

**§ 90.685 Authorization, construction and implementation of EA licenses.**

(a) EA licenses in the 809–824/854–869 MHz band will be issued for a term not to exceed ten years.

(b) EA licensees in the 809–824/854–869 MHz band must, within three years of the grant of their initial license, construct and place into operation a sufficient number of base stations to provide coverage to at least one-third of the population of its EA-based service area. Further, each EA licensee must provide coverage to at least two-thirds of the population of the EA-based service area within five years of the grant of their initial license. EA-based licensees may, in the alternative, provide substantial service to their markets within five years of the grant of their initial license. Substantial service shall be defined as: “Service which is sound, favorable, and substantially above a level of mediocre service.”

(c) *Channel use requirement.* In addition to the population coverage requirements described in this section, we will require EA licensees in Channel blocks A, B and C in the 816–821/861–866 MHz band to construct 50 percent of the total channels included in their spectrum block in at least one location in their respective EA-based service area within three years of initial license grant and to retain such channel usage for the remainder of the construction period.

(d) An EA licensee’s failure to meet the population coverage requirements of paragraphs (b) and (c) of this section, will result in forfeiture of the entire EA license. Forfeiture of the EA license, however, would not result in the loss of any constructed facilities authorized to the licensee prior to the date of the commencement of the auction for the EA licenses.

(e) EA licensees operating on channels listed in § 90.614(b) and (c) must implement an Enhanced Specialized Mobile Radio (ESMR) system—as defined in § 90.7—on their EA license and any associated site-based licenses prior to the expiration date of the EA license. EA licensees operating on these channels shall follow the construction notification procedures set forth in § 1.946(d) of this chapter. Failure to implement an ESMR system on their EA

and site-based licenses before the expiration date of the EA license will result in termination of the EA license and any associated site-based licenses pursuant to § 1.946(c) of this chapter.

[62 FR 41216, July 31, 1997, as amended at 69 FR 67852, Nov. 22, 2004; 70 FR 6760, Feb. 8, 2005; 70 FR 76712, Dec. 28, 2005; 82 FR 41548, Sept. 1, 2017]

**§ 90.687 Special provisions regarding assignments and transfers of authorizations for incumbent SMR licensees in the 809–824/854–869 MHz band.**

An SMR license initially authorized on any of the channels listed in Tables 4 and 5 of § 90.617 may transfer or assign its channel(s) to another entity subject to the provisions of § 1.948 of this chapter and § 90.609(b). If the proposed transferee or assignee is the EA licensee for the spectrum block to which the channel is allocated, such transfer or assignment presumptively will be deemed to be in the public interest. However, such presumption will be rebuttable.

[69 FR 67852, Nov. 22, 2004]

**§ 90.689 Field strength limits.**

(a) For purposes of implementing §§ 90.689 through 90.699, predicted 36 and 40 dBµV/m contours shall be calculated using Figure 10 of § 73.699 of this chapter with a correction factor of –9 dB, and predicted 18 and 22 dBµV/m contours shall be calculated using Figure 10a of § 73.699 of this chapter with a correction factor of –9 dB.

(b) The predicted or measured field strength at any location on the border of the EA-based service area for EA licensees must not exceed 40 dBµV/m unless all bordering EA licensees agree to a higher field strength. In the event that this standard conflicts with the EA licensee’s obligation to provide co-channel protection to incumbent licensees pursuant to § 90.621(b), the requirements of § 90.621(b) shall prevail.

[61 FR 6158, 6159, Feb. 16, 1996, as amended at 62 FR 41216, July 31, 1997]

**§ 90.691 Emission mask requirements for EA-based systems.**

(a) Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to

spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $116 \text{ Log}_{10}(f/6.1)$  decibels or  $50 + 10 \text{ Log}_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where  $f$  is the frequency removed from the center of the outer channel in the block in kilohertz and where  $f$  is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least  $43 + 10 \text{ Log}_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where  $f$  is the frequency removed from the center of the outer channel in the block in kilohertz and where  $f$  is greater than 37.5 kHz.

(b) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

**§ 90.693 Grandfathering provisions for incumbent licensees.**

(a) *General provisions.* These provisions apply to "incumbent licensees," all 800 MHz licensees authorized in the 809–821/854–866 MHz band who obtained licenses or filed applications on or before December 15, 1995.

(b) *Spectrum blocks A through V.* An incumbent licensee's service area shall be defined by its originally licensed 40 dB $\mu$ V/m field strength contour and its interference contour shall be defined as its originally-licensed 22 dB $\mu$ V/m field strength contour. The "originally-licensed" contour shall be calculated using the maximum ERP and the actual height of the antenna above average terrain (HAAT) along each radial. Incumbent licensees are permitted to add, remove or modify transmitter sites within their original 22 dB $\mu$ V/m field strength contour without prior notification to the Commission so long as their original 22 dB $\mu$ V/m field strength contour is not expanded. Incumbent licensee protection extends

only to its 40 dB $\mu$ V/m signal strength contour. Pursuant to the minor modification notification procedures set forth in 1.947(b), the incumbent licensee must notify the Commission within 30 days of any change in technical parameters for stations that are authorized under a waiver of 90.621(b)(4), or that are authorized under 90.621(b)(5).

(c) Special provisions for spectrum blocks F1 through V. Incumbent licensees that have received the consent of all affected parties or a certified frequency coordinator to utilize an 18 dB $\mu$ V/m signal strength interference contour shall have their service area defined by their originally-licensed 36 dB $\mu$ V/m field strength contour and their interference contour shall be defined as their originally-licensed 18 dB $\mu$ V/m field strength contour. The "originally-licensed" contour shall be calculated using the maximum ERP and the actual HAAT along each radial. Incumbent licensees seeking to utilize an 18 dB $\mu$ V/m signal strength interference contour shall first seek to obtain the consent of affected co-channel incumbents. When the consent of a co-channel licensee is withheld, an incumbent licensee may submit to any certified frequency coordinator an engineering study showing that interference will not occur, together with proof that the incumbent licensee has sought consent. Incumbent licensees are permitted to add, remove or modify transmitter sites within their original 18 dB $\mu$ V/m field strength contour without prior notification to the Commission so long as their original 18 dB $\mu$ V/m field strength contour is not expanded. Incumbent licensee protection extends only to its 36 dB $\mu$ V/m signal strength contour. Pursuant to the minor modification notification procedures set forth in 1.947(b), the incumbent licensee must notify the Commission within 30 days of any change in technical parameters for stations that are authorized under a waiver of 90.621(b)(4), or that are authorized under 90.621(b)(5).

(d) *Consolidated license*—(1) *Spectrum blocks A through V.* Incumbent licensees operating at multiple sites may, after grant of EA licenses has been completed, exchange multiple site licenses