the requirements of this part.

(1) The measurement data required for a TV interface device subject to certification shall be obtained for each of the two units and submitted with an application for certification pursuant to subpart J of part 2 of this chapter.

(2) The measurement data required for a TV interface device subject to Supplier's Declaration of Conformity shall be obtained for the units tested and retained on file pursuant to the provisions of subpart J of part 2 of this chapter.

(c) A copy of the exact instructions that will be provided for assembly of the device shall be submitted with an application for certification. Those parts which are not normally furnished shall be detailed in the application for certification.

* * * * *

50. Section 15.27 is amended by revising paragraph (a) to read as follows:

§15.27 Special accessories.

(a) Equipment marketed to a consumer must be capable of complying with the necessary regulations in the configuration in which the equipment is marketed. Where special accessories, such as shielded cables and/or special connectors, are required to enable an unintentional or intentional radiator to comply with the emission limits in this part, the equipment must be marketed with, i.e., shipped and sold with, those special accessories. However, in lieu of shipping or packaging the special accessories with the unintentional or intentional radiator, the responsible party may employ other methods of ensuring that the special accessories are provided to the consumer, without additional charge, at the time of purchase. Information detailing any alternative method used to supply the special accessories shall be included in the application for a grant of equipment authorization or retained in the Supplier's Declaration of Conformity records, as appropriate. The party responsible for the equipment, as detailed in §2.909 of this chapter, shall ensure that these special accessories are provided with the equipment. The instruction manual for such devices shall include appropriate instructions on the first page of the text concerned with the installation of the device that these special accessories must be used with the device. It is the responsibility of the user to use the needed special accessories supplied with the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

* * * * *

51. Section 15.31 is amended by adding a note to paragraph (a)(4) and revising paragraphs (b), (d), (f)(4), (h), (j), (k), (l), and (m) to read as follows:

§ 15.31 Measurement standards.

*** * * * ***

(a) * * *

(4) *** * ***

Note to paragraph (a)(4): Digital devices tested to show compliance with the provisions of § 15.109(g) must be tested following the ANSI C63.4 procedure described in paragraph (a)(4) of this section.

(b) All parties making compliance measurements on equipment subject to the requirements of this part are urged to use these measurement procedures. Any party using other procedures should ensure that such other procedures can be relied on to produce measurement results compatible with the FCC measurement procedures. The description of the measurement procedure used in testing the equipment for compliance and a list of the test equipment actually employed shall be made part of an application for certification or included with the data required to be retained by the party responsible for devices authorized pursuant to a Supplier's Declaration of Conformity.

* * * * *

(d) Field strength measurements shall be made, to the extent possible, on an open area test site. Test sites other than open area test sites may be employed if they are properly calibrated so that the measurement results correspond to what would be obtained from an open area test site. In the case of equipment for which measurements can be performed only at the installation site, such as perimeter protection systems, carrier current systems, and systems employing a "leaky" coaxial cable as an antenna, measurements for Supplier's Declaration of Conformity or for obtaining a grant of equipment authorization shall be performed at a minimum of three installations that can be demonstrated to be representative of typical installation sites.

* * * * *

(f) * * *

(4) The applicant for a grant of certification shall specify the extrapolation method used in the application filed with the Commission. For equipment subject to Supplier's Declaration of Conformity, this information shall be retained with the measurement data.

* * * * *

(h) A device which incorporates a carrier current system shall be tested as if the carrier current

system were incorporated in a separate device; that is, the device shall be tested for compliance with whatever rules would apply to the device were the carrier current system not incorporated, and the carrier current system shall be tested for compliance with the rules applicable to carrier current systems.

* * * * *

(j) If the equipment under test consists of a central control unit (host device) and an external or internal accessory(ies) (peripheral, sleeve, etc.) and the party declaring compliance of the equipment or applying for a grant of equipment authorization manufactures or assembles the central control unit and at least one of the accessory devices that can be used with that control unit, testing of the control unit and/or the accessory(ies) must be performed using the devices manufactured or assembled by that party, in addition to any other needed devices which the party does not manufacture or assemble. If the party declaring compliance of the equipment or applying for a grant of equipment authorization does not manufacture or assemble the central control unit and at least one of the accessory devices that can be used with that control unit or the party can demonstrate that the central control unit or accessory(ies) normally would be marketed or used with equipment from a different entity, testing of the central control unit and/or the accessory(ies) must be performed using the specific combination of equipment which is intended to be marketed or used together. Only one test using peripherals or accessories that are representative of the devices that will be employed with the equipment under test is required. All possible equipment combinations are not required to be tested. The accessories or peripherals connected to the device being tested shall be unmodified, commercially available equipment.

(k) Composite systems (i.e. systems that incorporate different devices contained in a single enclosure or in separate enclosures connected by wire or cable) shall be measured for compliance with the technical standards of this part in accordance with the procedures in § 2.947(f) of this chapter. For digital devices which consist of a combination of Class A and Class B devices, the total combination of which results in a Class A digital device, it is only necessary to demonstrate

that the equipment combination complies with the limits for a Class A device. This equipment combination may not be employed for obtaining a grant of equipment authorization or declaring compliance a Class B digital device. However, if the digital device combination consists of a Class B central control unit, e.g., a personal computer, and a Class A internal peripheral(s), it must be demonstrated that the Class B central control unit continues to comply with the limits for a Class B digital device with the Class A internal peripheral(s) installed but not active.

(l) Measurements of radio frequency emissions conducted to the public utility power lines shall be performed using a 50 ohm/50 μH line-impedance stabilization network (LISN).

(m) Measurements on intentional radiators or receivers, other than TV broadcast receivers, shall be performed and, if required, reported for each band in which the device can be operated with the device operating. The number of fundamental frequencies shall be investigated as specified in ANSI C63.10-2013, clause 5.7 (incorporated by reference, see §15.38).

* * * * *

52. Section 15.32 is revised to read as follows:

§ 15.32 Test procedures for CPU boards and computer power supplies.

Power supplies and CPU boards used with personal computers and for which separate authorizations are required to be obtained shall be tested in accordance with the specific procedures published or otherwise authorized by the Commission.

53. Section 15.33 is amended by revising paragraph (a) to read as follows:

§ 15.33 Frequency range of radiated measurements.

(a) For an intentional radiator, the spectrum shall be investigated as specified in ANSI C63.10-2013, clause 5.5 (incorporated by reference, see §15.38).

* * * * *

54. Section 15.35 is revised to read as follows:

§ 15.35 Measurement detector functions and bandwidths.

The conducted and radiated emission limits shown in this part are based on the following, unless otherwise specified in this part:

(a) On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a CISPR quasi-peak detector function and related measurement bandwidths, unless otherwise specified. The specifications for the measuring instrumentation using the CISPR quasi-peak detector can be found in ANSI C63.4-2014, clause 4 (incorporated by reference, see §15.38). As an alternative to CISPR quasi-peak measurements, the responsible party, at its option, may demonstrate compliance with the emission limits using measuring equipment employing a peak detector function as long at the same bandwidth as indicated for CISPR quasi-peak measurements are employed.

(b) Unless otherwise specified, on any frequency or frequencies above 1000 MHz, the radiated emission limits are based on the use of measurement instrumentation employing an average detector function. Unless otherwise specified, measurements above 1000 MHz shall be performed using a minimum resolution bandwidth of 1 MHz. When average radiated emission measurements are specified in this part, including average emission measurements below 1000 MHz, there also is also a limit on the peak level of radio frequency emissions. Unless otherwise specified, the limit on peak radio frequency emissions is 20 dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device, e.g., the total peak power level. Note that the use of a pulse desensitization correction factor may be needed to determine the total peak emission level. The instruction manual or application note for the measurement instrument should be consulted for determining pulse desensitization factors, as necessary.

(c) Unless otherwise specified, when the radiated emission limits are expressed in terms of the average value of the emission, and pulsed operation is employed, the measurement field strength shall be determined by averaging over one complete pulse train, including blanking intervals, as long as the pulse train does not exceed 0.1 seconds. As an alternative (provided the transmitter

operates for longer than 0.1 seconds) or in cases where the pulse train exceeds 0.1 seconds, the measured field strength shall be determined from the average absolute voltage during a 0.1 second interval during which the field strength is at its maximum value. The exact method of calculating the average field strength shall be submitted with any application for certification or shall be retained in the measurement data file for equipment subject to Supplier's Declaration of Conformity.

55. Section 15.101 is revised to read as follows:

§15.101 Equipment authorization of unintentional radiators.

(a) Except as otherwise exempted in §§15.23, 15.103, and 15.113, unintentional radiators shall be authorized prior to the initiation of marketing, as follows:

Type of Device	**Equipment Authorization Required**
TV Broadcast Receiver	SDoC or Certification
FM Broadcast Receiver	SDoC or Certification
CB Receiver	SDoC or Certification
Superregenerative Receiver	SDoC or Certification
Scanning Receiver	Certification
Radar Detector	Certification
All other receivers subject to Part 15	SDoC or Certification
TV Interface Device	SDoC or Certification
Cable System Terminal Device	SDoC or Certification
Stand-alone Cable input selector switch	SDoC or Certification
Class B personal computers and peripherals	SDoC or Certification
CPU boards and internal power supplies used with Class B personal computers	SDoC or Certification
Class B personal computers assembled using authorized CPU boards or power supplies	SDoC or Certification
Class B external switching power supplies	SDoC or Certification
Other Class B digital devices & peripherals	SDoC or Certification
Class A digital devices, peripherals & external	SDoC or Certification

switching power supplies	
Access Broadband over Power Line (Access BPL)	Certification
All other devices	SDoC or Certification

(b) Only those receivers that operate (tune) within the frequency range of 30-960 MHz, CB receivers and radar detectors are subject to the authorizations shown in paragraph (a) of this section. However, receivers indicated as being subject to Supplier's Declaration of Conformity that are contained within a transceiver, the transmitter portion of which is subject to certification, shall be authorized under the Supplier's Declaration of Conformity procedure. Receivers operating above 960 MHz or below 30 MHz, except for radar detectors and CB receivers, are exempt from complying with the technical provisions of this part but are subject to §15.5.

(c) Personal computers shall be authorized in accordance with one of the following methods:

(1) The specific combination of CPU board, power supply and enclosure is tested together and authorized under a Supplier's Declaration of Conformity or a grant of certification;

(2) The personal computer is authorized under a Supplier's Declaration of Conformity or a grant of certification, and the CPU board or power supply in that computer is replaced with a CPU board or power supply that has been separately authorized under a Supplier's Declaration of Conformity or a grant of certification; or

(3) The CPU board and power supply used in the assembly of a personal computer have been separately authorized under a Supplier's Declaration of Conformity or a grant of certification; and

(4) Personal computers assembled using either of the methods specified in paragraph (c)(2) or (3) of this section must, by themselves, also be authorized under a Supplier's Declaration of Conformity if they are marketed. However, additional testing is not required for this Supplier's Declaration of Conformity, provided the procedures in §15.102(b) are followed.

(d) Peripheral devices, as defined in §15.3(r), shall be authorized under a Supplier's Declaration of Conformity, or a grant of certification, as appropriate, prior to marketing. Regardless of the provisions of paragraph (a) or (c) of this section, if a CPU board, power supply, or peripheral

device will always be marketed with a specific personal computer, it is not necessary to obtain a separate authorization for that product provided the specific combination of personal computer, peripheral device, CPU board and power supply has been authorized under a Supplier's Declaration of Conformity or a grant of certification as a personal computer.

(1) No authorization is required for a peripheral device or a subassembly that is sold to an equipment manufacturer for further fabrication; that manufacturer is responsible for obtaining the necessary authorization prior to further marketing to a vendor or to a user.

(2) Power supplies and CPU boards that have not been separately authorized and are designed for use with personal computers may be imported and marketed only to a personal computer equipment manufacturer that has indicated, in writing, to the seller or importer that they will obtain a Supplier's Declaration of Conformity or a grant of certification for the personal computer employing these components.

(e) Subassemblies to digital devices are not subject to the technical standards in this part unless they are marketed as part of a system in which case the resulting system must comply with the applicable regulations. Subassemblies include:

(1) Devices that are enclosed solely within the enclosure housing the digital device, except for: power supplies used in personal computers; devices included under the definition of a peripheral device in §15.3(r); and personal computer CPU boards, as defined in §15.3(bb);

(2) CPU boards, as defined in §15.3(bb), other than those used in personal computers, that are marketed without an enclosure or power supply; and

(3) Switching power supplies that are separately marketed and are solely for use internal to a device other than a personal computer.

(f) The procedures for obtaining a grant of certification or a Supplier's Declaration of Conformity are contained in subpart J of part 2 of this chapter.

56. Section 15.102 is amended by revising paragraph (b)(4) to read as follows:

§15.102 CPU boards and power supplies used in personal computers.

* * * * *

(b) * * *

(4) If the system is marketed, the resulting equipment combination is authorized under a Supplier's Declaration of Conformity pursuant to §15.101(c)(4) and a compliance information statement, as described in §2.1077(b) of this chapter, is supplied with the system. Marketed systems shall also comply with the labeling requirements in §15.19 and must be supplied with the information required under §§15.21, 15.27, and 15.105; and

* * * * *

57. Section 15.123 is amended by revising paragraphs (c)(3) and (c)(5)(iii) to read as follows:

§15.123 Labeling of digital cable ready products.

* * * * *

(c) * * *

(3) Subsequent to the testing of its initial unidirectional digital cable product model, a manufacturer or importer is not required to have other models of unidirectional digital cable products tested at a qualified test facility for compliance with the procedures of Uni-Dir-PICS-I01-030903 (incorporated by reference, see §15.38) unless the first model tested was not a television, in which event the first television shall be tested as provided in §15.123(c)(1). The manufacturer or importer shall ensure that all subsequent models of unidirectional digital cable products comply with the procedures in the Uni- Dir-PICS-I01-03090 (incorporated by reference, see §15.38) and all other applicable rules and standards. The manufacturer or importer shall maintain records indicating such compliance in accordance with the Supplier's Declaration of Conformity procedure requirements in part 2, subpart J of this chapter. The manufacturer or importer shall further submit documentation verifying compliance with the procedures in the Uni-Dir-PICS-I01-030903: (incorporated by reference, see §15.38) to the qualified test facility.

* * * * *

(c) * * *

(5) * * *

(iii) Subsequent to the successful testing of its initial M-UDCP, a manufacturer or importer is not required to have other M-UDCP models tested at a qualified test facility for compliance with M-UDCPPICS-I04-080225, (incorporated by reference, see §15.38) unless the first model tested was not a television, in which event the first television shall be tested as provided in §15.123(c)(5)(i). The manufacturer or importer shall ensure that all subsequent models of M-UDCPs comply with M-UDCP-PICS-I04-080225, (incorporated by reference, see §15.38) and all other applicable rules and standards. The manufacturer or importer shall maintain records indicating such compliance in accordance with the Supplier's Declaration of Conformity procedure requirements in part 2, subpart J of this chapter. For each M-UDCP model, the manufacturer or importer shall further submit documentation demonstrating compliance with M-UDCP-PICS-I04-080225, (incorporated by reference, see §15.38) to the qualified test facility.

* * * * *

58. Section 15.201 is amended by revising paragraphs (a) through (c) to read as follows:

§15.201 Equipment authorization requirement.

(a) Intentional radiators operated as carrier current systems, devices operated under the provisions of §§15.211, 15.213, and 15.221, and devices operating below 490 kHz in which all emissions are at least 40 dB below the limits in §15.209 shall comply with the Suppliers Declaration of Conformity procedures in subpart J of part 2 of this chapter prior to marketing.

(b) Except as otherwise exempted in paragraph (c) of this section and in §15.23, all intentional radiators operating under the provisions of this part shall be certified by the Commission pursuant to the procedures in subpart J of part 2 of this chapter prior to marketing.

(c) For devices such as perimeter protection systems which, in accordance with §15.31(d), are required to be measured at the installation site, each application for certification must be accompanied by a statement indicating that the system has been tested at three installations and found to comply at each installation. Until such time as certification is granted, a given

installation of a system that was measured for the submission for certification will be considered to be in compliance with the provisions of this chapter, including the marketing regulations in subpart I of part 2 of this chapter, if tests at that installation show the system to be in compliance with the relevant technical requirements. Similarly, where measurements must be performed on site for equipment subject to Supplier's Declaration of Conformity, a given installation that has been found compliant with the applicable standards will be considered to be in compliance with the provisions of this chapter, including the marketing regulations in subpart I of part 2 of this chapter.

* * * * *

§ 15.212 [Removed]

59. Remove §15.212.

§15.239 [Amended]

60. In § 15.239, remove paragraph (d).

61. Section 15.615 is amended by revising paragraph (a)(4) to read as follows:

§15.615 General administrative requirements.

(a) * * *

(4) The manufacturer and type of Access BPL equipment and its associated FCC ID number, or, in the case of Access BPL equipment that has been subject to Supplier's Declaration of Conformity, the Trade Name and Model Number, as specified on the equipment label.

*** * * * ***

PART 18—INDUSTRIAL, SCIENTIFIC, AND MEDICAL EQUIPMENT

62. The authority citation for part 18 continues to read as follows:

Authority: 47 U.S.C. 4, 301, 302, 303, 304, 307.

63. Section 18.203 is revised to read as follows:

§ 18.203 Equipment authorization.

(a) Consumer ISM equipment, unless otherwise specified, must be authorized under either the Supplier's Declaration of Conformity or certification procedure prior to use or marketing. An application for certification shall be filed with a TCB, pursuant to the relevant sections in part 2, subpart J of this chapter.

(b) Consumer ultrasonic equipment generating less than 500 watts and operating below 90 kHz, and non-consumer ISM equipment shall be subject to Supplier's Declaration of Conformity, in accordance with the relevant sections of part 2, subpart J of this chapter.

(c) Grants of equipment authorization issued, as well as on-site certifications performed, before March 1, 1986, remain in effect and no further action is required.

64. Section 18.209 is revised to read as follows:

§ 18.209 Identification of authorized equipment.

Each device for which a grant of equipment authorization is issued under this part shall be identified pursuant to the applicable provisions of subpart J of part 2 of this chapter. Changes in the identification of authorized equipment may be made pursuant to §2.1033 of this chapter. FCC Identifiers as described in §§2.925 and 2.926 of this chapter shall not be used on equipment subject to Supplier's Declaration of Conformity.

65. Section 18.212 is revised to read as follows:

§18.212 Compliance information.

(a) Equipment authorized under the Supplier's Declaration of Conformity procedure shall include the following compliance information in lieu of the information required by §2.1077 of this chapter.

(1) Identification of the product, e.g., name and model number.

(2) A statement similar to the following:

This device complies with Part 18 of the FCC Rules.

(3) The name and address of the responsible party as defined in §2.909 of this chapter. This party must be located within the United States.

(b) The compliance information may be placed in the instruction manual, on a separate sheet, or on the packaging. There is no specific format for this information.

66. Section 18.311 is revised to read as follows:

§ 18.311 Methods of measurement.

The measurement techniques which will be used by the FCC to determine compliance with the technical requirements of this part are set out in FCC Measurement Procedure MP-5, "Methods of Measurements of Radio Noise Emissions from ISM equipment" or compliance measurements shall be made in accordance with the specific procedures published or other procedures otherwise authorized by the Commission.

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