

Federal Communications Commission Office of Engineering and Technology **Laboratory Division**

July 2, 2018

SUPPLIER'S DECLARATION OF CONFORMITY FREQUENTLY ASKED QUESTIONS

Question 1: My product has previously been placed on the market under the Declaration of Conformity (DoC) or verification rules; is it also required for the product to comply with the new Supplier's Declaration of Conformity (SDoC) requirements?

Answer 1: No, products that were subject to either the DoC or verification equipment authorization procedures in the past are not required to be changed and updated under the new SDoC requirements, as long as the devices remain unmodified (see also Question 2).

Question 2: When is it required to use the new SDoC procedures?

Answer 2: A transition period is provided in the rules allowing use of the former DoC or verification procedures, whichever was previously applicable for a device, until November 2, 2018. 1,2

Equipment approved prior to November 2, 2018 using the former DoC or verification procedures is grandfathered; it is not necessary to re-test or apply the SDoC procedure.

If any changes are made to equipment previously approved using either DoC or verification after November 2, 2018, then the procedures for SDoC apply for the modified equipment.³

Question 3: For SDoC, is it necessary to have my product tested at an FCC-recognized accredited testing laboratory?

Answer 3: No, with the new SDoC procedure it is not necessary to have testing performed at an accredited testing laboratory. The use of an FCC-recognized accredited testing laboratory is required when using the DoC procedure but is not required when using the SDoC procedure.

See 47 CFR § 2.950 Transition periods, paragraphs (i) and (j).

² For a copy of the previous procedures (as of the 2016 CFR edition), see: (https://www.govinfo.gov/app/collection/cfr/2016/title47/chapterI).

³ Any changes includes changes of the responsible party, or changes made to the design, circuitry, or construction that requires a re-evaluation or update to the compliance test report, and the unique identification used to positively identify the changed product with the new compliance test report.

Question 4: What are options to meet the requirement for the responsible party to be located in the United States?

Answer 4: The responsible party is typically one of the following: the manufacturer, the assembler (if the equipment is assembled from individual component parts), or the importer (if the equipment is imported).⁴ This party is responsible for the compliance of the equipment with the applicable standards and must maintain a United States presence. A retailer or original equipment manufacturer (OEM) located in the United States may enter into an agreement with the responsible party (manufacturer, assembler, or importer) to assume the liabilities of guaranteeing compliance of the equipment and become the new responsible party for the purposes of the Commission's rules.⁵ In all cases, the compliance information provided with the equipment must identify the responsible party by name, United Statesbased address, and telephone number or internet contact information.

Although supporting records are not required to be maintained within the United States, the responsible party, located within the United States, is required to be able to provide any compliance information, such as test reports and equipment samples at no cost to the FCC, when requested by the Commission.

In determining compliance for devices subject to SDoC, the responsible party warrants that each unit of equipment marketed under an SDoC 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 the SDoC within the variation that can be expected due to quantity production and testing on a statistical basis.⁶

Question 5: Is placement of the FCC logo on my product required when using the SDoC procedure?

Answer 5: No, for SDoC the use of the FCC logo is not required. Parties may opt to use the FCC logo as an indicator that the device complies with the FCC requirements when authorized using the SDoC rules. However, the FCC logo may be used only if the device complies with the applicable equipment authorization rules. Furthermore, presence of the FCC logo does not obviate the need to provide the user with the required compliance information statement, and to compile and retain (and provide, if requested by FCC) pertinent records related to device testing.

Question 6: What are the technical and administrative requirements for an onboard-vehicle battery charger subject to approval using the SDoC rules?

Answer 6: A battery charger used in a vehicle (*e.g.*, cellular phone charger) is classified as a digital device subject to Part 15 Subpart B. According to Section 15.103(a), digital devices used exclusively in transportation vehicles are subject only to non-interference provisions (Section 15.5) and are otherwise exempt. As long as the product is not marketed for applications other than use within a vehicle, its connection through the 12 V auxiliary power outlet is sufficient to demonstrate that a cellular phone charger is intended for use only within a transportation vehicle, and thus falls under the exemption in Section 15.103(a).

⁴ See 47 CFR §§ 2.1203 and 2.1204. Section 2.1203 requires that no radio frequency device may be imported into the United States unless the importer or ultimate consignee, or their designated broker, determines that the device meets one or more of the conditions for entry set out in Section 2.1204.

⁵ See 47 CFR § 2.909.

⁶ See 47 CFR § 2.931.

However, a battery charger and associated digital electronics on-board a vehicle that is used for charging the vehicle's battery while parked and connected to AC power lines is not exempt from an equipment authorization under Section 15.103. Section 15.103(a) does not apply to battery chargers for electric vehicles that can be used for charging while stationary and connected to an AC power line. The exemption is only intended for digital devices which operate primarily when the vehicle is in motion, such as on a road or highway where the potential for interference is low. When stationary and connected to the AC power line, typically in a residential environment such as a home garage or driveway, the potential for interference by both AC line conducted emissions and radiated emissions is greater.

A battery charger and associated electronics on-board an electric-power vehicle are therefore subject to an equipment authorization under SDoC as Part 15 Class A or Class B unintentional radiators (*e.g.*, switching power supply and digital device).

Question 7: Can the receiver testing under Section 15.101(b) for a device that supports multiple non-contiguous bands below 1 GHz (*i.e.*, within 30-960 MHz) be limited to just three frequencies (low, mid, and high) across that entire device operating range below 1 GHz?

Answer 7: Measurement requirements for receivers are the same as those for intentional radiators under Section 15.31(m). For bands or sub-bands that are wider than 10 MHz, test data for low, mid, and high frequencies is required.

Question 8: For Section 15.101(b) compliance demonstration, would the FCC allow a declaration in the report or supporting documentation that the various receiver modes for wireless wide-area network (WWAN) operations (*e.g.*, WCDMA, CDMA, GSM, and LTE) do not show significant differences in emissions, or identify one mode as being worst case, to avoid having multiple modes and associated test data with different low/mid/high channels in the test report?

Answer 8: Similar to licensed transmitter testing, we require that the worst-case mode(s) be tested and the data be provided to demonstrate compliance. We do allow testing on only those modes that are known from past experience (or through preliminary testing) to represent the worst case. However, ultimately the applicant bears responsibility for ensuring that the worst-case conditions have been examined and reported in the certification application.

Question 9: If a composite device is subject to both the certification and SDoC, what SDoC compliance information is required to be submitted with the certification application filing?

Answer 9: Composite-system devices and end products are subject to the approval requirements in Section 2.947(f). If a composite device is subject to both certification and SDoC approvals, the certification application should describe the portions of the equipment that have been approved using the SDoC procedure. The exhibits for the label in the certification filing should show compliance with both the certification labeling requirements, and the SDoC labeling requirements. Additional SDoC information requirements, such as the Section 2.1077 compliance information statement that must be provided with the device, are normally not required to be submitted, but may be requested at any time by the FCC. See also other general information and guidance on SDoC and labeling given in KDB Publications 896810 D01 and 784748, respectively.

Question 10: For a composite system regulated under multiple rule parts, how are the frequency range and limits of radiated measurements determined?

Answer 10: When determining the frequency range of radiated measurements for a composite-system device or end product, all the frequencies in the composite-system equipment needs to be considered to determine the frequency range used for testing each individual device. Section 15.33(a)(4) is used for the intentional radiator portions, and Section 15.33(b) is used for the unintentional radiator portions.

- a) When testing the intentional radiator portion(s), the upper frequency range of investigation (as specified in Section 15.33(a)(4)) shall be based on the **higher of:**
 - 1) the range applicable to the intentional radiator specified in Sections 15.33(a)(1) through 15.33(a)(3); or
 - 2) the range applicable to the digital device, as specified in Section 15.33(b)(1).
- b) When testing the unintentional radiator portion(s), the upper frequency range of investigation (as specified in Section 15.33(b)(1), except as otherwise indicated in Sections 15.33(b)(2) or 15.33(b)(3)) is based on the highest frequency generated and the highest frequency used in the composite device.

The emissions from a composite system with all of its intentional-radiator and unintentional-radiator components operating cannot exceed the highest level permitted in any rule section applicable for each individual component specified in Section 2.947 (f).

A host product subject to SDoC that also uses certified transmitter modules is subject to the preceding frequency range guidance and limits as a composite system.

EXAMPLES:

- For a composite system comprised of a digital device using a clock frequency of 1 GHz as the highest frequency for the digital logic and an intentional radiator operating at 2.4 GHz, the composite is required to be investigated to the upper frequency of 24 GHz (in this case, 10 times the intentional radiator frequency is the higher frequency).
- For a composite system comprised of a digital device using a clock frequency of 2 GHz as the highest frequency for the digital logic and an intentional radiator operating at 913 MHz, the composite is required to be investigated to the upper frequency of 10 GHz (in this case, 5 times the unintentional radiator clock frequency is the higher frequency).

Question 11: Under the SDoC procedure, can personal computer systems be assembled from already authorized assemblies such as enclosures, power supplies, and CPU boards, then be marketed without testing the assembled system?

Answer 11: Personal computer systems can be assembled from individual assemblies that have been authorized by themselves using either SDoC or certification. See KDB Publication 657217.

Questions 12: If a device can operate as a computer peripheral and in a non-peripheral configuration and the grantee chooses the option to certify the device, is it required that certification applications be filed

under the equipment class JBP and also under the non-peripheral configuration equipment class, which could be one of the following: JAB, JAD or JAV?

Answer 12: For a device that can operate as a computer peripheral and in a non-computer peripheral configuration it is acceptable to combine the tests reports for the digital device or non-computer peripheral configurations into the equipment authorization filing for the computer peripheral application under the equipment class JBP. The information provided in the application should clearly define what is being done and identify which configuration had the worst case test results.

Question 13: How should modifications to equipment with current equipment code DXT (Part 15 Low Power Transceiver, Rx Verified) be addressed when this category will no longer exist and the receiver portion will need to be approved under SDoC or certification?

Answer 13: For devices authorized with the equipment class DXT, where the receiver is verified and the receiver is modified, the modified receiver would need to be tested and authorized using either SDoC or certification under the appropriate equipment class (e.g., CRR, CSR, or CYY).

Question 14: Are receivers subject to authorization using the SDoC procedure?

Answer 14: Receivers that operate (tune) within the frequency range of 30-960 MHz and CB receivers are authorized using the SDoC procedure.⁷ Scanning receivers and radar detectors are subject to approval using the certification procedure.⁸

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 Part 15.9 However, a receiver, regardless of the frequency of operation, that uses digital circuitry is classified as a digital device and is subject to authorization using the SDoC procedure. The emissions from the local oscillator associated with the tuning function may be ignored when demonstrating compliance with the digital device limits. If the receiver tunes both inside and outside of the 30-960 MHz band it is subject to the Part 15 emission requirements and is required to be authorized as a receiver functioning within the 30-960 MHz band

Question 15: Is it required to have the compliance test report signed by a representative of the responsible party located in the United States?

Answer 15: Test reports must be signed by a representative of the responsible party with the authority to act on behalf of the responsible party. However, it is not necessary for the representative that signs the test report to be located in the United States.

Although supporting records are not required to be maintained within the United States, the responsible party, located within the United States, is required to be able to provide any compliance information, such as test reports and equipment samples at no cost to the FCC, when requested by the Commission.

⁷ For any equipment subject to the SDoC procedure, the certification equipment authorization procedure may be used in place of the SDoC procedure at the option of the responsible party.

⁸ See 47 CFR § 15.101(b).

⁹ Subject to the general conditions of operation. See 47 CFR § 15.5.

It is acceptable for the responsible party located in the United States to sign an addendum to the test report that provides an attestation stating that they take responsibility for the product and acknowledge the test report in accordance with Section 2.938 (10).¹⁰

NOTE: This publication covers several questions related to products that are now subject to approval under the SDoC procedures. Several individual KDB publications are now included in the list of frequently asked questions and others are no longer applicable. As a result, the following KDB Publications have been expired: 129354, 151388, 162908, 238018, 275534, 415081, 440724, 453296, 501325, 513313, 584157, 685804, 892282, and 980285.

Change Notice

04/09/2018: <u>896810 D02 SDoC FAQ v01r01</u> replaces <u>896810 D02 SDoC FAQ v01</u>. Document updated to correct typographical errors.

07/02/2018: <u>896810 D02 SDoC FAQ v01r02</u> replaces <u>896810 D02 SDoC FAQ v01r01</u>. Document updated to add new questions 14 and 15.

¹⁰ See 47 CFR § 2.938(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."