

Testimony

of

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on

Wireless Enhanced 911

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I. Introduction

Good morning Mr. Chairman and Members of the Subcommittee. Thank you for this opportunity to report to you on the Commission's policies and rules aimed at improving the quality and delivery of wireless 911 services throughout the Nation and, in particular, at implementing wireless Enhanced 911.

II. Importance of Wireless Enhanced 911 Service

Almost exactly five years ago today, the FCC adopted the first wireless Enhanced 911 rules, as a vital step in applying wireless technology to improving public safety. A wireless phone is a valuable emergency tool that can be taken almost anywhere. For many Americans, the ability to call for help in an emergency is the principal reason they own a wireless phone. But that help may never arrive, or may be too late, if the 911 call does not get through or if emergency response teams cannot locate you quickly. Our wireless 911 rules require that wireless carriers deliver 911 calls and implement the technology that provides the 911 call center with information about the caller's location.

We based those first rules in large measure on an agreement reached between the wireless industry and the public safety community back in 1996. Both recognized the importance of improving wireless 911 and, especially, of locating wireless 911 calls. To reach these goals, these parties developed, and filed with the Commission, a Consensus Agreement that proposed a transition plan to allow the wireless industry and technology vendors to develop and begin to deploy the capability to accurately locate 911 calls. This consensus transition plan included both scheduling and accuracy requirements. The goals it set were very challenging – they required

the development of sophisticated location technologies for all of the various transmission standards used by wireless carriers. It also required effective, cooperative efforts among wireless carriers, technology vendors, equipment manufacturers, local telephone companies, and state and local public safety organizations and governments. The Commission adopted E911 rules based on the schedule and the accuracy standards proposed in the parties' Consensus Agreement.

The Commission has recognized, however, that new technologies often develop in unexpected ways, both good and bad, and that we should be ready to adjust our rules both to take advantage of the opportunities, and to ameliorate the problems, presented by such developments. Accordingly, over the course of the intervening years, we have made revisions to our rules with the goal of facilitating the deployment of wireless E911. In particular, we have adjusted our program in several ways to reflect technological change and to allow carriers more choices to meet our standards. For example, when technology was developed to put GPS location capability in wireless handsets, we revised our rules to permit this promising new technology to compete with network-based solutions in providing location information. We also revised the methodology for assessing accuracy to make it more workable and tightened the accuracy requirements somewhat to better reflect technological developments and to further enhance public safety. And last year we granted a temporary, limited waiver of the accuracy requirements to VoiceStream, to permit use of a new hybrid location technology; *i.e.*, one that combines elements of the handset- and network-based approaches. Other Commission orders have addressed a range of obstacles to E911 deployment, including funding and disputes over the division of responsibilities between carriers and public safety call centers.

Now, in 2001, the end of the scheduled 5-year development period and the beginning of phased-in deployment are almost here. Under the Commission's rules, carriers are to begin the process of rolling out E911 Phase II on October 1, 2001, less than four months from now. When Phase II is implemented, it will generally enable the reporting of the location of 911 calls within 100 meters or better. However, I should add that this is not a flash-cut process – it will take several years for Phase II to be ubiquitously deployed. For example, with handset-based technologies, the rules require carriers to hit progressively higher penetration levels for location capable handsets, until they achieve 95 percent penetration by the end of 2005. Similarly, carriers choosing network-based technologies must incorporate the necessary hardware and software into their networks over a 6- to 18-month period after receiving a request from a PSAP for E911 service. These requests are expected to come in over the next few years as PSAPs become ready to utilize Phase II services at different points in time.

As we approach this benchmark, the need for wireless E911 is clearer and greater than ever. In 1995, there were 34 million wireless subscribers, who, according to the Cellular Telecommunications and Internet Association, made 20 million 911 calls a year. Today, there are more than 116 million wireless subscribers and the number of wireless 911 calls has more than doubled, to over 50 million a year. About 30 percent of all 911 calls nationwide are now made from wireless phones, and this percentage is growing. This dramatic increase in wireless 911 calls places increasing burdens on call takers at 911 call centers, particularly since accurate location information is not provided for any of those calls. E911 Phase II is needed more than ever to help police, fire and emergency medical teams locate emergencies more quickly and do their life-saving work more effectively and efficiently.

III. Current Status of Wireless E911

Where does wireless E911 stand now – and how near are the original Consensus Agreement parties to meeting the pledge made to begin accurately locating wireless 911 calls within five years? In my view, they are close to hitting that target. They certainly have come a long way. Promising location technologies have been developed and field tested. Necessary software is being developed and infrastructure equipment and handsets are being manufactured. Many carriers appear well on the way to deploying Phase II, and many call centers have requested Phase II and are preparing themselves to use this new location information effectively. But there are always challenges involved in deploying any major new technology on a mass market basis for the first time, and wireless location technologies are no different. To make the promise of wireless E911 a reality, much work remains to be done by call centers, vendors, and carriers to meet the challenges involved in deploying these lifesaving technologies.

We at the Commission will continue our work to make this happen, and to achieve complete deployment of Phase II location information across the nation as quickly as possible. Progress to date has been spurred, in large part, by the Commission's rules and decisions. Those rules have been definite in requiring that carriers implement E911, but flexible and practical in the means by which they do so. This approach requires cooperation and good faith effort on all sides to ensure successful deployment. We are committed to working with the stakeholders to resolve problems and speed deployment. But we are also committed to enforcement of our rules if, for example, parties simply ignore their obligations or fail to make good faith efforts to comply. Thus, it is important for all parties to work diligently to achieve the goals they agreed to five years ago, which are now reflected in the wireless E911 rules.

We share Congress' vision, embodied in the Wireless Telecommunications and Public Safety Act of 1999, of a seamless, ubiquitous, and reliable wireless telecommunications system that plays a critical, life-saving role in emergency communications. The specific provisions of the 911 Act – declaring 911 the national emergency number, protecting the privacy of location information while providing for its effective use in emergencies, and promoting liability protection – have significantly advanced those goals, and we commend this Subcommittee for its leadership in getting this important legislation enacted. We strongly support the vision of the 911 Act and remain determined to monitor and enforce the E911 rules to help achieve that vision.

At the same time, we will continue to be flexible and practical in applying the E911 rules, when the circumstances warrant that approach. Last year, in granting the VoiceStream waiver, the Commission set out specific standards for Phase II waivers. Those standards, fundamentally, require carriers to show the Commission what they can and will do to provide Phase II location information, not simply what they cannot do. The Commission expects wireless carriers to take concrete steps toward achieving Phase II, while recognizing that difficulties may arise. Different carriers may face different problems and opportunities, because of the technology they use or the geographic areas they serve. We are currently considering several waiver requests and have heard reports that other carriers are preparing additional requests. We plan to address these requests based on the specific showings and facts presented to us, with our focus on the most practical and realistic means of achieving the objectives of promoting public safety and implementing Phase II as soon and as fully as possible.

In fashioning this program, we are reassured by factual information indicating that there is wireless location technology available capable of locating 911 callers much more accurately than is in place today and think that it is time to begin deployment. As that deployment proceeds, we expect that the technology and system-wide performance will improve, and as customers increasingly understand how location capability makes their lives safer, they will insist on having it available. They will come to rely on automatic wireless location identification in the same way they rely on air bags and seatbelts in their cars. And once customers begin to use wireless location technology, competition and experience will help make it not only more accurate and reliable, but more useful for other purposes as well. The future of this technology is, I am confident, strong, once it is actually deployed and this "virtuous cycle" begins to kick in. But to get to that future, all of us involved in this process will have to redouble our efforts to see that the promise of this life-saving technology is fulfilled.

IV. Conclusion

I would like to thank the Subcommittee for this opportunity to provide information on the Commission's wireless E911 program. I look forward to updating this information as wireless E911 advances and to answering any of your questions.