(iv) Date of the license;

(v) A certification that the facility as authorized has been completed and that each antenna has been tested and found to perform within authorized gain patterns or off-axis EIRP density levels; and

(vi) The date when the earth station became operational.

(vii) A statement that the station will remain operational during the license period unless the license is submitted for cancellation.

(2) For FSS earth stations authorized under a blanket license, the licensee must notify the Commission when the earth station network commences operation. The notification should include the information described in paragraphs (b)(1)(i) through (iv) of this section and a certification that each hub antenna, and a type of antenna used in remote stations in the network, has been tested and found to perform within authorized gain patterns or offaxis EIRP density levels. For any type of antenna whose performance was not certified when the network commenced operation, the licensee must submit the information and certification stated above for the antenna type when it is first deployed.

(c) [Reserved]

(d) Each receiving earth station licensed or registered pursuant to §25.115(b) must be constructed and placed into service within 6 months after coordination has been completed. Each licensee or registrant must file with the Commission a certification that the facility is completed and operating as provided in paragraph (b) of this section, with the exception of certification of antenna patterns.

[56 FR 24016, May 28, 1991, as amended at 58
FR 68059, Dec. 23, 1993; 59 FR 53327, Oct. 21,
1994; 65 FR 59142, Oct. 4, 2000; 70 FR 32254,
June 2, 2005; 78 FR 8421, Feb. 6, 2013; 79 FR
8318, Feb. 12, 2014; 81 FR 55330, Aug. 18, 2016;
84 FR 53654, Oct. 8, 2019]

§25.134 [Reserved]

§25.135 Licensing provisions for earth station networks in the non-voice, non-geostationary Mobile-Satellite Service.

(a) Each applicant for a blanket earth station license in the non-voice, non-geostationary mobile-satellite

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service shall demonstrate that transceiver operations will not cause unacceptable interference to other authorized users of the spectrum, based on existing system information publicly available at the Commission at the time of filing, and will comply with operational conditions placed upon the systems with which they are to operate in accordance with §25.142(b). This demonstration shall include a showing as to all the technical parameters, including duty cycle and power limits, under which the individual user transceivers will operate.

(b) [Reserved]

(c) Transceiver units in this service are authorized to communicate with and through U.S.-authorized space stations only.

[58 FR 68059, Dec. 23, 1993, as amended at 69 FR 5710, Feb. 6, 2004; 79 FR 8319, Feb. 12, 2014]

\$25.136 Earth Stations in the 24.75-25.25 GHz, 27.5-28.35 GHz, 37.5-40 GHz, 47.2-48.2, GHz and 50.4-51.4 GHz bands.

(a) FSS is secondary to the Upper Microwave Flexible Use Service in the 27.5–28.35 GHz band. Notwithstanding that secondary status, an applicant for a license for a transmitting earth station in the 27.5–28.35 GHz band that meets one of the following criteria may be authorized to operate without providing interference protection to stations in the Upper Microwave Flexible Use Service:

(1) The FSS licensee also holds the relevant Upper Microwave Flexible Use Service license(s) for the area in which the earth station generates a power flux density (PFD), at 10 meters above ground level, of greater than or equal to $-77.6 \text{ dBm/m}^2/\text{MHz}$;

(2) The FSS earth station was authorized prior to July 14, 2016; or

(3) The application for the FSS earth station was filed prior to July 14, 2016 and has been subsequently granted; or

(4) The applicant demonstrates compliance with all of the following criteria in its application:

(i) There are no more than two other authorized earth stations operating in the 27.5–28.35 GHz band within the county where the proposed earth station is located that meet the criteria contained in either paragraph (a)(1),

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(2), (3), or (4) of this section. For purposes of this requirement, multiple earth stations that are collocated with or at a location contiguous to each other shall be considered as one earth station;

(ii) The area in which the earth station generates a PFD, at 10 meters above ground level, of greater than or equal to -77.6 dBm/m2/MHz, together with the similar area of any other earth station authorized pursuant to paragraph (a) of this section, does not cover, in the aggregate, more than the amount of population of the UMFUS license area within which the earth station is located as noted in table 1 to this paragraph (a)(4)(ii):

TABLE 1 TO PARAGRAPH (a)(4)(ii)

Population within UMFUS li- cense area	Maximum permitted aggre- gate population within – 77.6 dBm/m²/MHz PFD contour of earth stations
Greater than 450,000	0.1 percent of population in UMFUS license area.
Between 6,000 and 450,000	450 people.
Fewer than 6,000	7.5 percent of population in UMFUS license area.

(iii) The area in which the earth station generates a PFD, at 10 meters above ground level, of greater than or equal to -77.6 dBm/m²/MHz does not contain any major event venue, urban mass transit route, passenger railroad, or cruise ship port. In addition, the area mentioned in paragraph (a)(4)(ii) of this section shall not cross any of the following types of roads, as defined in functional classification guidelines issued by the Federal Highway Administration pursuant to 23 CFR 470.105(b): Interstate, Other Freeways and Expressways, or Other Principal Arterial. The Federal Highway Administration Office of Planning, Environment, and Realty Executive Geographic Information System (HEPGIS) map contains information on the classification of roads. For purposes of this rule, an urban area shall be an Adjusted Urban Area as defined in section 101(a)(37) of Title 21 of the United States Code.

(iv) The applicant has successfully completed frequency coordination with the UMFUS licensees within the area in which the earth station generates a PFD, at 10 meters above ground level, of greater than or equal to -77.6 dBm/ m²/MHz with respect to existing facilities constructed and in operation by the UMFUS licensee. In coordinating with UMFUS licensees, the applicant shall use the applicable processes contained in §101.103(d) of this chapter.

(b) Applications for earth stations in the 37.5-40 GHz band shall provide an exhibit describing the zone within which the earth station will require protection from transmissions of Upper Microwave Flexible Use Service licensees. For purposes of this rule, the protection zone shall consist of the area where UMFUS licensees may not locate facilities without the consent of the earth station licensee. The earth station applicant shall demonstrate in its application, using reasonable engineering methods, that the requested protection zone is necessary in order to protect its proposed earth station.

(c) The protection zone (as defined in paragraph (b) of this section) shall comply with the following criteria. The applicant must demonstrate compliance with all of the following criteria in its application:

(1) There are no more than two other authorized earth stations operating in the 37.5-40 GHz band within the county within which the proposed earth station is located that meet the criteria contained in paragraph (c) of this section, and there are no more than 14 other authorized earth stations operating in the 37.5-40 GHz band within the PEA within which the proposed earth station is located that meet the criteria contained in paragraph (c) of this section. For purposes of this requirement, multiple earth stations that are collocated with or at a location contiguous to each other shall be considered as one earth station;

(2) The protection zone, together with the protection zone of other earth stations in the same PEA authorized pursuant to this, does not cover, in the aggregate, more than the amount of population of the PEA within which the earth station is located as noted in table 2 to this paragraph (c)(2):

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TABLE 2 TO PARAGRAPH (c)(2)

Population within Partial Eco- nomic Area (PEA) where earth station is located	Maximum permitted aggre- gate population within protection zone of earth stations
Greater than 2,250,000	0.1 percent of population in PEA.
Between 60,000 and 2,250,000.	2,250 people.
Fewer than 60,000	3.75 percent of population in PEA.

(3) The protection zone does not contain any major event venue, urban mass transit route, passenger railroad, or cruise ship port. In addition, the area mentioned in the preceding sentence shall not cross any of the following types of roads, as defined in functional classification guidelines issued by the Federal Highway Administration pursuant to 23 CFR 470.105(b): Interstate, Other Freeways and Expressways, or Other Principal Arterial. The Federal Highway Administration Office of Planning, Environment, and Realty Executive Geographic Information System (HEPGIS) map contains information on the classification of roads. For purposes of this rule, an urban area shall be an Adjusted Urban Area as defined in section 101(a)(37) of Title 21 of the United States Code.

(4) The applicant has successfully completed frequency coordination with the UMFUS licensees within the protection zone with respect to existing facilities constructed and in operation by the UMFUS licensee. In coordinating with UMFUS licensees, the applicant shall use the applicable processes contained in §101.103(d) of this chapter.

(d) Notwithstanding that FSS is coprimary with the Upper Microwave Flexible Use Service in the 47.2–48.2 GHz band, earth stations in the 47.2– 48.2 GHz band shall be limited to individually licensed earth stations. An applicant for a license for a transmitting earth station in the 47.2–48.2 GHz band must meet one of the following criteria to be authorized to operate without providing any additional interference protection to stations in the Upper Microwave Flexible Use Service:

(1) The FSS licensee also holds the relevant Upper Microwave Flexible Use Service license(s) for the area in which the earth station generates a PFD, at

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10 meters above ground level, of greater than or equal to $-77.6\ dBm/m^2/MHz;$ or

(2) The earth station in the 47.2-48.2 GHz band was authorized prior to February 1, 2018; or

(3) The application for the earth station in the 47.2–48.2 GHz band was filed prior to February 1, 2018; or

(4) The applicant demonstrates compliance with all of the following criteria in its application:

(i) There are no more than two other authorized earth stations operating in the 47.2-48.2 GHz band within the county where the proposed earth station is located that meet the criteria contained in paragraph (d)(1), (2), (3), or (4)of this section, and there are no more than 14 other authorized earth stations operating in the 47.2-48.2 GHz band within the PEA where the proposed earth station is located that meet the criteria contained in paragraph (d)(1), (2), (3), or (4) of this section. For purposes of this requirement, multiple earth stations that are collocated with or at a location contiguous to each other shall be considered as one earth station:

(ii) The area in which the earth station generates a PFD, at 10 meters above ground level, of greater than or equal to $-77.6 \text{ dBm/m}^2/\text{MHz}$, together with the similar area of any other earth station authorized pursuant to paragraph (d) of this section, does not cover, in the aggregate, more than the amount of population of the PEA within which the earth station is located as noted in table 3 to this paragraph (d)(4)(ii):

TABLE 3 TO PARAGRAPH (d)(4)(ii)

Population within Partial Eco- nomic Area (PEA) where earth station is located	Maximum permitted aggre- gate population within – 77.6 dBm/m²/MHz PFD contour of earth stations
Greater than 2,250,000	0.1 percent of population in PEA.
Between 60,000 and 2,250,000.	2,250 people.
Fewer than 60,000	3.75 percent of population in PEA.

(iii) The area in which the earth station generates a PFD, at 10 meters above ground level, of greater than or equal to $-77.6 \text{ dBm/m}^2/\text{MHz}$ does not contain any major event venue, any

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highway classified by the U.S. Department of Transportation under the categories Interstate, Other Freeways and Expressways, or Other Principal Arterial, or an urban mass transit route, passenger railroad, or cruise ship port; and

(iv) The applicant has successfully completed frequency coordination with the UMFUS licensees within the area in which the earth station generates a PFD, at 10 meters above ground level, of greater than or equal to -77.6 dBm/ m²/MHz with respect to existing facilities constructed and in operation by the UMFUS licensee. In coordinating with UMFUS licensees, the applicant shall use the applicable processes contained in §101.103(d) of this chapter.

(e) Notwithstanding that FSS is coprimary with the Upper Microwave Flexible Use Service in the 24.75–25.25 GHz and 50.4–51.4 GHz bands, earth stations in these bands shall be limited to individually licensed earth stations. An applicant for a license for a transmitting earth station in the 24.75–25.25 GHz or 50.4–51.4 GHz band must meet one of the following criteria to be authorized to operate without providing any additional interference protection to stations in the Upper Microwave Flexible Use Service:

(1) The FSS licensee also holds the relevant Upper Microwave Flexible Use Service license(s) for the area in which the earth station generates a power flux density (PFD), at 10 meters above ground level, of greater than or equal to -77.6dBm/m²/MHz;

(2) The earth station in the 24.75–25.25 GHz band was authorized prior to August 20, 2018; or the earth station in the 50.4–51.4 GHz band was authorized prior to June 12, 2019; or

(3) The application for the earth station in the 24.75–25.25 GHz band was filed prior to August 20, 2018; or the application for the earth station in the 50.4–51.4 GHz band was filed prior to June 12, 2019; or

(4) The applicant demonstrates compliance with all of the following criteria in its application:

(i) There are no more than two other authorized earth stations operating in the same frequency band within the county where the proposed earth station is located that meet the criteria contained in either paragraph (e)(1), (2), (3), or (4) of this section, and there are no more than 14 other authorized earth stations operating in the same frequency band within the Partial Economic Area where the proposed earth station is located that meet the criteria contained in paragraph (e)(1), (2), (3), or (4) of this section. For purposes of the requirement in this paragraph (e)(4), multiple earth stations that are collocated with or at a location contiguous to each other shall be considered as one earth station;

(ii) The area in which the earth station generates a power flux density (PFD), at 10 meters above ground level, of greater than or equal to -77.6 dBm/ m²/MHz, together with the similar area of any other earth station operating in the same frequency band authorized pursuant to paragraph (e) of this section, does not cover, in the aggregate, more than the amount of population of the county within which the earth station is located as noted in table 4 to this paragraph (e)(4)(ii):

TABLE 4 TO PARAGRAPH (e)(4)(ii)

Population within the County where earth station is located	Maximum permitted aggre- gate population within - 77.6 dBm/m²/MHz PFD contour of earth stations
Greater than 450,000	0.1 percent of population in county.
Between 6,000 and 450,000 Fewer than 6,000	450 people. 7.5 percent of population in county.

(iii) The area in which the earth station generates a PFD, at 10 meters above ground level, of greater than or equal to -77.6 dBm/m2/MHz does not contain any major event venue, urban mass transit route, passenger railroad, or cruise ship port. In addition, the area mentioned in paragraph (e)(4)(ii) of this section shall not cross any of the following types of roads, as defined in functional classification guidelines issued by the Federal Highway Administration pursuant to 23 CFR 470.105(b): Interstate, Other Freeways and Expressways, or Other Principal Arterial. The Federal Highway Administration Office of Planning, Environment, and Realty Executive Geographic Information System (HEPGIS) map contains information on the classification of roads. For purposes of this paragraph

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(e)(4), an urban area shall be an Adjusted Urban Area as defined in section 101(a)(37) of Title 21 of the United States Code; and

(iv) The applicant has successfully completed frequency coordination with the UMFUS licensees within the area in which the earth station generates a PFD, at 10 meters above ground level, of greater than or equal to -77.6 dBm/ m2/MHz with respect to existing facilities constructed and in operation by the UMFUS licensee. In coordinating with UMFUS licensees, the applicant shall use the applicable processes contained in §101.103(d) of this chapter.

(f) If an earth station applicant or licensee in the 24.75–25.25 GHz, 27.5–28.35 GHz, 37.5–40 GHz, 47.2–48.2 GHz and/or 50.4–51.4 GHz bands enters into an agreement with an UMFUS licensee, their operations shall be governed by that agreement, except to the extent that the agreement is inconsistent with the Commission's rules or the Communications Act.

(g) Any earth station authorizations issued pursuant to paragraph (a)(4), (c), (d)(4), or (e)(4) of this section shall be conditioned upon operation being in compliance with the criteria contained in the applicable paragraph.

[81 FR 79937, Nov. 14, 2016, as amended at 83
FR 63, Jan. 2, 2018; 83 FR 34489, July 20, 2018;
84 FR 20819, May 13, 2019; 84 FR 47147, Sept. 9, 2019]

§25.137 Requests for U.S. market access through non-U.S.-licensed space stations.

(a) Earth station applicants requesting authority to communicate with a non-U.S.-licensed space station and entities filing a petition for declaratory ruling to access the United States market using a non-U.S.-licensed space station must attach an exhibit with their FCC Form 312 demonstrating that U.S.licensed satellite systems have effective competitive opportunities to provide analogous services in:

(1) The country in which the non-U.S. licensed space station is licensed; and

(2) All countries in which communications with the U.S. earth station will originate or terminate. The applicant bears the burden of showing that there are no practical or legal constraints that limit or prevent access of 47 CFR Ch. I (10-1-20 Edition)

the U.S. satellite system in the relevant foreign markets. The exhibit required by this paragraph must also include a statement of why grant of the application is in the public interest. This paragraph shall not apply with respect to requests for authority to operate using a non-U.S. licensed satellite that is licensed by or seeking a license from a country that is a member of the World Trade Organization for services covered under the World Trade Organi-Telecommunications zation Basic Agreement.

(b) Any request pursuant to paragraph (a) of this section must be filed electronically through the International Bureau Filing System and must include an exhibit providing legal and technical information for the non-U.S.-licensed space station of the kind that §25.114 or §25.122 or §25.123 would require in a license application for that space station, including but not limited to, information required to complete Schedule S. An applicant may satisfy this requirement by cross-referencing a pending application containing the requisite information or by citing a prior grant of authority to communicate via the space station in question in the same frequency bands to provide the same type of service.

(c) A non-U.S.-licensed NGSO-like satellite system seeking to serve the United States can be considered contemporaneously with other U.S. NGSOlike satellite systems pursuant to §25.157 and considered before later-filed applications of other U.S. satellite system operators, and a non-U.S.-licensed GSO-like satellite system seeking to serve the United States can have its request placed in a queue pursuant to §25.158 and considered before later-filed applications of other U.S. satellite system operators, if the non-U.S.-licensed satellite system:

(1) Is in orbit and operating;

(2) Has a license from another administration; or

(3) Has been submitted for coordination to the International Telecommunication Union.

(d) Earth station applicants requesting authority to communicate with a non-U.S.-licensed space station and entities filing a petition for declaratory