

JOINT WRITTEN STATEMENT

of

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Commissioners

Federal Communications Commission

Hearing

on

Wireless E911

**Before the
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Good morning, Mr. Chairman and distinguished Members of the Subcommittee. We appreciate this opportunity to appear before you this morning on behalf of the Federal Communications Commission (FCC) to discuss the Commission's work in support of the deployment of Enhanced 911 (E911) wireless services throughout the United States. This hearing is an important opportunity to focus a spotlight on a critical public safety matter, and we commend Chairman Burns and the other members of the Congressional E911 Caucus for their leadership in this area.

I. Introduction

Since the tragic events of September 11, 2001, and during these uncertain times, we are reminded now more than ever of the importance of our Nation's emergency response system and the public's reliance on dialing 911 to reach first responders in times of crisis. Increasingly, 911 calls are being made from wireless phones. Public Safety Answering Points (PSAPs) report that they receive 30 to 50 percent of emergency calls from wireless phones.

An important goal of the FCC is to ensure that each American who uses a wireless phone has enhanced 911 capabilities. This is made more challenging by the fact that wireless phones are mobile. Mobility creates technological challenges related to automatic location identification when dialing 911 – a crucial element in responding to emergency situations.

The FCC's E911 regulatory regime is a government-led effort to mandate the development and deployment of wireless 911 automatic location identification technology prior to commercial demand for that product. Indeed, the FCC's initial decision in 1996 to impose an

E911 requirement on mobile wireless carriers was not based on any statutory mandate, nor was it based on any tangible technological showing. Subsequently, in 1999, Congress passed S. 800, the Wireless Communications and Public Safety Act of 1999, which was championed by Chairman Burns, among others. This legislation mandated 911 as the universal number for emergency calls and furthered E911 implementation by addressing key issues such as privacy and carrier liability.

The deployment has been a tremendous undertaking full of uncertainty about the technology, the timing, and the costs for all parties involved. The Commission set an ambitious roll out schedule for the deployment of wireless E911. In hindsight, wireless carriers and their vendors may not have fully appreciated the difficulties in deploying such a new, but important, technology. All parties have been frustrated by unforeseen obstacles, but continue to work through the issues to ensure successful deployment of a nationwide E911 system.

As part of our commitment to the deployment of Enhanced 911 nationwide, the FCC has worked very hard over the past 18 months to clarify the rules and schedules governing the deployment and implementation of E911 services. We are pleased to report that many of the wireless carriers have followed suit. Moreover, several technological solutions to identify a wireless 911 caller's location are now available, with more anticipated in the future.

Now that the E911 rules and policies have been clearly established, our focus has rightly turned to ensuring prompt wireless E911 implementation. Implementation is an extremely complex process, and the Commission has taken firm steps to ensure that wireless carriers

assume their responsibility in ensuring that the deployment of wireless E911 is not unnecessarily delayed. Enforcement actions have been initiated, million dollar fines have been issued, and consent decrees now are in place.

To speed full implementation, greater coordination is necessary among all stakeholders – the FCC, wireless carriers, PSAPs, location technology vendors, incumbent local exchange carriers (ILECs), local and state governments, equipment manufacturers, and 911 service providers. And the FCC will do its part. We are pleased to announce that the FCC will launch an E911 Coordination Initiative to complement current efforts by those parties to speed and rationalize the E911 deployment process, and to ensure that the all parties and the public have clear expectations about the roles of the respective parties and deployment plans. The Coordination Initiative will be launched with a joint session of all the affected parties and the public at the Commission on April 29, 2003. In particular, the event will follow up on the findings and recommendations of the Commission’s Hatfield Report on E911 deployment. We look forward to a full dialog on these issues that will spur efficient and effective E911 deployment.

Not all aspects of E911 deployment are within the Commission’s control, however. For example, financial support and assistance from state and local authorities to provide funding to the PSAPs for their part in this important initiative is also imperative. We know that members of Congress and particularly members of this Subcommittee share the Commission’s goal that the entire Nation will have access to wireless E911 services as soon as practicable. We are pleased that Congress is continuing its active role in the roll out of wireless E911 through efforts such as

the bipartisan Congressional E911 Caucus, co-sponsored by Senators Burns and Clinton and Representatives Shimkus and Eshoo. We look forward to working with you on achieving the goal of a nationwide E911 system.

II. Background

The FCC and Congress have been working toward E911 deployment for almost a decade. In 1996, based in large part on a consensus agreement developed by the wireless carrier and public safety communities, the FCC established two phases of E911 deployment. Phase I requires carriers to deploy a service that provides the telephone number of the 911 caller and the location of the cell site or base station receiving the 911 call. Phase II service requires wireless carriers to provide precise location information for wireless E911. Because of technological challenges associated with Phase II deployment, the FCC has allowed nationwide wireless carriers to commit to individual compliance plans. In some cases, wireless carriers have violated the terms of their compliance plans, and these violations have led to enforcement actions.

III. Wireless E911 Deployment Today

The deployment of E911, because of technological and other challenges, was never intended to be a flash-cut process, but a gradual phase-in over several years. It is estimated that there are between 5,000 and 7,000 PSAPs across the Nation. Despite these challenges, wireless E911 is becoming a reality. Deployment of Phase I service is well under way. Of the Phase I requests received from PSAPs, five of the six nationwide carriers reported that they have fulfilled approximately 70 percent or more of these requests, and two wireless carriers, AT&T

Wireless and Verizon Wireless, report that they have each fulfilled over 90 percent of Phase I requests received.

The precise rollout of Phase II service, like that of Phase I, depends in large part on when the PSAP makes a request to the wireless carrier for Phase II service. PSAPs must have the ability to upgrade their systems to receive location information and have cost-recovery mechanisms in place before a wireless carrier must implement Phase II pursuant to a PSAP request. Unfortunately, because of budget cuts, many jurisdictions do not have the required funding to upgrade their PSAPs so that they are technologically ready to support Phase II implementation.

When wireless carriers implement Phase II services, they may select either a handset-based or network-based solution. Wireless carriers that use network-based solutions must deploy Phase II to 50 percent of the PSAP's coverage area within six months of a valid request, and to 100 percent of the PSAP's coverage area within 18 months of a request, unless the parties agree upon a different schedule. Wireless carriers choosing a handset-based solution must complete any necessary upgrades to their systems within six months of a PSAP request. Additionally, the rules provide for specific benchmark dates by which these carriers must begin to sell and activate a certain percentage of handsets that provide location information. By December 31, 2005, these carriers must ensure that 95 percent of their customers' handsets are location-capable.

The 2005 date is popularly referred to as the final implementation date of Phase II wireless E911. However, it is important to note that the December 31, 2005, date primarily

requires carriers choosing a handset-based Phase II solution to ensure that at least 95% of their subscribers have location-capable handsets. As the Commission does not have jurisdiction over PSAPs, there is no corresponding requirement that PSAPs actually be able to receive Phase II data at that time. Also, those carriers who have selected a network-based solution will continue to deploy Phase II within six months of a valid PSAP request. With regard to the 2005 date for carriers with handset-based technologies, the Commission has held firm to this implementation date for location-capable handset deployment. We recognize that a continuing set of delays could seriously hinder E911 deployment and therefore could reduce safety-of-life services for all Americans.

According to the most recent reports submitted to the FCC by the nationwide wireless carriers, Phase II has been deployed in approximately 125 localities across the country, to more than 300 PSAPs in 16 states. Multiple wireless carriers are providing Phase II service to their customers in metropolitan areas such as Houston, Dallas/Fort Worth, Chicago, East St. Louis, as well as Rhode Island. At least one wireless carrier has deployed Phase II service in cities such as Kansas City, Miami, Richmond, San Antonio, and Indianapolis.

Additionally, with respect to location-capable handsets, every nationwide carrier using a handset-based approach is offering at least one location-capable handset model, in accordance with applicable benchmarks. Both Sprint PCS and Verizon Wireless have reported that they are offering their customers at least ten different GPS-enabled handset models. Sprint reported that it has sold over 5.8 million GPS-enabled handsets.

IV. FCC Actions To Promote Continued E911 Deployment

To further promote the successful implementation and deployment of nationwide E911, the FCC has engaged in four major areas of activity: (1) enforcement, (2) implementation, (3) investigation of technical and operational challenges, and (4) outreach and coordination. As discussed below, all four areas are essential to ensure that E911 deployment moves forward as swiftly and effectively as possible.

A. Enforcing FCC Directives

The Commission requires carriers to comply with our E911 rules, and during the past year we have not hesitated to use our enforcement power when wireless carriers are not justified in failing to meet the FCC's requirements. In cases where the public interest warrants, we have provided additional flexibility in situations where delayed compliance is beyond the wireless carrier's control.

When the FCC last reported to Congress on the status of E911, we indicated that individual compliance plans for the nationwide carriers were in place. Since that time, the Commission has taken the following actions where carriers have failed to comply with these plans:

- Entered into consent decrees with AT&T Wireless (June 2002) and Cingular Wireless (May 2002) regarding deployment of E911 over their Time-Division Multiple Access (TDMA) Networks, notwithstanding the fact that both carriers plan to phase out much of their TDMA networks as they transition to the Global System for Mobile Communications (GSM) standard. These consent decrees require AT&T Wireless and

Cingular Wireless each to make a \$100,000 voluntary contribution to the U.S. Treasury, to deploy E911 Phase II technology at their TDMA cell sites, and to provide Phase II service in response to PSAP requests by specified benchmark dates. The consent decrees also require the carriers to make automatic penalty payments for failure to comply with deployment benchmarks and to submit periodic reports on the status of their compliance efforts.

- After issuing a Notice of Apparent Liability against AT&T Wireless for apparent E911 violations concerning its GSM network, the Commission and AT&T Wireless entered into a consent decree in October 2002 to address these apparent violations. This decree requires AT&T Wireless to make a \$2 million voluntary contribution to the U.S. Treasury, to deploy E911 Phase II technology at its GSM cell sites and provide Phase II service in response to PSAP requests by specified benchmark dates. The consent decree also requires AT&T to make automatic penalty payments for failure to comply with deployment benchmarks and to submit periodic reports on the status of its compliance efforts.
- Recently, the Enforcement Bureau initiated an investigation into Cingular Wireless's and T-Mobile's deployment of E911 with respect to their GSM networks and will make a recommendation to the FCC shortly on how to proceed.

The Commission continues to monitor each carrier's progress in deploying Phase I and Phase II E911 and to investigate alleged failures to meet FCC-mandated benchmarks. Where

warranted, the FCC will continue to take quick action to ensure that wireless carriers comply with the FCC's E911 rules and regulations.

It is worth noting that the three wireless carriers deploying GSM networks have experienced difficulties in meeting their benchmarks due to technology problems. The Commission has repeatedly met with these carriers to emphasize the seriousness of the existing benchmarks. All three carriers were referred to the FCC's Enforcement Bureau. Within the past six months, two of those carriers have announced their decision to switch location technologies to ensure improved performance of their E911 systems.

Finally, on a separate enforcement front, in December 2002, in response to allegations made in lawsuits filed by the Wireless Consumers Alliance, the Commission's Enforcement Bureau initiated an investigation against ten equipment manufacturers regarding possible violations of the 911 call processing rule with respect to certain handset models. The Enforcement Bureau sent letters to the manufacturers requesting information as to whether a total of 33 handset models are in compliance with the 911 call processing rule. The Bureau is reviewing the responses and preparing follow-up letters to some of the manufacturers and working with the FCC's Office of Engineering and Technology on possible field and lab testing protocols to ensure the manufacturers are in compliance with our rules.

The 911 call processing rule requires that all mobile phones manufactured after February 13, 2000, and capable of operation in an analog mode, incorporate one or more of the special procedures for processing 911 calls endorsed or approved by the Commission. Such procedure

must recognize when a 911 call is made and must override any programming in the mobile phone that determines the handling of a non-911 call in order to permit the 911 call to be handled by an analog carrier other than the user's preferred analog carrier.

B. Moving Towards Full Implementation

Although significant progress is being made, we still have a long way to go before wireless E911 is deployed across the Nation. In addition to actively enforcing its existing rules, the FCC is also looking at new ways to help speed and smooth implementation of E911 across the country. To this end, over the past year, the FCC has made a number of E911-related rulings, including:

- Setting a deployment schedule for smaller, non-nationwide carriers to begin to provide E911 service. Specifically, under this schedule, mid-sized carriers were required to begin deployment on March 1, 2003 and small carriers will begin deployment later this year. Like the nationwide carriers, mid-sized carriers must report regularly on their E911 deployment progress, and smaller carriers must provide a report outlining their plans for E911 deployment.
- Clarifying PSAP readiness issues and providing for a certification process for wireless carriers where wireless carriers have completed all necessary steps toward E911 implementation that are not dependent on PSAP readiness.
- Issuing guidance on cost recovery issues regarding the demarcation point between PSAPs and carriers.

- Issuing a Further Notice of Proposed Rulemaking seeking public comment on how the 911 and E911 rules should apply to technologies not currently covered by the rules, such as Mobile Satellite Service, telematics services, and emerging voice services and devices; and seeking updated information on issues involved with the delivery of callback and location information on 911 calls from stations served by Multi-Line Telephone Systems, such as PBXs. This item provides an early forum for the possible extension of our 911 and E911 rules.

In other instances, the Commission directly responded to concerns raised by several of the national public safety organizations regarding the unnecessary diversion of PSAP resources to respond to unintentional or harassing 911 calls from wireless phones. In October 2002 and pursuant to a specific public safety request, the Commission issued a public notice clarifying that its 911 call-forwarding rule does not preclude wireless carriers from blocking fraudulent 911 calls from non-service initialized (NSI) phones pursuant to state and local laws. The public notice highlighted the waste of public safety resources that results from fraudulent 911 calls made from NSI handsets, which lack a call back number. The Commission continues to look at the issue of NSI wireless phones through an ongoing proceeding.

In December 2002 the Commission released a Staff Report on unintentional wireless 911 calls, which occur when a consumer accidentally dials 911, often through use of a pre-programmed auto-dial key. The report confirmed that unintentional wireless 911 calls pose a significant problem for PSAPs, and outlined steps that industry participants can and should take to address the problem. For example, the major wireless carriers have requested that their

vendors cease shipping phones with an active, auto-dial 911 feature. In nearly all cases, wireless phones distributed by these carriers have not had an auto-dial 911 feature since at least February of 2002. In addition, the Cellular Telecommunications and Internet Association (CTIA) has modified its handset certification program such that certified handsets may not be pre-programmed with an auto-dial 911 feature.

The FCC has also received a commissioned report of an independent expert, Dale Hatfield, which examined the technical and operational issues affecting wireless E911 implementation. Mr. Hatfield, a widely respected telecommunications expert with nearly four decades of experience, met with interested parties to elicit more detailed information regarding E911 deployment issues. In October 2002, he released a report to the Commission containing his findings and recommendations. The Commission sought public comment on the Hatfield report late last year, and the Commission is actively considering Mr. Hatfield's recommendations.

In his report, Mr. Hatfield made a number of findings identifying obstacles to E911 deployment, which include:

- Wireless carrier implementation issues;
- ILEC cost recovery and technical issues;
- Cost recovery and PSAP funding issues;
- Ongoing need for PSAP education, assistance, and outreach; and
- Lack of comprehensive stakeholder coordination.

While the FCC had already become aware of many of the issues raised in the Hatfield report and was working on potential solutions, the Hatfield report suggested many novel approaches, which the FCC is actively studying and, in some cases, implementing.

C. Overcoming Technical and Operational Challenges

The Hatfield report confirmed that ILECs play a critical role in the deployment of wireless E911 service. ILECs generally serve as 911 system operators, providing trunks, facilities, and services necessary to connect wireless carriers and PSAPs. For Phase II, they also provide the Automatic Location Identification (ALI) databases that are used for wireline 911 and must be upgraded to accommodate wireless ALI data. The FCC has sought cooperation from the ILECs to fulfill their E911 implementation role. In response to concerns from both the PSAP and wireless communities, late last summer, the FCC requested additional information from the six major ILECs regarding their role in E911 deployment, including specific information on technical issues and cost recovery plans.

Additionally, Commission staff has been working with state commissions, wireless carriers, PSAPs, and ILECs regarding specific cost issues that have been brought to our attention. In one instance, the Commission staff issued a letter regarding a dispute over responsibility for the costs to upgrade ALI databases for purposes of deploying wireless E911 Phase II service. We fully intend to take action where appropriate to ensure that actual wireless E911 deployment is not delayed because of perceived regulatory disputes. In an Order released last fall, the Commission similarly expressed concern over the potential threat to timely wireless deployment due to a lack of cooperation by the ILECs and noted that it would consider

instituting enforcement actions or imposing additional regulatory obligations on ILECs, if necessary.

The Hatfield report also confirmed that there continue to be E911 implementation issues outside of the Commission's purview. Specifically, we note that PSAP funding continues to be a significant barrier to deployment. Although cost recovery mechanisms are in place in a number of states, these funds have on occasion been diverted for other uses unrelated to E911. If PSAPs do not have funds in place to upgrade their systems, Phase II service will not be implemented in those areas. We know that this issue already has been raised by the Congressional E911 Caucus, and we applaud your efforts to resolve this critical issue.

D. Coordination and Outreach

Wireless E911 implementation is a highly complex process that requires an enormous amount of coordination. Both coordination and outreach are essential components in the Commission's ongoing effort to facilitate E911 implementation. We look forward to working with the Chairman and our fellow Commissioners on our E911 Coordination Initiative. We believe that the upcoming April 29 meeting will complement the national public safety organizations' leadership efforts and result in substantial progress for all parties.

The Commission's Wireless Telecommunications Bureau (WTB) and Consumer and Governmental Affairs Bureau (CGB) have provided ongoing outreach to consumers, public safety, and state legislators on E911 issues. In addition to speaking at numerous conferences, the Bureaus have served to educate PSAPs, state legislators, and the public on 911 and E911 issues.

With respect to educating the public, CGB most recently established a Consumer Alert on unintentional 911 calls and WTB has established a web page for 911 and E911 issues, which include Fact Sheets on the wireless E911 requirements generally and the nationwide carriers' obligations to deploy E911 pursuant to their approved compliance plans. We will continue these efforts and begin other outreach efforts to ensure that E911 implementation is as efficient as possible.

The Commission staff also has been monitoring the E911 coordination efforts of other organizations to enhance stakeholder coordination. We applaud the joint efforts of industry and public safety to focus on E911 deployment and coordination of stakeholders. For example, public safety outreach efforts such as the National Emergency Numbering Association's Strategic Wireless Action Teams Initiative and the Association of Public-Safety Communications Officials' Project Locate have been instrumental in working with local PSAPs to ensure PSAPs are aware of their responsibilities and to assist with on-the-ground implementation efforts. Additionally, the joint industry and public safety group, Emergency Services Interconnection Forum (ESIF), an arm of the Alliance for Telecommunications Industry Solutions, has worked to develop and refine technical and operational interconnection issues to ensure wireless 911 will be available to everyone.

Last month, ESIF submitted to the Commission a PSAP Readiness Package, which was developed through the joint efforts of wireless carriers, 911 service system providers, and public safety organizations. This serves as a useful tool for PSAPs that are unfamiliar with the E911 request process. The Department of Transportation has also established a Wireless E911

Initiative, which includes efforts to bring national leadership and attention to the E911 issue, to provide technical assistance and guidance and training to accelerate PSAP readiness, and to engage the Nation's leading information technology experts in a reexamination of the technological approach to E911.

V. Conclusion

Wireless communications have become increasingly important to our national communications infrastructure and our everyday lives. That significance is further validated by the fact that the United States is the only nation in the world that has required that wireless telephones are E911 capable to assist the public safety community in performing their vital work. All the stakeholders who have worked on this process – Congress, the public safety community, wireless carriers, ILECs, state and local governments, equipment vendors, technology vendors, and the Commission – should be proud of this accomplishment. However, these very same stakeholders must continue to be diligent in completing the availability of Nationwide E911 in the near future.

The Commission continues to make wireless E911 deployment one of its highest priorities. We have come a long way, and through some difficult times, but we are optimistic about the future of wireless E911. We appreciate Congress's efforts, and in particular, the efforts of members of this Subcommittee, to keep this issue in the forefront.

We would like to thank the Subcommittee for this opportunity to provide information on wireless E911. We look forward to hearing your views and answering any questions you may have.