# 2.948 Test Facility Registration Electronic Filing User's Manual

#### INTRODUCTION

Title 47 CFR § 2.948 describes the test site registration requirements. The description of the measurement facilities shall be filed at <a href="http://www.fcc.gov">http://www.fcc.gov</a>. There is no fee for filing § 2.948 test site registrations. The steps in submitting an electronic registration are summarized as follows:

- 2. Connect to <a href="http://www.fcc.gov">http://www.fcc.gov</a> and click the **E-Filing** tab near the top of the page.
- 3. Scroll down and click on the link **OET Equipment Authorization Electronic Filing.**
- 4. Under Filing Options on the left hand side, click on **Register New Test Firm** and complete the application form.

The information required in Section 2.948 must be submitted by dividing it into exhibit types in order to organize the data and allow for faster review.

Exhibit Type: Cover Letter

Exhibit Type: Anti-Drug Abuse Certification

Exhibit Type: Radiated Site Description with Photos

Exhibit Type: Line Conducted Site Description with Photos

Exhibit Type: Dimensioned Drawings

Exhibit Type: Description of Support Structures Exhibit Type: List of Measuring Equipment

Exhibit Type: Calibration Information Exhibit Type: Site Attenuation Data

Exhibit Type: Types of Testing/Public Availability

In order for the submission to be completed and assigned for FCC review, there must be at least one exhibit submitted to each exhibit type. The exhibit should only contain information related to that exhibit type. If, for example, you are submitting a radiated emissions test site, but not a line conducted emissions test site, an explanation must be provided in the Line Conducted Exhibit Type regarding the line conducted exhibit data not being applicable.

The following file formats are acceptable for exhibits:

- Adobe Acrobat
- Microsoft Word

- Microsoft Excel
- WordPerfect
- Lotus 123
- ASCII Text
- JPG/JPEG(JFIF standard only)

Each exhibit must be less than 4 MB. Multiple exhibits per exhibit type are allowed but in order to reduce review time, it is recommended that filers submit as few exhibits under each category as necessary to complete the application. All files submitted, except PDF and JPG, are virus scanned and converted to PDF before appearing on the Web.

## **Exhibit Type: Cover Letter**

The cover letter must include the name of the test firm, its address, the name of the contact person, that person's e-mail address, and be signed by an official of the firm. The contact person must be at the mailing address of the test firm. Indicate the address/location of the actual test site facility. Be sure to include the city, county, province, prefecture, etc. If the test firm has multiple sites which are numbered, indicate the number of the site.

### **Exhibit Type: Anti-Drug Abuse Certification**

Provide a statement certifying that neither the applicant nor any party to the application is subject to a denial of Federal benefits, that include FCC benefits, pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862 because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the definition of a "party" for these purposes.

#### **Exhibit Type: Radiated Site Description with Photos**

The site must comply with the radiated test site requirements in ANSI-C63.4. Indicate if the site is an open area test site or a semi-anechoic chamber. GTEM's are not acceptable.

ANSI-C63.7 is a guide which provides information that is useful in constructing an open area test site (OATS) used to perform radiated emission measurements. It is helpful in avoiding construction errors.

Describe in detail the construction of the radiated site. Be sure to describe:

1. Materials for weather protection enclosure of OATS.

- 2. Ground plane including: material, method of fastening/bonding sections (intervals of electrical joints), flatness/smoothness, shape and size, and covering.
- 3. Obstruction free area including size and shape.

Photographs should clearly show the details of the test site.

## **Exhibit Type: Line Conducted Site Description with Photographs**

The site must comply with the line conducted test site requirements in ANSI-C63.4. If the site does not include a line conducted test site, a statement indicating that the site does not include a line conducted test site should be submitted in this exhibit type.

Describe in detail the construction of the line conducted test site. Be sure to describe:

- 1. Metal floor and wall. For open area test site, a wall is not required.
- 2. Two LISN's grounded to floor and not located under the table.
- 3. 80 cm high non-conductive table with 1x 1.5 m top.
- 4. All metal surfaces. Metal surfaces other than the back wall must be at least 80 cm from the table top.

Photographs should clearly show the details of the test site.

## **Exhibit Type: Dimensioned Drawings**

Provide a drawing showing the dimensions of the site and the physical layout of all supporting structures.

For an open area test site show:

- 1. Size of the ground plane.
- 2. Location of turntable and mast.
- Obstruction free area.
- 4. All structures within five times the distance between the measuring antenna and the device being measured.

For a semi-anechoic chamber site show:

- 1. Interior dimension. Height must be greater than 5 m.
- Location of turntable and mast.
- 3. Diameter of turntable.

For a line-conducted test site show:

- 1. Dimensions of room if in screen room.
- 2. Dimensions of metal floor and vertical wall 40 cm behind EUT support table.
- 3. Location of LISN's.

- 4. Distance of all metal surfaces.
- 5. Height and size of top of EUT support table.

## **Exhibit Type: Description of Support Structures**

Provide a description of:

- 1. EUT support tables.
  - a. Materials
  - b. Dimensions
- 2. Turntable.
  - a. Commercial model number or detailed description if homemade
  - b. Diameter
  - c. Flushed or raised It must have a metal top and be non-metal if raised.
  - d. Remote controlled a requirement.
- 3. Mast.
  - a. Commercial model number or detailed description if homemade
  - b. Materials

## **Exhibit Type: List of Measuring Equipment**

Provide make and model numbers of:

- 1. Receiver and/or spectrum analyzer.
- 2. Antennas.
- 3. LISN's.

#### **Exhibit Type: Calibration Information**

Provide the following:

- 1. Date of last calibration.
- 2. Calibration schedule.
- Where calibrated.

## **Exhibit Type: Site Attenuation Data**

Provide the following:

- 1. Normalized Site Attenuation (NSA) per ANSI-C63.4.
- 2. Plot of NSA and ±4 dB limits.
- 3. Table showing the following:
  - a. Actual measurements
  - b. Antenna factors
  - c. Calculated values
  - d. Theoretical values or sample calculation
- 4. Volumetric NSA for alternative sites such as semi-anechoic chamber.

## **Exhibit Type: Types of Testing/Public Availability**

Indicate the types of testing provided at the site. For example:

- 1. Line conducted emissions testing
- 2. 3 and/or 10 meter anechoic radiated emissions testing
- 3. 3 and/or 10 meter open area radiated emissions testing

Should the site be listed on the FCC Web site as providing testing services to the public?