Federal Communications Commission

§ 22.912

Service area boundary extensions.

This section contains rules governing service area boundary (SAB) extensions. SAB extensions are areas outside of the cellular market boundary, but within the service area as calculated using the methods of §22.911(a). Cellular systems must be designed to comply with the rules in this section. Applications proposing systems that would not comply with the rules in this section are defective. Service within SAB extensions is not protected from interference or capture under §22.911(d) unless and until the area within the SAB extension becomes a part of the cellular geographic service area (CGSA) in accordance with §22.911(c).

(a) De minimis extensions. Except as otherwise provided in paragraphs (b) and (d) of this section, SABs may be extended into adjacent cellular markets if such extensions are de minimis, are demonstrably unavoidable for technical reasons of sound engineering design, and do not extend into the CGSA of any other licensee’s cellular system on the same channel block, any part of the Gulf of Mexico Exclusive Zone (GMEZ), or into any adjacent cellular market on a channel block for which the five year build-out period has expired.

(b) Contract extensions. Except as otherwise provided in paragraph (d) of this section, cellular system licensees may enter into contracts to allow SAB extensions as follows:

(1) The licensee of any cellular system may, at any time, enter into a contract with an applicant for, or licensee of, a cellular system on the same channel block in an adjacent cellular market, to allow one or more SAB extensions into its CGSA only (not into unserved area).

(2) The licensee of the first authorized cellular system on each channel block in the Gulf of Mexico Service Area (GMSA) may enter into a contract with an applicant for, or licensee of, a cellular system on the same channel block in an adjacent cellular market or in the Gulf of Mexico Coastal Zone (GMCZ), to allow one or more SAB extensions into the Gulf of Mexico Exclusive Zone.

(3) The licensee of the first authorized cellular system on each channel block in each cellular market may enter into a contract with an applicant for or licensee of a cellular system on the same channel block in an adjacent cellular market, to allow one or more SAB extensions into its CGSA and/or unserved area in its cellular market, during its five year build-out period.

the same channel block in adjacent cellular markets may agree to allow SAB extensions into their CGSA and/or unserved areas in their cellular markets during the five year build-out period of the market into which the SAB extends.

(c) Same applicant/licensee. Except as restricted in paragraph (d) of this section, licensees of cellular systems that are also an applicant or licensee on the same channel block in adjacent cellular markets may, at any time, allow or propose SAB extensions from their adjacent market system into their CGSA only (not into unserved areas). Except as restricted in paragraph (d) of this section, licensees of the first authorized cellular systems that are also an applicant or licensee on the same channel block in adjacent cellular markets may allow or propose SAB extensions from their adjacent market system into their CGSA and/or unserved areas in their cellular markets during the five year build-out period of the market into which the SAB extends.

(d) Unserved area systems. Phase I initial cellular applications must not propose SAB extensions. Phase I sole major modification applications and Phase II applications may propose SAB extensions, subject to the conditions in this section.

§ 22.917 Emission limitations for cellular equipment.

The rules in this section govern the spectral characteristics of emissions in the Cellular Radiotelephone Service.

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

(b) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points,