

and (a)(5) of this section or with data for radials other than the cardinal radials to be a valid alternative method for determining the CGSA of a cellular system.

(c) *CGSA extension areas.* SAB extensions (areas outside of the cellular market boundary, but within the service area as calculated using the methods of paragraph (a) of this section) are part of the CGSA only under the following circumstances:

(1) During the five year build-out period of the system in the cellular market containing the extension, the licensees of systems on the same channel block in adjacent cellular markets may agree that the portion of the service area of one system that extends into unserved areas in the other system's cellular market is part of the CGSA of the former system.

(2) At the end of the five year build-out period of the system in the cellular market containing the extension, the portion of the service area that extends into unserved areas in another cellular market becomes part of the CGSA, provided that the licensee of the system so extended files a system information update in accordance with § 22.947(c).

(3) For original systems in MSAs, extensions of the CGSA authorized by the FCC are part of the CGSA to the extent authorized.

(d) *Protection afforded.* Within the CGSA determined in accordance with this section, cellular systems are entitled to protection from co-channel and first-adjacent channel interference and from capture of subscriber traffic by adjacent systems on the same channel block.

(1) Licensees must cooperate in resolving co-channel and first-adjacent channel interference by changing channels used at specific cells or by other technical means.

(2) Protection from capture of subscriber traffic is applied and limited in accordance with the following:

(i) Subscriber traffic is captured if an SAB of one cellular system overlaps the CGSA of another operating cellular system. Therefore, cellular licensees must not begin to operate any facility that would cause an SAB to overlap the existing CGSA of another cellular system on the same channel block,

without first obtaining the written consent of the licensee of that system. However, cellular licensees may continue to operate existing facilities that produce an SAB overlapping a subsequently-authorized portion of the CGSA of another cellular system on the same channel block until the licensee of that system requests that the SAB be removed from its CGSA. Such request may be made directly to the licensee of the overlapping system or to the FCC. In the event such request is made, the licensee of the overlapping system must reduce the transmitting power or antenna height (or both) at the pertinent cell site as necessary to remove the SAB from the CGSA of the other system, unless a written consent from the licensee of the other system allowing the SAB to remain is obtained. Cellular licensees may enter into contracts with the licensees of other cellular systems on the same channel block to allow SABs to overlap CGSAs.

(ii) Cellular licensees are at most entitled to have a CGSA free of SABs from other cellular systems on the same channel block.

(e) *Unserved areas.* Unserved areas are areas outside of all existing CGSAs (on either of the channel blocks), to which the Communications Act of 1934, as amended, is applicable.

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§ 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.

(b) *Contract extensions.* Except as restricted in paragraph (d) of this section, licensees of cellular systems on the same channel block in adjacent cellular markets may, at any time, enter into contracts with applicants or other licensees to allow SAB extensions into their CGSA only (not into unserved areas). Except as restricted in paragraph (d) of this section, licensees of

the first authorized cellular systems on 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.

[59 FR 59507, Nov. 17, 1994, as amended at 68 FR 42295, July 17, 2003]

§ 22.913 Effective radiated power limits.

The effective radiated power (ERP) of transmitters in the Cellular Radiotelephone Service must not exceed the limits in this section.

(a) *Maximum ERP.* In general, the effective radiated power (ERP) of base transmitters and cellular repeaters must not exceed 500 Watts. However, for those systems operating in areas more than 72 km (45 miles) from international borders that:

(1) Are located in counties with population densities of 100 persons or fewer per square mile, based upon the most recently available population statistics from the Bureau of the Census; or,

(2) Extend coverage on a secondary basis into cellular unserved areas, as those areas are defined in § 22.949, the