

Federal Communications Commission

§ 25.280

acknowledging its coordination responsibilities under § 25.277.

[58 FR 13421, Mar. 11, 1993, as amended at 62 FR 5931, Feb. 10, 1997; 70 FR 4787, Jan. 31, 2005; 70 FR 32257, June 2, 2005]

§ 25.278 Additional coordination obligation for non-geostationary and geostationary satellite systems in frequencies allocated to the fixed-satellite service.

Licensees of non-geostationary satellite systems that use frequency bands allocated to the Fixed-Satellite Service for their feeder link operations shall coordinate their operations with licensees of geostationary Fixed-Satellite Service systems licensed by the Commission for operation in the same frequency bands. Licensees of geostationary Fixed-Satellite Service systems in the frequency bands that are licensed to non-geostationary satellite systems for feeder link operations shall coordinate their operations with the licensees of such non-geostationary satellite systems.

[59 FR 53330, Oct. 21, 1994, as amended at 78 FR 8431, Feb. 6, 2013]

§ 25.279 Inter-satellite service.

(a) Any satellite communicating with other space stations may use frequencies in the inter-satellite service as indicated in § 2.106 of this chapter. This does not preclude the use of other frequencies for such purposes as provided for in several service definitions, *e.g.*, FSS. The technical details of the proposed inter-satellite link shall be provided in accordance with § 25.114(c).

(b) *Operating conditions.* In order to ensure compatible operations with authorized users in the frequency bands to be utilized for operations in the inter-satellite service, these inter-satellite service systems must operate in accordance with the conditions specified in this section.

(1) *Coordination requirements with federal government users.* (i) In frequency bands allocated for use by the inter-satellite service that are also authorized for use by agencies of the federal government, the federal use of frequencies in the inter-satellite service frequency bands is under the regulatory jurisdiction of the National

Telecommunications and Information Administration (NTIA).

(ii) The Commission will use its existing procedures to reach agreement with NTIA to achieve compatible operations between federal government users under the jurisdiction of NTIA and inter-satellite service systems through frequency assignment and coordination practice established by NTIA and the Interdepartment Radio Advisory Committee (IRAC). In order to facilitate such frequency assignment and coordination, applicants shall provide the Commission with sufficient information to evaluate electromagnetic compatibility with the federal government users of the spectrum, and any additional information requested by the Commission. As part of the coordination process, applicants shall show that they will not cause interference to authorized federal government users, based upon existing system information provided by the government. The frequency assignment and coordination of the satellite system shall be completed prior to grant of construction authorization.

(2) *Coordination among inter-satellite service systems.* Applicants for authority to establish inter-satellite service are encouraged to coordinate their proposed frequency usage with existing permittees and licensees in the inter-satellite service whose facilities could be affected by the new proposal in terms of frequency interference or restricted system capacity. All affected applicants, permittees, and licensees, shall at the direction of the Commission, cooperate fully and make every reasonable effort to resolve technical problems and conflicts that may inhibit effective and efficient use of the radio spectrum; however, the permittee or licensee being coordinated with is not obligated to suggest changes or re-engineer an applicant's proposal in cases involving conflicts.

[59 FR 53331, Oct. 21, 1994, as amended at 65 FR 59144, Oct. 4, 2000]

§ 25.280 Inclined orbit operations.

(a) Satellite operators may commence operation in inclined orbit mode without obtaining prior Commission authorization provided that the Commission is notified by letter within 30

days after the last north-south station keeping maneuver. The notification shall include:

- (1) The operator's name;
- (2) The date of commencement of inclined orbit operation;
- (3) The initial inclination;
- (4) The rate of change in inclination per year; and
- (5) The expected end-of-life of the satellite accounting for inclined orbit operation, and the maneuvers specified under § 25.283 of the Commission's rules.

(b) Licensees operating in inclined-orbit are required to:

(1) Periodically correct the satellite attitude to achieve a stationary spacecraft antenna pattern on the surface of the Earth and centered on the satellite's designated service area;

(2) Control all electrical interference to adjacent satellites, as a result of operating in an inclined orbit, to levels not to exceed that which would be caused by the satellite operating without an inclined orbit;

(3) Not claim protection in excess of the protection that would be received by the satellite network operating without an inclined orbit; and

(4) Continue to maintain the space station at the authorized longitude orbital location in the geostationary satellite arc with the appropriate east-west station-keeping tolerance.

[69 FR 54587, Sept. 9, 2004]

§ 25.281 Transmitter identification requirements for video uplink transmissions.

(a) Earth-to-space transmissions carrying video information with analog modulation must be identified through use of an Automatic Transmitter Identification System (ATIS) with an analog identifier or a direct sequence spread spectrum signal.

(1) Use of an analog identifier must be in accordance with the following requirements:

(i) The ATIS signal must be a separate subcarrier that is automatically activated whenever any radio frequency signal is transmitted.

(ii) The ATIS message must continuously repeat.

(iii) The ATIS subcarrier signal must be generated at a frequency of 7.1 MHz

±25 kHz and modulate the uplink radio frequency carrier at a level no less than -26 dB (referenced to the unmodulated carrier).

(iv) ATIS subcarrier deviation must not exceed 25 kHz.

(v) The ATIS message protocol must be International Morse Code keyed by a 1200 Hz ±800 Hz tone representing a mark and a message rate of 15 to 25 words per minute. The tone must frequency-modulate the subcarrier signal with the ATIS message.

(vi) The ATIS message must include the FCC-assigned call sign of the transmitting earth station, a telephone number providing immediate access to personnel capable of resolving interference or coordination problems, and a unique serial number of ten or more digits programmed into the ATIS message in a permanent manner so that it cannot be readily changed by the operator on duty. Additional information may be included in the ATIS data stream provided the total ATIS message length does not exceed 30 seconds.

(2) Use of a direct sequence spread spectrum ATIS signal must be in accordance with the requirements in paragraphs (b)(1) and (2) of this section.

(b) As of September 3, 2017, transmissions of fixed-frequency, digitally modulated video signals with a symbol rate of 128,000/s or more from a temporary-fixed earth station must be identified through use of an ATIS in accordance with the requirements that follow.

(1) The ATIS message must be modulated onto a direct sequence spread spectrum signal in accordance with the DVB-CID standard, ETSI TS 103 129 V1.1.2 (2014-03) (incorporated by reference, *see* § 25.108).

(2) The ATIS message must continuously repeat.

NOTE 1 TO PARAGRAPH (b): Paragraph (b) is waived for earth stations using modulators manufactured before August 1, 2017, that cannot be made compliant with the DVB-CID standard by a software upgrade.

(c) ATIS equipment must be integrated into the uplink transmitter chain with a method that cannot easily be defeated.

[79 FR 8325, Feb. 12, 2014; 81 FR 33601, May 31, 2016, as amended at 82 FR 40494, Aug. 25, 2017]