serve 37.5 percent of the U.S. population within five years of initial license grant date; and, shall construct base stations that provide coverage to a composite area of 1,500,000 square kilometers or serve 75 percent of the U.S. population within ten years of initial license grant date. Licensees may, in the alternative, provide substantial service to the licensed area as provided in paragraph (d) of this section.

- (b) Regional narrowband PCS licensees shall construct base stations that provide coverage to a composite area of 150,000 square kilometers or serve 37.5 percent of the population of the service area within five years of initial license grant date; and, shall construct base stations that provide coverage to a composite area of 300,000 square kilometers or serve 75 percent of the service area population within ten years of initial license grant date. Licensees may, in the alternative, provide substantial service to the licensed area as provided in paragraph (d) of this section.
- (c) MTA narrowband PCS licensees shall construct base stations that provide coverage to a composite area of 75,000 square kilometers or 25 percent of the geographic area, or serve 37.5 percent of the population of the service area within five years of initial license grant date; and, shall construct base stations that provide coverage to a composite area of 150,000 square kilometers or 50 percent of the geographic area, or serve 75 percent of the population of the service area within ten years of initial license grant date. Licensees may, in the alternative, provide substantial service to the licensed area as provided in paragraph (d) of this section.
- (d) As an alternative to the requirements of paragraphs (a), (b), and (c) of this section, narrowband PCS licensees may demonstrate that, no later than ten years after the initial grant of their license, they provide substantial service to their licensed area. Licensees choosing this option must notify the FCC by filing FCC Form 601, no later than 15 days after the end of the five year period following the initial grant of their license, that they plan to satisfy the alternative requirement to provide substantial service. "Substan-

tial service" is defined as service that is sound, favorable, and substantially above a level of mediocre service that would barely warrant renewal.

- (e) In demonstrating compliance with the construction requirements set forth in this section, licensees must base their calculations on signal field strengths that ensure reliable service for the technology utilized. Licensees may determine the population of geographic areas included within their service contours using either the 1990 census or the 2000 census, but not both.
- (1) For the purpose of this section, the service radius of a base station may be calculated using the following formula:

 $d_{\rm km} = 2.53 \times h_{\rm m} 0.34 \times p^{0.17}$ 

where  $d_{km}$  is the radial distance in kilometers,  $% \left( 1\right) =\left( 1\right) \left( 1\right)$ 

 $h_{\rm m}$  is the antenna HAAT of the base station in meters, and

p is the e.r.p. of the base station in watts.

- (2) Alternatively, licensees may use any service radius contour formula developed or generally used by industry, provided that such formula is based on the technical characteristics of their system.
- (f) Upon meeting the five and ten year benchmarks in paragraphs (a), (b), and (c) of this section, or upon meeting the substantial service alternative in paragraph (d), licensees shall notify the Commission by filing FCC Form 601 and including a map and other supporting documentation that demonstrate the required geographic area coverage, population coverage, or substantial service to the licensed area. The notification must be filed with the Commission within 15 days of the expiration of the relevant period.
- (g) If the sale of a license is approved, the new licensee is held to the original build-out requirement.
- (h) Failure by a licensee to meet the above construction requirements shall result in forfeiture of the license and ineligibility to regain it.

[59 FR 14118, Mar. 25, 1994, as amended at 65 FR 35852, June 6, 2000]

## § 24.104 Partitioning and disaggregation.

Nationwide, regional, and MTA licensees may apply to partition their

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authorized geographic service area or disaggregate their authorized spectrum at any time following grant of their geographic area authorizations.

- (a) Application required. Parties seeking approval for partitioning and/or disaggregation shall apply for partial assignment of a license pursuant to §1.948 of this chapter.
- (b) Partitioning. In the case of partitioning, applicants and licensees must file FCC Form 603 pursuant to §1.948 of this chapter and describe the partitioned service area on a schedule to the application. The partitioned service area shall be defined by up to 120 sets of geographic coordinates at points at every 3 degrees azimuth from a point within the partitioned service area along the partitioned service area boundary unless either an FCC-recognized service area is used (e.g., MEA or EA) or county lines are followed. The geographical coordinates must be specified in degrees, minutes, and seconds to the nearest second latitude and longitude, and must be based upon the 1983 North American Datum (NAD83). In the case where FCC-recognized service areas or county lines are used, applicants need only list the specific area(s) through use of FCC designations or county names that constitute the partitioned area.
- (c) Disaggregation. Spectrum may be disaggregated in any amount.
- (d) Combined partitioning and disaggregation. Licensees may apply for partial assignment of authorizations that propose combinations of partitioning and disaggregation.
- (e) License term. The license term for a partitioned license area and for disaggregated spectrum shall be the remainder of the original licensee's license term as provided for in §1.955 of this chapter.

[65 FR 35853, June 6, 2000, as amended at 82 FR 41547, Sept. 1, 2017]

EFFECTIVE DATE NOTE: At 65 FR 35853, June 6, 2000, §24.104 was added. This section contains information collection and record-keeping requirements and will not become effective until approval has been given by the Office of Management and Budget.

## §24.129 Frequencies.

The following frequencies are available for narrowband PCS:

- (a) Eighteen frequencies are available for assignment on a nationwide basis as follows:
- (1) Seven 50 kHz channels paired with 50 kHz channels:

 $\begin{array}{c} {\rm Channel~1:~940.00-940.05~and~901.00-901.05~MHz;} \\ {\rm Channel~2:~940.05-940.10~and~901.05-901.10~MHz;} \\ {\rm Channel~3:~940.10-940.15~and~901.10-901.15~MHz;} \\ {\rm Channel~4:~940.15-940.20~and~901.15-901.20~MHz;} \\ {\rm Channel~5:~940.20-940.25~and~901.20-901.25~MHz;} \\ {\rm Channel~19:~930.50-930.55~and~901.30-901.35~MHz;} \\ {\rm and} \\ {\rm Channel~20:~930.75-930.80~and~901.90-901.95} \\ \end{array}$ 

MHz.

(2) Three 50 kHz channels paired with 12.5 kHz channels:

Channel 6: 930.40-930.45 and 901.7500-901.7625 MHz;

Channel 7: 930.45–930.50 and 901.7625–901.7750 MHz; and

Channel 8: 940.75-940.80 and 901.7750-901.7875 MHz;

(3) Two 50 kHz unpaired channels:

Channel 9: RESERVED; Channel 10: 940.80–940.85 MHz; and Channel 11: 940.85–940.90 MHz.

(4) One 100 kHz unpaired channel:

Channel 18: 940.65-940.75 MHz.

(5) Two 150 kHz channels paired with 50 kHz channels:

Channel 21: 930.00-930.15 and 901.50-901.55 MHz; and Channel 22: 930.15-930.30 and 901.60-901.65 MHz.

(6) Three 100 kHz channels paired with 50 kHz channels:

Channel 23: 940.55-940.65 and 901.45-901.50 MHz;

Channel 24: 940.30–940.40 and 901.55–901.60 MHz; and

Channel 25: 940.45–940.55 and 901.85–901.90 MHz.

- (b) Five frequencies are available for assignment on a regional basis as follows:
- (1) One 50 kHz channel paired with 50 kHz channel:

Channel 12: 940.25-940.30 and 901.25-901.30 MHz. Channel 13: RESERVED.

(2) Four 50 kHz channels paired with

12.5 kHz channels:

Channel 14: 930.55-930.60 and 901.7875-901.8000 MHz;

Channel 15: 930.60-930.65 and 901.8000-901.8125 MHz;