

# FACT SHEET

## FCC WIRELESS 911 REQUIREMENTS

In a series of orders since 1996, the Federal Communications Commission (FCC) has taken action to improve the quality and reliability of 911 emergency services for wireless phone users, by adopting rules to govern the availability of basic 911 services and the implementation of enhanced 911 (E911) for wireless services.

### BACKGROUND ON WIRELESS 911

The FCC's wireless 911 rules seek to improve the reliability of wireless 911 services and to provide emergency services personnel with location information that will enable them to locate and provide assistance to wireless 911 callers much more quickly. To further these goals, the agency has required wireless carriers to implement E911 service, subject to certain conditions and schedules. The wireless 911 rules apply to all cellular licensees, broadband Personal Communications Service (PCS) licensees, and certain Specialized Mobile Radio (SMR) licensees.

### BASIC WIRELESS 911 SERVICES

The basic 911 rules require wireless carriers to transmit all 911 calls to a Public Safety Answering Point (PSAP) without regard to validation procedures intended to identify and intercept calls from non-subscribers. Under the rules, therefore, both subscribers and non-subscribers can dial 911 and reach emergency assistance providers without having to prove their subscription status.

Many wireless 911 calls are made by "Good Samaritans" reporting traffic accidents, crimes, or other emergencies. Prompt delivery of these and other wireless 911 calls to public safety organizations benefits the public at large by promoting safety of life and property.

### 911 CALL PROCESSING PROCEDURES

In May 1999, the FCC adopted requirements to improve the ability of cellular phone users to complete wireless 911 calls. The 911 call completion rules are intended to improve the security and safety of analog cellular users, especially in rural and suburban areas.

Under the rules, all mobile phones manufactured for sale in the United States after February 13, 2000, that are capable of operating in an analog mode, including dual-mode and multi-mode handsets, must include a special method for processing 911 calls. When

a 911 call is made, the handset must override any programming that determines the handling of ordinary calls and must permit the call to be handled by any available carrier, regardless of whether the carrier is the customer's preferred service provider. Handsets capable of operating in analog mode must incorporate any one or more of the 911 call system selection processes endorsed or approved by the Commission.

### **PHASE I E911 REQUIREMENTS**

As of April 1, 1998, or within six months of a request by the designated Public Safety Answering Point (PSAP), whichever is later, covered carriers are required to provide to the PSAP the telephone number of the originator of a 911 call and the location of the cell site or base station receiving a 911 call. This information assists in the provision of timely emergency responses both by providing some information about the general location from which the call is being received and by permitting emergency call-takers to re-establish a connection with the caller if the call is disconnected.

### **PHASE II E911 REQUIREMENTS**

Wireless carriers are required to provide Automatic Location Identification (ALI) as part of Phase II E911 implementation beginning October 1, 2001, as detailed below. Originally, the FCC's rules envisioned that carriers would need to deploy network-based technologies to provide ALI. In the past several years, there have been significant advances in location technologies that employ new or upgraded handsets. In September 1999, the FCC revised its rules to better enable carriers to use handset-based location technologies to meet the Phase II requirements. In particular, the FCC established separate accuracy requirements and deployment schedules for network-based and handset-based technologies. In August 2000, the FCC made minor adjustments to the deployment schedule for handset-based technologies. The E911 Phase II requirements are as follows:

- **Handset-Based ALI Technology:** Wireless carriers who employ a Phase II location technology that requires new, modified or upgraded handsets (such as GPS-based technology) may phase-in deployment of Phase II subject to the following requirements:
  - Without respect to any PSAP request for Phase II deployment, the carrier shall:
    1. Begin selling and activating ALI-capable handsets no later than October 1, 2001;
    2. Ensure that at least 25 percent of all new handsets activated are ALI-capable no later than December 31, 2001;
    3. Ensure that at least 50 percent of all new handsets activated are ALI-capable no later than June 30, 2002; and
    4. Ensure that 100 percent of all new digital handset activated are ALI-capable no later than December 31, 2002 and thereafter.

5. By December 31, 2005, achieve 95 percent penetration of ALI-capable handsets among its subscribers.
- Once a PSAP request is received, the carrier shall, in the area served by the PSAP, within 6 months or by October 1, 2001, whichever is later:
    1. Install any hardware and/or software in the CMRS network and/or other fixed infrastructure, as needed, to enable the provision of Phase II E911 service; and
    2. Begin delivering Phase II E911 service to the PSAP.
  - Network-Based ALI Technology: As of October 1, 2001, within 6 months of a PSAP request, carriers employing network-based location technologies must provide Phase II information for at least 50 percent of the PSAP's coverage area or population. Within 18 months of a PSAP request, carriers must provide Phase II information for 100 percent of the PSAP's coverage area or population.
  - ALI Accuracy Standards: The FCC adopted the following revised standards for Phase II location accuracy and reliability:
    - For handset-based solutions: 50 meters for 67 percent of calls, 150 meters for 95 percent of calls;
    - For network-based solutions: 100 meters for 67 percent of calls, 300 meters for 95 percent of calls.
  - ALI Implementation Plan Report: The FCC required wireless carriers to report their plans for implementing E911 Phase II, including the technology they plan to use to provide caller location, by November 9, 2000. This report was aimed at providing information to permit planning for Phase II implementation by public safety organizations, equipment manufacturers, local exchange carriers, and the FCC, in order to support Phase II deployment by October 1, 2001.

### **CONDITIONS FOR ENHANCED 911 SERVICES**

The E911 Phase I requirements, as well as certain of the Phase II requirements, are applicable to wireless carriers only if the administrator of the designated PSAP has requested the service and is capable of receiving and utilizing information provided. In November 1999, the FCC revised its E911 rules to remove the prerequisite that a cost recovery mechanism for wireless carriers be in place before carriers are obligated to provide E911 service in response to a PSAP request. The PSAP must have the means of covering its costs of receiving and utilizing the E911 information, however, in order to make a valid request for E911 service. The FCC's rules do not mandate any specific state action nor specify any particular mechanism for funding the technology and service capabilities necessary to enable the PSAP to make a valid service request.

## **IMPLEMENTATION OF 911 ACT**

In August 2000, the FCC adopted an Order to implement the Wireless Communications and Public Safety Act of 1999 (911 Act), enacted on October 26, 1999. The purpose of the 911 Act is to enhance public safety by encouraging and facilitating the prompt deployment of a nationwide, seamless communications infrastructure for emergency services that includes wireless communications. The FCC initiated the implementation proceeding to address the provisions of the 911 Act and to fulfill the Congressional mandates set forth therein. Specifically, in the Order adopted in August 2000, the FCC took the following initiatives:

- designated 911 as the universal emergency telephone number within the United States for reporting an emergency to appropriate authorities and requesting assistance, effective upon August 29, 2000;
- sought comment on appropriate transition periods for areas in which 911 is not currently in use as an emergency number, as well as on service area-specific circumstances and capabilities that must be addressed before carriers can deploy 911 as the uniform emergency number; and
- sought comment on how the FCC should facilitate states' efforts to deploy comprehensive emergency communications systems – for example, through guidelines, meetings, or other information-sharing measures – in a manner that does not impose obligations or costs on any person.

The 911 Act also added provisions dealing specifically with wireless location information to 47 U.S.C. § 222, the section of the Communications Act that governs treatment of customer proprietary network information (CPNI) and subscriber list information (SLI). The Commission expects to initiate a proceeding to interpret and clarify these provisions in early 2001.