STATEMENT OF
JOHN MELCHER
PRESIDENT, NATIONAL EMERGENCY NUMBER ASSOCIATION

BEFORE THE
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
SUBCOMMITTEE ON COMMUNICATIONS
U.S. SENATE

"E9-1-1 Solutions and Progress"
March 5, 2003

Mr. Chairman, members of the Committee, Senator Burns, thank you very much for providing me with this opportunity to appear before you today. My name is John Melcher, and I serve as the President of the National Emergency Number Association (NENA) and as the Deputy Executive Director of the Greater Harris County [Texas] 911 Emergency Network.

Acknowledgements and Appreciation

Before we get started, allow me to extend a special thank you to the Committee and the United States Senate for all your individual and collective efforts and leadership on these critical issues. Mr. Chairman, I would especially like to thank you (Senator Conrad Burns) for your commitment to 9-1-1 in the Committee, Congress and throughout the nation. In 1999, you sponsored the Wireless Communications and Public Safety Act, an important roadmap for improving emergency communications, and specifically for deploying wireless E9-1-1. As a member of the United States Senate and Chair of the Subcommittee on Communications you have furthered the education of your colleagues and constituents. Most recently, you led the formation and creation of the Congressional

E9-1-1 Caucus, a bi-partisan, bi-cameral caucus to advance the issues, education and discussion of enhanced 9-1-1 services. In these many efforts, you have been a passionate supporter of technology, communications, first responders and 9-1-1. I extend my personal gratitude and thanks of the 9-1-1 industry and nation for your work and dedication.

Additionally, I would like to thank Senator Burns' colleagues in the United States Congress and the co-chairs of the Congressional E9-1-1 Caucus, Senator Hillary Rodham Clinton and Representatives Anna Eshoo and John Shimkus.

Thanks also to my fellow panelists from the Federal Communications Commission (FCC), Commissioners Abernathy and Adelstein; New York Assemblyman David Koon; Ms. Thera Bradshaw of the Association of Public Safety Communications Officials International (APCO); Mr. Mark Tuller of Verizon Wireless; Mr. Mike Amarosa of TruePosition; and Ms. Jenny Hansen of Montana, all of whom we continue to work closely with on these important issues.

.

The Voice of 9-1-1

Serving more than 7,000 members nationally, NENA represents the nation's very best in 9-1-1. Our membership consists of fire, emergency medical services (EMS), law enforcement, private vendors, industry and 9-1-1 officials throughout the nation—all professionals, dedicated to advancing the use of 9-1-1 for all emergencies, citizens and

communications devices. This membership is important because it collectively and uniquely represents the technical, operational and policy foundation and expertise to make 9-1-1 work like it should. It also represents the decision makers, stakeholders and leaders of 9-1-1 reaching into the disciplines of telecommunications (both wireline and wireless), public safety, and third party service providers. A broad foundation of public and private service providers, NENA is truly ***the*** "Voice of 9-1-1."

Having been involved in the 9-1-1 industry for well over two decades – from a dispatcher, to a paramedic, to my current position as chief operating officer – I have personally participated in the many stages of implementation and deployment of E9-1-1. From the inception of new technology to the detail and complexity of public policy, I can personally attest that the focus of this hearing is truly important. It recognizes that E9-1-1 implementation requires a partnership, a sequencing of leadership and a commitment of all parties to work together in a coordinated way to overcome barriers and challenges. It also recognizes the critical need to move forward as quickly as possible, and the opportunity to ensure that the American public receives the very best in calling 9-1-1 from any communication device, at any time, anywhere.

E9-1-1 implementation is a complex and challenging process. While there is much to applaud in the many broad-based efforts to implement E9-1-1, the goal of E9-1-1 "anywhere and everywhere" remains elusive. Homeland security issues, and the continuing reminders of the essential role E9-1-1 plays in our public safety, emphasize

the need to move past the rhetoric and truly address the systemic issues of E9-1-1 implementation.

Technology and Public Safety Answering Point (PSAP) Readiness

The deployment of E9-1-1 services, coupled with new technologies, has dramatically improved personal safety and security and given new promise to what is possible. What was once a dream is now a reality in places like St. Clair and Bond County, Illinois; Spartanburg, South Carolina; Tarrant and Harris County, Texas and the State of Rhode Island, just to name a few.

In these jurisdictions, wireless 9-1-1 callers are being located, new technologies are being introduced, lives and resources are being saved.

Just last Wednesday (February 26, 2003), Euless, Texas Police Corporal Mike Privitt, was saved by the newly-deployed wireless E9-1-1 system in Tarrant County, Texas. Driving home after working the nightshift, his truck hit a patch of ice, causing it to roll over several times down a deep embankment. Dazed and confused as his pickup lay upside down in a remote area, Privitt had no idea where he was. He called 9-1-1 from his wireless phone. Receiving the call in Tarrant County, Sergeant Jeromie Penrod was able to use the E9-1-1 information to locate Corporal Privitt in matter of seconds. Rescuers arrived just minutes later. Resources were saved and tragedy averted.

Another shining example of technology and E9-1-1 is here with me today in the gallery Officer Chris Murray of the Pasadena, Texas Police Department. Officer Murray's life has returned to normal after a potentially fatal accident, thanks to the deployment of E9-1-1, Automatic Crash Notification (ACN) life saving technologies.

Two days after Christmas, on the evening of December 27, 2002, Officer Murray was returning to the station after completion of his patrol duties. Driving his police cruiser, which was recently outfitted with a prototype telematics crash detection module, he temporarily lost control of his vehicle and veered off the roadway. Attempting to correct his slide, he turned his vehicle back on to the roadway, but the speed of the vehicle along with slippery conditions made it impossible for him to gain full control. Instantly he was catapulted across the roadway, nose-diving into a drainage ditch, flipping the vehicle, smashing into a utility pole and finally coming to rest upside down on the roadway. Unconscious, inverted and trapped, Officer Murray lay waiting for help to arrive.

Previous to impact, Officer Murray had been in radio contact with his patrol dispatchers. From the dispatcher perspective, it was obvious that something had gone terribly wrong. Officer Murray wasn't responding on his radio. However, the recently deployed telematics crash detection module was. Within seconds of the incident, detailed information providing the exact location of the event, the point of impact, along with an open communications channel was shared on *the* 9-1-1 network infrastructure with the PSAP receiving all the relevant data on the calltaker's screen. The Life Flight team was

immediately dispatched. Flown to the Trauma Center at Houston's Hermann Hospital, Officer Murray remained in and out of consciousness for several hours. After regaining consciousness several hours later, the doctors said that it was the speed of finding him and getting him to the hospital that prevented serious injuries.

All this was possible because Officer Murray's vehicle had been equipped with life-saving technology and the 9-1-1 network was able to receive and share detailed location and critical crash information with multiple responders.

Recognizing the power of such technologies and the communications networks to provide emergency services, the FCC recently sought comment on a notice of proposed rulemaking, asking whether its regulations on access to emergency service communications networks and systems should be expanded to address a variety of other devices and services, including mobile satellite service ("MSS"), telematics (in-vehicle) services, multi-line telephone systems ("MLTS"), resold cellular and PCS services; pre-paid calling services; "disposable" phones; automated maritime telecommunications systems ("AMTS"); and "emerging voice services and devices." As the leading 9-1-1 constituency, expert and advocate, NENA applauds the Commission's leadership in seeking comment on these critical services and taking a proactive stance on emergency services. It is essential that we begin to anticipate change in the way people communicate and the potential impact that these changes will have on access to emergency services. We can and should be proactive in addressing the impact on future technologies and systems, instead of dealing with the impact of change once it has

occurred—always looking back, or, like Alice in Wonderland, running as hard as we can to stay in the same place.

Preparing for the future, NENA's Future Path Plan is integrating the growing variety of non-traditional ways to access 9-1-1 by adding components and functions to the overall 9-1-1 system to ensure that new methods of access are more effective, more dependable, and more economical than what we have, or than other alternatives. This technical plan for future 9-1-1 systems is providing a long-term direction for development to support new call sources and needs.

In this, change can be as much an opportunity as it is a challenge.

One of the barriers most often cited by wireless carriers is the issue of "PSAP readiness" and the FCC-required implementation timeframes that affect the timing and pace of deployment.

While it's true that there are PSAPs that are not "ready," there are a growing number that are. It should also be emphasized that PSAP readiness is not just a direct PSAP concern. E9-1-1 implementation depends upon the timely and coordinated production and availability of Phase II capable handsets, other location technology, appropriate network infrastructure upgrades, PSAP support technologies and other technical enhancements.

Product development and infrastructure upgrades presumably depend upon timely orders from customers, and those, in turn, on a willingness and understanding of the supplier of what is expected and what is needed in project management expertise. In the interest of emergency services for wireless customers and the public in general, best efforts by all parties should always be the expectation. Sadly this is often not the case, and in some instances we are confronted with a conspicuous absence of engagement.

Ultimately wireless 9-1-1 calls must be routed to a PSAP on the network infrastructure of a landline telephone company. This "9-1-1 System Service Provider" is usually an incumbent local exchange telephone company (ILEC). A critical stakeholder in the process, ILEC's have been for the most part absent from both the original planning and FCC rule making on this subject. Subsequent regulatory actions have considered the ILEC simply a vendor to the PSAP, in spite of their central position in the interconnection/interface complexities uniquely brought to the table in wireless E9-1-1. This is untenable to the public safety community and dangerous to the wireless calling community.

In this environment, PSAP readiness is more of an issue of leadership. It requires productive, timely and efficient relationships between the wireless carrier, ILEC and PSAP, along with other third-party vendors and decision makers. Constant communications between the parties, project management, and forecasting of needs are critical. Landline trunking must be ordered and provisioned, technical interface issues addressed, and overlapping database functions coordinated. And, finally, much of this

must occur within a diverse and complicated regulatory environment, and it needs to be paid for. If all of this doesn't work well, the pace of deployment can be materially impacted.

I understand that sometimes public policy, presenting distinctive and beneficial public goals, may complicate and sometimes compete with legislation, and implementing rules and regulations. An example of this are LATA boundaries, which have been used to divide local from long-distance service. These are important to the way service providers compete with each other, but they also complicate the timely and cost effective provision of 9-1-1 service. Perhaps a balancing of both objectives is the best answer here.

Without a doubt, it's easy to point fingers and lay blame, but all parties can and should agree that PSAP readiness is an issue that reaches beyond the bricks and mortar of the PSAP. ***It's a systemic issue for all parties to address in a sense of common purpose, the public interest, frequent communications and cooperative spirit.***

Resources and Funding

Closely linked to the issues of technology and PSAP readiness is the availability of sustained resources and funding to deploy wireless E9-1-1.

FCC Docket 94-102, requires that wireless carriers provide location information from wireless phones by December 31, 2005 in any case where a valid PSAP request has been received. In order to do so, many PSAPs require sustained resources to be able to first accept, and then process Automatic Number Identification and Automatic Location Information (ANI/ALI) from wireless phones, through upgrades of technology and recovery of basic costs. Unfortunately, in far too many of our nation's communities, these E9-1-1 needs are not being met simply because ***9-1-1 funds and resources are not being allocated for 9-1-1 use.***

The costs of maintaining and operating a 9-1-1 system are significant and necessary. Technical, operational and financial resources are required from both the public and private sector. Reliability, redundancy, innovations and challenges in modern communications are constantly re-defining 9-1-1 costs and economies of scale. Funding our nation's 9-1-1 system is not only a challenge in today's world, but also a necessity to enhancing all emergency systems in the future.

In the days of the Bell monopoly many of these costs were included in a consumer's basic service. Early 9-1-1 cost recovery mechanisms consisted of costs being passed on directly to the consumer in the form of surcharges and fees on phone bills. Understanding that 9-1-1 is a benefit to the public as a whole, these fees and surcharges were used for direct 9-1-1 expenditures for both the public and private sector.

Training of dispatchers and turnover of highly skilled employees remains a challenge and obstacle for most PSAPs. Tight budgets and scarce resources make it that much more difficult to retain highly skilled employees. New technologies require more focus on education and training, while simultaneously creating a more skilled work force that requires additional resources for wages, training and employee retention. Dispatchers and call takers are dedicated public servants, but they need resources and skills to appropriately answer the call for help.

As new communications technologies emerged, such as mobile telephony, surcharges were adopted for wireless phone bills to pay for 9-1-1 services. Today, there are approximately 40 states in the U.S. that currently collect a surcharge for E9-1-1 from wireless phone customers. All too often these monies sit idle. Not for lack of PSAP need, but rather waiting for pricing from LEC tariffs, wireless carrier requirements or other local priorities. Caught in the middle, PSAPs are torn between making request for services that haven't been priced or simply not requesting E9-1-1.

Instead of paying to develop and deploy E9-1-1, these monies are being spent on other government needs that may or may not pertain to 9-1-1. Accruing large sums of money in short periods of time, these funds are being reallocated to other purposes within the general fund or simply lost in the appropriations process altogether.

Boosting revenues for strained government budgets and programs, 9-1-1 funding has become an easy target. Subsequently, without appropriate funding and resources our

9-1-1 systems become antiquated, obsolete and unable to handle new communications technologies being used by the public. This results in missed deadlines, under-funded systems or no deployments at all.

While I'm not questioning the right of state legislators to make critical public policy decisions regarding their budgetary needs, this alarming trend is, at best, slowing our progress towards truly universal 9-1-1 service, and, at worst, outright endangering its implementation. The nature of emergency services will always be local but the access to those services is a national expectation.

Protecting and investing 9-1-1 monies for 9-1-1 purposes is a principle and policy agenda that we can and should all agree on.

Solutions, Emergency Services Interconnection Forum (ESIF) and NENA's Strategic Wireless Action Team (SWAT)

Since the adoption of the Consensus Agreement in 1996 between the wireless industry and public safety, much has been made of finding solutions to specific technologies, funding obstacles and regulatory barriers. And in the years that have followed, we have seen leaders and opportunities rise to the occasion.

Members of this body (United States Senate) took it upon themselves to establish a framework for implementation by passing the Wireless Communication and Public

Safety Act of 1999. Landmark legislation for public safety and 9-1-1, the Act identifies a need and challenge of national leadership by designating 9-1-1 as ***the*** universal emergency telephone number for wireline and wireless phones. Four years later, as I've noted, the Act still stands as a shining example of leadership and commitment to our nation's emergency communications system.

As the chief regulatory body, the FCC has demonstrated a commitment to the Consensus Agreement and a willingness to inquire by commissioning the Hatfield report to better understand the technical roles and responsibilities of the many parties that are required for E9-1-1 deployments. We applauded and praised the FCC and Mr. Hatfield for such a thorough report and analysis of wireless E9-1-1 and see it as an important roadmap for the technical challenges that lie ahead.

Likewise we have worked with our fellow public safety organizations to support activities such as APCO's Project Locate and the Public Safety Foundation of America, which provides grants to expedite the implementation of E9-1-1. Similarly, we have worked and supported a joint project with the United States Department of Transportation (USDOT) Wireless Implementation Program. In this effort, NENA has taken the lead to survey State and County 9-1-1 coordinators and provide national information on readiness of states, counties and PSAPs for wireless E9-1-1.

Of special note, working with the Alliance of Telecommunications Industry Solutions (ATIS), NENA co-convened the Emergency Services Interconnection Forum

(ESIF) to help provide a venue for the telecommunications industry, public safety and other stakeholders to develop and refine technical and operational interconnection issues critical to this process. ESIF allows many different telecommunication entities to fully cooperate and interconnect with each other in order to determine the best practices and solutions necessary to deploy E9-1-1 services. (Please refer to the testimony of Susan Miller, President of ATIS to learn about this substantive effort being coordinated by NENA and ATIS).

Each and every one of these activities has been an important stepping stone to better understand the nature of the problem and advance the issues of wireless E9-1-1. Much of what we have accomplished thus far in E9-1-1 would not be possible if not for the dedication, perspiration and leadership of the many experts in private industry, government and 9-1-1 in these aforementioned activities.

Understanding that we as a nation and community are still at a crossroads of implementation, and that specific institutional barriers exist in technology, PSAP readiness and the funding of our nation's 9-1-1 system, we have launched the Strategic Wireless Action Team (SWAT), to examine and address the global and systemic challenges affecting E9-1-1 deployment.

In this process, NENA has proactively convened national leaders and technical and operational experts to identify priorities, and determine the changes needed to

improve our nation's 9-1-1 system. Specifically, this initiative brings together all the relevant constituents — wireless and wireline telecommunications companies, state and local organizations, and the nation's leading Public Safety groups: NENA, APCO and NASNA — in a cooperative effort to address — *and resolve* — the critical barriers to ubiquitous E9-1-1 deployment. Supporting third-party objectivity, this effort is being organized and facilitated with support from the Monitor Group, a preeminent international strategy advisory firm; Giuliani Partners, and the PSAP Readiness Fund.

Focused on systemic solutions and results-based outcomes, SWAT is interjecting new dialogue, energy, and resources where others have exhausted, given resources, time, or expertise. Moreover, SWAT is recognizing the necessity for a comprehensive public/private cooperative effort to address the many issues that are affecting the 9-1-1 system — one dealing with solutions, not barriers and contention.

Today we are faced with an aging 9-1-1 network in an era when the public demand for cutting-edge communications tools reaches from the schoolhouse to corporate offices to the home, in order to function throughout the community. While the nation's 9-1-1 service providers struggle with deploying location technology for wireless telephone sets, some parts of the country do not even have basic 9-1-1. As segments of our community rely more on two-way messaging devices, automatic crash notification service, etc., NENA's SWAT recognizes that the 9-1-1 system must be modernized to accommodate emerging technologies and interconnected to accommodate the transfer of digital information across the country. More than anything, SWAT is an approach to

resolve the coordination and funding issues systemically by increasing the alignment of all critical stakeholders involved in deploying E9-1-1.

SWAT is an opportunity to do it right: Organize leaders on a national level; get the right experts in a room; apply appropriate resources and guidance; and identify technologies, tools, and expertise needed to assure the consistent delivery of 9-1-1 systems throughout the U.S. SWAT is designed to look at the components of wireless E9-1-1, along with the environment in which it operates, and identify and deploy the kind of focused resources necessary to truly foster wireless deployment. It's about getting the right people and, the right information to solve wireless E9-1-1 problems.

The initiative is representing an approach premised on the need to bring all involved parties to the process and to craft a comprehensive recommendation – by June of this year – which overcomes the myriad E9-1-1 logjams in place today. It is examining the economic, technological, operational, policy and political implications of potential E9-1-1 solutions to balance multiple private interests with public policy goals, and develop a recommendation that all parties can support. The initiative culminates in a consensus plan to be announced late this spring.

Very much a work in progress, in a relatively short timeframe, SWAT has yielded positive results and a candid dialogue along with a renewed commitment to the deployment of wireless E9-1-1. Proactive and consensus driven – SWAT recognizes that

we can't afford to address E9-1-1 issues in a contentious and litigious approach, but that we must work together to implement this critical services as quickly as we can.

A critical mass of public safety advocates and leaders, wireline E9-1-1 system service providers and wireless companies — and their respective CEOs — have already committed their ongoing support to this initiative. Some have yet to come to the table, but the opportunity remains: build a better 9-1-1 system for all enhanced services, devices and communications.

Final Thoughts

Like all partnerships, we have had our ups and downs and fair share of trying times and difficult moments. There have been finger pointing, squabbles over resources and, of course, spin. The sandbox hasn't always been productive and pleasant. I am here today to move past that. We've got a job to do. It's about solutions, progress and implementation, and to the extent that barriers exist, we must work together in a committed and coordinated way to overcome them.

We must find and support solutions and move past rhetoric and sound bites.

As the national President of the National Emergency Number Association, I am tasked with facilitating a discussion that responds to the systemic issues of 9-1-1. I'm also asked to work collaboratively to form solutions. But in the end it comes to one

simple goal. It's about saving lives, protecting property and ensuring the security for all Americans.

I thank you for your leadership and the opportunity to work with all of you in advancing the implementation of E9-1-1.