(1) Report on the various phases of the project which were investigated;

(2) Total number of hours of operation on each frequency assigned;

(3) Copies of any publication on the project;

(4) Detailed analysis of the result obtained; and

(5) Any other pertinent information.

(b) In addition to the information required by paragraph (a) of this section, the developmental report of a station authorized for the development of a proposed radio service must include comprehensive information on the following items:

(1) Probable public support and methods of its determination;

(2) Practicability of service operations;

(3) Interference encountered;

(4) Pertinent information relative to merits of the proposed service;

(5) Propagation characteristics of frequencies used, particularly with respect to the service objective;

(6) Frequencies believed to be more suitable and reasons therefor; and

(7) Type of signals or communications employed in the experimental work.

(c) Developmental reports will be made a part of the Commission's public records, except upon the applicant's specific request for confidentiality and Commission approval in accordance with § 0.459 of this chapter. Information determined confidential by the Commission will not be publicly disclosed.

[61 FR 26677, May 28, 1996, as amended at 63 FR 68983, Dec. 14, 1998]

Subpart G—24 GHz Service and Digital Electronic Message Service

§ 101.501 Eligibility.

See § 101.147(n) for licensing of DEMS facilities in the 10.6 GHz band. Applications for new facilities using the 18 GHz band are no longer being accepted. Any entity, other than one precluded by § 101.7, is eligible for authorization to provide 24 GHz Service under this subpart.

[65 FR 59359, Oct. 5, 2000]

§ 101.503 Digital Electronic Message Service Nodal Stations.

10.6 GHz DEMS Nodal Stations may be authorized only as a part of an integrated communication system wherein 10.6 GHz DEMS User Stations associated therewith also are licensed to the 10.6 GHz DEMS Nodal Station licensee. Applications for 10.6 GHz DEMS Nodal Station licenses should specify the maximum number of 10.6 GHz DEMS User Stations to be served by that nodal station. Any increase in that number must be applied for pursuant to § 1.913 of this chapter.

[65 FR 59359, Oct. 5, 2000]

§ 101.505 Frequencies.

Frequencies, and the conditions on which they are available, for DEMS operations are contained in this subpart as well as in § 101.147(m), (n), and (r)(9).

[65 FR 59359, Oct. 5, 2000]

§ 101.507 Frequency stability.

The frequency stability in the 10,550–10,680 MHz band must be ±0.0001% for each DEMS Nodal Station transmitter and ±0.0003% for each DEMS User Station transmitter. The frequency stability in the 24,250–25,250 MHz bands must be ±0.001% for each Nodal Station transmitter and ±0.003% for each User Station transmitter.

68 FR 4961, Jan. 31, 2003]

§ 101.509 Interference protection criteria.

(a) As a condition for use of frequencies in this service each licensee is required to:

(1) Engineer the system to be reasonably compatible with adjacent and co-channel operations in the same or adjacent areas on all frequencies; and

(2) Cooperate fully and in good faith to resolve whatever potential interference and transmission security problems may be present in adjacent and co-channel operations.

(b) All harmful interference to other users of co-channel and adjacent channel use in the same or adjacent geographical area are prohibited. In areas where Economic Areas are in close proximity, careful consideration

should be given to minimum power requirements and to the location, height, and radiation pattern of the transmitting and receiving antennas. Licensees are expected to cooperate fully in attempting to resolve problems of potential interference before bringing the matter to the attention of the Commission.

(c) Licensee shall coordinate their facilities whenever the facilities have optical line-of-sight into other licensees' areas or are within the same geographic area. Licensees are encouraged to develop operational agreements with relevant licensees in the same or adjacent areas. Incumbent SMSA licensee(s) shall retain exclusive rights to its channel(s) within its SMSA and must be protected.

(d) Licensees shall comply with the appropriate coordination agreements between the United States and Canada and the United States and Mexico concerning cross-border sharing and use of the 24 GHz bands which may require using channels pairs in accordance with the table in § 101.147(r)(9).

(e) The Commission recommends that coordination is not necessary if the power flux density (pfd) at the boundary of the relevant adjacent area is lower than –114 dBW/m² in any 1 MHz. This value can be changed and agreed upon by both coordinating parties. Licensees should be able to deploy with a pfd up to –94 dBW/m² in any 1 MHz at the boundary of the relevant adjacent area without negatively affecting the successful operations of the adjacent area licensee.

[65 FR 59360, Oct. 5, 2000]

§ 101.511 Permissible services.

(a) Authorizations for stations in the 24 GHz Service will be granted to provide services on a common carrier basis or a non-common carrier basis or on both a common carrier and non-common carrier basis in a single authorization.

(b) Stations may render any kind of digital communications service consistent with the Commission's rules and the regulatory status of the station to provide services on a common carrier or non-common carrier basis.

(c) An applicant or licensee may submit a petition at any time requesting clarification of the regulatory status required to provide a specific communications service.

[65 FR 59360, Oct. 5, 2000]

§ 101.513 Transmitter power.

The transmitter power will be governed by § 101.113. Further, each application must contain an analysis demonstrating compliance with § 101.113(a).

§ 101.515 Emissions and bandwidth.

Different types of emissions may be authorized if the applicant describes fully the modulation and bandwidth desired, and demonstrates that the bandwidth desired is no wider than needed to provide the intended service. In no event, however, may the necessary or occupied bandwidth exceed the specified channel width of the assigned pair.

§ 101.517 Antennas.

(a) Transmitting antennas may be omnidirectional or directional, consistent with coverage and interference requirements.

(b) The use of horizontal or vertical plane wave polarization, or right hand or left hand rotating elliptical polarization must be used to minimize harmful interference between stations.

(c) Directive antennas must be used at all DEMS User Stations and may be elevated no higher than necessary to assure adequate service. Antenna structures requiring FAA notification under part 17 of this chapter must be registered with the Commission. The structure owner is responsible for registering, painting, and lighting the structure if applicable. Requests for such authorization must show the inclusive dates of the proposed operation.

§ 101.519 Interconnection.

(a) All DEMS licensees must make available to the public all information necessary to allow the manufacture of user equipment that will be compatible with the licensee's network.

(b) All DEMS licensees must make available to the public all information necessary to allow interconnection of DEMS networks.