comply with the radiated emission limits provided in §15.109(b).

(2) *Low voltage power lines.* Access BPL systems that operate over low-voltage power lines, including those that operate over low-voltage lines that are connected to the in-building wiring, shall comply with the radiated emission limits provided in §15.109(a) and (e).

(c) *Interference Mitigation and Avoidance.* (1) Access BPL systems shall incorporate adaptive interference mitigation techniques to remotely reduce power and adjust operating frequencies, in order to avoid site-specific, local use of the same spectrum by licensed services. These techniques may include adaptive or ''notch'' filtering, or complete avoidance of frequencies, or bands of frequencies, locally used by licensed radio operations.

(i) For frequencies below 30 MHz, when a notch filter is used to avoid interference to a specific frequency band, the Access BPL system shall be capable of attenuating emissions within that band to a level at least 20 dB below the applicable part 15 limits.

(ii) For frequencies above 30 MHz, when a notch filter is used to avoid interference to a specific frequency band, the Access BPL system shall be capable of attenuating emissions within that band to a level at least 10 dB below the applicable part 15 limits.

(iii) At locations where an Access BPL operator attenuates radiated emissions from its operations in accordance with the above required capabilities, we will not require that operator to take further actions to resolve complaints of harmful interference to mobile operations.

(2) Access BPL systems shall comply with applicable radiated emission limits upon power-up following a fault condition, or during a start-up operation after a shut-off procedure, by the use of a non-volatile memory, or some other method, to immediately restore previous settings with programmed notches and excluded bands, to avoid time delay caused by the need for manual re-programming during which protected services may be vulnerable.

(3) Access BPL systems shall incorporate a remote-controllable shutdown feature to deactivate, from a central location, any unit found to cause harmful interference, if other interference mitigation techniques do not resolve the interference problem.

[70 FR 1374, Jan. 7, 2005, as amended at 71 FR 49379, Aug. 23, 2006]

§15.613 Measurement procedures.

Compliance measurements for Access BPL shall be made in accordance with the Guidelines for Access BPL systems specified by the Commission.

§15.615 General administrative requirements.

(a) *Access BPL Database.* Entities operating Access BPL systems shall supply to an industry-recognized entity, information on all existing Access BPL systems and all proposed Access BPL systems for inclusion into a publicly available data base, within 30 days prior to initiation of service. Such information shall include the following:

(1) The name of the Access BPL provider.

(2) The frequencies of the Access BPL operation.

(3) The postal zip codes served by the specific Access BPL operation.

(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 verification, the Trade Name and Model Number, as specified on the equipment label.

(5) The contact information, including both phone number and e-mail address of a person at, or associated with, the BPL operator's company, to facilitate the resolution of any interference complaint.

(6) The proposed/or actual date of Access BPL operation.

(b) The Access BPL database manager shall enter this information into the publicly accessible database within three (3) business days of receipt.

(c) No notification to the Commission is required.

(d) A licensed spectrum user experiencing harmful interference that is suspected to be caused by an Access BPL system shall inform the local BPL operator's contact person designated in the Access BPL database. The investigation of the reported interference

and the resolution of confirmed harmful interference from the Access BPL system shall be successfully completed by the BPL operator within a reasonable time period according to a mutually acceptable schedule, after the receipt of an interference complaint, in order to avoid protracted disruptions to licensed services. The Access BPL operator shall respond to complaints of harmful interference from public safety users within 24 hours. With regard to public safety complaints, the BPL provider shall be required to immediately cease the operations causing such complaint if it fails to respond within 24 hours.

(e) *Consultation with public safety users.* An entity operating an Access BPL system shall notify and consult with the public safety users in the area where it plans to deploy Access BPL, at least 30 days prior to initiation of any operation or service. This entity shall design or implement the Access BPL system such that it does not cause harmful interference in those frequencies or bands used by the public safety agencies in the area served by the Access BPL system. The notification shall include, at a minimum, the information in paragraph (a) of this section.

(f) *Federal government spectrum users and other radio service users.* An entity operating an Access BPL system shall ensure that, within its Access BPL deployment area, its system does not operate on any frequencies designated as excluded bands or on identified frequencies within any designated exclusion zones.

(1) *Excluded Bands.* To protect Aeronautical (land) stations and aircraft receivers, Access BPL operations using overhead medium voltage power lines are prohibited in the frequency bands listed in Table 1. Specifically, such BPL systems shall not place carrier frequencies in these bands.

TABLE 1—EXCLUDED FREQUENCY BANDS

Frequency band
2,850–3,025 kHz
3,400–3,500 kHz
4,650–4,700 kHz
5,450–5,680 kHz
6,525–6,685 kHz
8,815–8,965 kHz
10,005–10,100 kHz
11,275–11,400 kHz
13,260–13,360 kHz
17,900–17,970 kHz
21,924–22,000 kHz
74.8–75.2 MHz

(2) *Exclusion zones.* Exclusion zones encompass the operation of any Access BPL system within 1km of the boundary of coast station facilities at the coordinates listed in Tables 2 and 2.1. Exclusion zones also encompass the operation of Access BPL systems using overhead medium voltage power lines within 65 km of the Very Large Array observatory located at the coordinate 34°04′43.50″; N, 107°37′03.82″ W. Exclusion zones further encompass the operation of Access BPL systems using overhead low voltage power lines or underground power lines within 47 km of the Very Large Array observatory located at the coordinate 34°04′43.50″; N, 107°37′ 03.82″ W. Within the exclusion zones for coast stations, Access BPL systems shall not use carrier frequencies within the band of 2173.5–2190.5 kHz. Within the exclusion zone for the Very Large Array radio astronomy observatory, Access BPL systems shall not use carrier frequencies within the 73.0–74.6 MHz band.

(i) *Existing coast station facilities.* Access BPL systems shall not operate in the frequency band 2,173.5–2,190.5 kHz, within 1 kilometer (km) of the boundary of coast station facilities at the coordinates listed in Tables 2 and 2.1. BPL operators planning to deploy Access BPL devices at these frequencies in areas within these exclusion zones as defined above shall consult with the appropriate point of contact for these coast stations to ensure harmful interference is prevented at these facilities.

Point of contact: Commandant (CG 622), U.S. Coast Guard, 2100 2nd Street, SW., Washington, DC 20593–0001, Telephone: (202) 267–2860, e-mail: *cgcomms@comdt.uscg.mil*.

TABLE 2—EXCLUSION ZONES FOR U.S. COAST GUARD COAST STATIONS

Locale	Latitude	Longitude
Group Guam	13°35′23″ N	144°50′24″ E
GANTSEC	18°18′00″ N	65°46′59″ W
Puerto Rico	18°28′11″ N	66°07′47″ W

TABLE 2—EXCLUSION ZONES FOR U.S. COAST GUARD COAST STATIONS—Continued

Locale	Latitude	Longitude
Honolulu	21°18′21″ N	157°53′23″ W
Group Key West	24°33′35″ N	81°47′59″ W
Trumbo Point CG Base	24°33′58″ N	81°47′57″ W
Miami	25°37′28″ N	80°23′07″ W
Everglades Park	25°50′10″ N	81°23′13″ W
Group Saint Petersburg (Everglades).	25°51′00″ N	81°23′24″ W
Station Ft. Lauderdale	26°05′21″ N	80°06′40″ W
Station Ft. Myers Beach	26°27′34″ N	81°57′15″ W
Group Miami (Ft. Pierce)	27°27′36″ N	80°18′36″ W
Station Ft. Pierce	27°27′50″ N	80°18′27″ W
Group Corpus Christi	27°42′01″ N	97°16′11″ W
Group Corpus Christi	27°42′06″ N	97°16′45″ W
ESD Saint Petersburg	27°45′21″ N	82°37′32″ W
Group Saint Petersburg	27°46′11″ N	82°37′47″ W
Station Port O'Connor	28°26′03″ N	96°25′39″ W
S. Padre Island	28°26′22″ N	97°09′56″ W
Freeport	28°55′59″ N	95°16′59″ W
Group Galveston (Freeport).	28°56′24″ N	95°17′59″ W
Station YANKEETOWN	29°01′51″ N	82°43′39″ W
Station Ponce De Leon Inlet.	29°03′50″ N	81°55′01″ W
Group New Orleans (Grand Isle).	29°15′53″ N	89°57′26″ W
Galveston	29°19′59″ N	94°46′18″ W
Kapalan	29°20′04″ N	94°47′17″ W
Sabine	29°43′42″ N	93°52′14″ W
New Orleans	30°01′17″ N	90°07′24″ W
Panama City	30°10′01″ N	85°45′04″ W
Group Mobile (Panama City).	30°10′12″ N	85°45′36″ W
ANT Jacksonville Beach	30°17′16″ N	81°24′10″ W
Pensacola	30°20′24″ N	87°18′17″ W
Group Mayport	30°23′10″ N	81°26′01″ W
Group Mayport	30°23′24″ N	81°25′48″ W
Ft. Morgan	30°39′07″ N	88°03′12″ W
Tybee Lighthouse	32°01′15″ N	80°50′39″ W
Point Loma Lighthouse	32°39′56″ N	117°14′34″ W
Point Loma	32°40′07″ N	117°14′14″ W
Activities San Diego	32°43′59″ N	117°11′13″ W
Group Charleston (Sullivan's Island).	32°45′00″ N	79°49′47″ W
Sullivan's Island Lights	32°45′02″ N	79°50′03″ W
Group Charleston	32°46′25″ N	79°56′37″ W
Group San Diego	32°52′48″ N	118°26′23″ W
San Pedro	33°45′00″ N	118°15′58″ W
Group Fort Macon	33°53′24″ N	78°01′48″ W
Point Mugu	33°59′32″ N	119°07′18″ W
Group LA/Long Beach	34°07′11″ N	119°06′35″ W
Channel Island	34°09′17″ N	119°13′11″ W
Station Oxnard Channel Island.	34°09′43″ N	119°13′19″ W
Group Ft. Macon	34°41′48″ N	76°40′59″ W
Group Cape Hatteras	35°13′59″ N	75°31′59″ W
Group Cape Hatteras	35°15′35″ N	75°31′48″ W
Morro Bay (Cambria)	35°31′21″ N	121°03′31″ W
San Clemente Island	32°50′24″ N	118°23′15″ W
Point Pinos	36°38′12″ N	121°56′06″ W
CAMSLANT	36°43′47″ N	76°01′11″ W
Group Hampton Roads	36°53′01″ N	76°21′10″ W
Point Montara	37°31′23″ N	122°30′47″ W
Point Montara Lighthouse	37°32′09″ N	122°31′08″ W
Group San Francisco	37°32′23″ N	122°31′11″ W
Group San Francisco	37°48′34″ N	122°21′55″ W
Point Bonita	37°49′00″ N	122°31′41″ W
Group Eastern Shores	37°55′47″ N	75°22′47″ W
Group Eastern Shore	37°55′50″ N	75°22′58″ W
CAMSPAC	38°06′00″ N	122°55′48″ W
Point Arena Lighthouse	38°57′18″ N	124°44′28″ W
Point Arena	38°57′36″ N	123°44′23″ W
Group Atlantic City	39°20′59″ N	74°27′42″ W
Activities New York	40°36′06″ N	74°03′36″ W
Activities New York	40°37′11″ N	74°04′11″ W
ESD Moriches Hut	40°47′19″ N	72°44′53″ W
Group Moriches	40°47′23″ N	72°45′00″ W
Group Humboldt Bay	40°58′41″ N	124°06′31″ W
Group Humboldt Bay	40°58′47″ N	124°06′35″ W
Trinidad Head	41°03′15″ N	124°09′02″ W
Group Long Island Sound	41°16′12″ N	72°54′00″ W
Station New Haven	41°16′12″ N	72°54′06″ W
Station Brant Point	41°17′21″ N	70°05′31″ W
Group Woods Hole	41°17′23″ N	70°04′47″ W
Station Castle Hill	41°27′46″ N	71°21′42″ W
Group Woods Hole	41°17′29″ N	70°401′07″ W
Boston Area	41°40′12″ N	70°31′48″ W
Station Provincetown	42°01′48″ N	70°12′42″ W
Eastern Point	42°36′24″ N	70°39′26″ W
Cape Blanco	42°50′16″ N	124°33′52″ W
Group North Bend	43°24′16″ N	124°13′22″ W
Group North Bend	43°24′35″ N	124°14′23″ W
Cape Elizabeth	43°33′28″ N	70°12′00″ W
Group South Portland	43°38′24″ N	70°15′00″ W
Group South Portland	43°38′45″ N	70°14′51″ W
Group SW Harbor	44°16′19″ N	68°18′27″ W
Group Southwest Harbor	44°16′48″ N	68°18′36″ W
Fort Stevens, Oregon	46°09′14″ N	123°53′07″ W
Group Astoria	46°09′29″ N	123°31′48″ W
Group Astoria	46°09′35″ N	123°53′24″ W
La Push	47°49′00″ N	124°37′59″ W
Station Quillayute River	47°54′49″ N	124°38′01″ W
Port Angeles	48°07′59″ N	123°25′59″ W
Group Port Angeles	48°08′24″ N	123°24′35″ W
Juneau (Sitka)	57°05′24″ N	135°15′35″ W
Kodiak	57°40′47″ N	152°28′47″ W
Valdez (Cape Hinchinbrook).	60°26′23″ N	146°25′48″ W

Note: Systems of coordinates comply with NAD 83.

TABLE 2.1—EXCLUSION ZONES FOR MARITIME PUBLIC COAST STATIONS

[Points of Contact Are Identified in the Commission's License Database]

Licensee name	Location	Latitude	Longitude
Shipcom LLC	Marina Del Ray, CA	33°56′21″ N	118°27′14″ W
Globe Wireless	Rio Vista, CA	38°11′55″ N	121°48′34″ W
Avalon Communications Corp	St. Thomas, VI	18°21′19″ N	64°56′48″ W
Globe Wireless	Bishopville, MD	38°24′10″ N	75°12′59″ W
Shipcom LLC	Mobile, AL	30°40′07″ N	88°10′23″ W
Shipcom LLC	Coden, AL	30°22′35″ N	88°12′20″ W
Globe Wireless	Pearl River, LA	30°22′13″ N	89°47′26″ W
Globe Wireless	Kahalelani, HI	21°10′33″ N	157°10′39″ W
Globe Wireless	Palo Alto, CA	37°26′44″ N	122°06′48″ W

TABLE 2.1—EXCLUSION ZONES FOR MARITIME PUBLIC COAST STATIONS—Continued

[Points of Contact Are Identified in the Commission's License Database]

Licensee name	Location	Latitude	Longitude
Globe Wireless	Agana, GU	13°29′22″ N	144°49′39″ E

NOTE: Systems of coordinates comply with NAD 83.

(ii) *New or relocated Coast stations.* In the unlikely event that a new or relocated coast station is established for the 2.173.5–2.190.5 kHz band at a coordinate not specified in Table 2 or 2.1, Access BPL operations in that frequency band shall also be excluded within 1 km of the new coast station facility;

(3) *Consultation areas.* Access BPL operators shall provide notification to the appropriate point of contact specified regarding Access BPL operations at any frequencies of potential concern in the following consultation areas, at least 30 days prior to initiation of any operation or service. The notification shall include, at a minimum, the information in paragraph (a) of this section. We expect parties to consult in good faith to ensure that no harmful interference is caused to licensed operations and that any constraints on BPL deployments are minimized to those necessary to avoid harmful interference. In the unlikely event that a new or relocated aeronautical receive station is established for the 1.7–30 MHz band at a coordinate not specified in Table 3b, Access BPL operators are also required to coordinate with the appropriate point of contact regarding Access BPL operations at any frequencies of potential concern in the new or relocated consultation areas, and to adjust their system operating parameters to protect the new or relocated aeronautical receive station.

(i) For frequencies in the 1.7–30 MHz frequency range, the areas within 4 km of facilities located at the following coordinates:

(A) The Commission's protected field offices listed in 47 CFR 0.121, the point-of-contact for which is specified in that section;

(B) The aeronautical stations listed in Tables 3a and 3b;

(C) The land stations listed in Tables 4 and 5;

(ii) For frequencies in the 1.7–80.0 MHz frequency range, the areas within 4 km of facilities located at the coordinates specified for radio astronomy facilities in 47 CFR 2.106, Note U.S. 311.

Point of contact: Electromagnetic Spectrum Manager, National Science Foundation, Division of Astronomical Sciences, 4201 Wilson Blvd., Suite 1045, Arlington, VA 22230, (703) 292–4896, *esm@nsf.gov*.

(iii) For frequencies in the 1.7–80 MHz frequency range, the area within 1 km of the Table Mountain Radio Receiving Zone, the coordinates and point of contact for which are specified in 47 CFR 21.113(b).

(iv) For frequencies in the 1.7–30 MHz frequency range, the areas within 37 km of radar receiver facilities located at the coordinates specified in Table 6.

Point of contact: U.S. Coast Guard HQ, Division of Spectrum Management CG–622, 2100 Second St., SW., Rm. 6611, Washington, DC 20593, Tel: (202) 267–6036, Fax: (202) 267–4106, e-mail: *jtaboada@comdt.uscg.mil*.

TABLE 3a—CONSULTATION AREA COORDINATES FOR AERONAUTICAL (OR) STATIONS (1.7–30 MHz)

Command name	Location	Latitude	Longitude
Washington	Arlington, VA	38°51′07″ N	77°02′15″ W
Cape Cod	Cape Cod, MA	41°42′00″ N	70°30′00″ W
Atlantic City	Atlantic City, NJ	39°20′59″ N	74°27′42″ W
Elizabeth City	Elizabeth City, NC	36°15′53″ N	76°10′32″ W
Savannah	Savannah, GA	32°01′30″ N	81°08′30″ W
Miami	Opa Locka, FL	25°54′22″ N	80°16′01″ W
Clearwater	Clearwater, FL	27°54′27″ N	82°41′ 29″ W
Borinquen	Aguadilla, PR	18°18′36″ N	67°04′ 48″ W
New Orleans	New Orleans, LA	29°49′31″ N	90°02′ 06″ W
Traverse City	Traverse City, MI	44°44′24″ N	85°34′54″ W
San Diego	San Diego, CA	32°43′33″ N	117°10′ 15″ W

TABLE 3a—CONSULTATION AREA COORDINATES FOR AERONAUTICAL (OR) STATIONS (1.7–30 MHz)—Continued

Command name	Location	Latitude	Longitude
Sacramento	McCllelan AFB, CA	38°40′06″ N	121°24′04″ W
Astoria	Warrenton, OR	46°25′18″ N	123°47′ 46″ W
North Bend	North Bend, OR	43°24′39″ N	124°14′35″ W
Barbers Point	Kapolei, HI	21°18′01″ N	158°04′15″ W
Kodiak	Kodiak, AK	57°44′19″ N	152°30′18″ W
Houston	Houston, TX	29°45′00″ N	95°22′00″ W
Detroit	Mt. Clemens, MI	42°36′05″ N	82°50′12″ W
San Francisco	San Francisco, CA	37°37′58″ N	122°23′20″ W
Los Angeles	Los Angeles, CA	33°56′36″ N	118°23′48″ W
Humboldt Bay	McKinleyville, CA	40°58′39″ N	124°06′45″ W
Port Angeles	Port Angeles, WA	48°08′25″ N	123°24′48″ W
Sitka	Sitka, AK	57°05′50″ N	135°21′58″ W

NOTE: Systems of coordinates conform to NAD 83.

Point of contact: ARINC, 2551 Riva Road, Annapolis, MD 21401, Tel: 1–800–633–6882, Fax: (410) 266–2329, e-mail: *arincmkt@arinc.com*, *http://www.arinc.com*.

Point of contact: ARINC, 2551 Riva Road, Annapolis, MD 21401, Tel: 1–800–633–6882, Fax: 410–266–2329, e-mail: *bplnotifications@arinc.com*, *http://www.arinc.com*.

TABLE 3B—CONSULTATION AREA COORDINATES FOR AERONAUTICAL RECEIVE STATIONS (1.7–30 MHz)

Locale	Latitude	Longitude
Southampton, NY	40°55′15″ N	72°23′41″ W
Molokai, HI	21°12′23″ N	157°12′30″ W
Oahu, HI	21°22′27″ N	158°05′56″ W
Half Moon Bay, CA	37°39′64″ N	122°24′44″ W
Pt. Reyes, CA	38°06′00″ N	122°56′00″ W
Barrow, AK	71°17′24″ N	156°40′12″; W
Guam	13°28′12″ N	144°48′0.0″ E (note: Eastern Hemisphere)
NY Comm Center, NY	40°46′48″ N	73°05′46″ W
Cedar Rapids, IA	42°02′05.0″ N	91°38′37.6″ W
Beaumont, CA	33°54′27.1″ N	116°59′49.1″ W
Fairfield, TX	31°47′02.6″ N	96°47′03.0″ W
Houston, TX	29°36′35.8″ N	95°16′54.8″ W
Miami, FL	25°49′05″ N	80°18′28″ W

Note: Systems of coordinates conform to NAD 83.

Point of contact: U.S. Coast Guard HQ, Division of Spectrum Management CG–622, 2100 Second St., SW., Rm. 6611, Washington, DC 20593, Tel: (202) 267–6036, Fax: (202) 267–4106, e-mail: *jtaboada@comdt.uscg.mil*.

TABLE 4—CONSULTATION AREA COORDINATES FOR LAND STATIONS, SET 1 (1.7–30 MHz)

Command name	Location	Latitude	Longitude
COMMSTA Boston	Maspee, MA	41°24′00″ N	70°18′57″ W
Camslant	Chesapeake, VA	36°33′59″ N	76°15′23″ W
COMMSTA Miami	Miami, FL	25°36′58″ N	80°23′04″ W
COMMSTA New Orleans	Belle Chasse, IA	29°52′40″ N	89°54′46″ W
Camspac	Pt. Reyes Sta, CA	38°06′00″ N	122°55′48″ W
COMMSTA Honolulu	Wahiawa, HI	21°31′08″ N	157°59′28″ W
COMMSTA Kodiak	Kodiak, AK	57°04′26′ N	152°28′20″ W
Guam	Finegayan, GU	13°53′08″ N	144°50′20″ E

NOTE: Systems of coordinates conform to NAD 83.

Point of contact: COTHEN Technical Support Center, COTHEN Program Manager, Tel: (800) 829–6336.

TABLE 5—CONSULTATION AREA COORDINATES FOR LAND STATIONS, SET 2 (1.7–30 MHz)

Site name	Latitude	Longitude
Albuquerque, NM	35°05′02″ N	105°34′23″ W
Arecibo, PR	18°17′26″ N	66°22′33″ W
Atlanta, GA	32°33′06 N	84°23′35″ W
Beaufort, SC	34°34′22″ N	76°09′48″ W
Cape Charles, VA	37°05′37″ N	75°58′06″ W
Cedar Rapids, IA	42°00′09″ N	91°17′39″ W
Denver, CO	39°15′45″ N	103°34′23″ W
Fort Myers, FL	81°31′20″ N	26°20′01″ W
Kansas City, MO	38°22′10″ N	93°21′48″ W
Las Vegas, NV	36°21′15″ N	114°17′33″ W
Lovelock, NV	40°03′07″ N	118°18′56″ W
Memphis, TN	34°21′57″ N	90°02′43″ W
Miami, FL	25°46′20″ N	80°28′48″ W
Morehead City, NC	34°34′50″ N	78°13′59″ W
Oklahoma City, OK	34°30′52″ N	97°30′52″ W
Orlando, FL	28°31′30″ N	80°48′58″ W
Reno, NV	38°31′12″ N	119°14′37″ W
Sarasota, FL	27°12′41″ N	81°31′20″ W
Wilmington, NC	34°29′24″ N	78°04′31″ W

NOTE: Systems of coordinates conform to NAD 83.

Point Of Contact: ROTHR Deputy Program Manager, (540) 653–3624.

TABLE 6—CONSULTATION AREA COORDINATES FOR RADAR RECEIVER STATIONS (1.7–30 MHz)

Latitude/Longitude
18°01′ N/66°30′ W
28°05′ N/98°43′ W
36°34′ N/76°18′ W

NOTE: Systems of coordinates conform to NAD 83.

[70 FR 1374, Jan. 7, 2005, as amended at 71 FR 49379, Aug. 23, 2006]

Subpart H—Television Band Devices

SOURCE: 74 FR 7326, Feb. 17, 2009, unless otherwise noted.

§ 15.701 Scope.

This subpart sets out the regulations for Television Band Devices (TVBDs) which are unlicensed intentional radiators operating on available channels in the broadcast television frequency bands at 54–60 MHz, 76–88 MHz, 174–216 MHz, 470–608 MHz and 614–698 MHz bands.

§ 15.703 Definitions.

(a) *Available channel.* A television channel which is not being used by an authorized user at or near the same geographic location as the TVBD and is acceptable for use by an unlicensed device under the provisions of §15.709. A TVBD determines television channel availability either from the TV bands database or spectrum sensing.

(b) *Client device.* A TVBD operating in client mode.

(c) *Client mode.* An operating mode in which the transmissions of the TVBD, including frequencies of operation, are under control of the master device. A device in client mode is not able to initiate a network.

(d) *Fixed device.* A TVBD that transmits and/or receives radiocommunication signals at a specified fixed location. Fixed TVBDs may operate as part of a system, transmitting to one or more fixed TVBDs or to personal/portable TVBDs.

(e) *Geo-location.* The capability of a TVBD to determine its geographic coordinates within a specified level of accuracy.

(f) *Master device.* A TVBD operating in master mode.

(g) *Master mode.* An operating mode in which the TVBD has the capability to transmit without receiving an enabling signal. The TVBD is able to select a channel itself based on a list provided by the database and initiate a network by sending enabling signals to other devices. A network always has at least one device operating in master mode.

(h) *Mode I operation.* Operation of a personal/portable TVBD operating only on the available channel identified by either the fixed TVBD or Mode II TVBD that enables its operation. Mode I operation does not require use of a geo-location capability or access to the TV bands database and requires operation in client mode.

(i) *Mode II operation.* Operation of a personal/portable TVBD whereby the device determines the available channels at its location using its own geolocation and TV bands database access capabilities. Devices operating in Mode II may function as master devices.

(j) *Network initiation.* The process by which a fixed or Mode II TVBD sends control signals to another similar device or to a client device(s) and allows them to begin transmissions.