Written Statement of

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Thank you, Chairman Inouye and Co –Chairman Stevens, and members of the Committee for the opportunity to appear before you today to testify on behalf of APCO International and its members, who manage and operate emergency communications centers worldwide. My name is Wanda McCarley and I am the Operations and Training Manager for the Tarrant County 9-1-1 District in Fort Worth, Texas. I also serve as the President of APCO International.

APCO was established in 1935 and it is the nation's oldest and largest public safety communications organization, representing members around the world who manage and operate communications systems and facilities for police, fire, emergency medical services and other state and local government public safety agencies. APCO International's mission is to be a member-driven

association of communications professionals that provides leadership; influences public safety communications decisions of government and industry; promotes professional development; and, fosters the development and use of technology for the benefit of the public.

From the very beginning, APCO International's members have played a critical role in the development of 9-1-1 services. Our members were there when the first 9-1-1 call was placed in Haleyville, Alabama on February 16, 1968 and today they are responsible for answering and dispatching emergency services to thousands of 9-1-1 calls made every day around the country.

Over the past 30 years, APCO's members have done a great job of educating the public to dial 9-1-1 in case of an emergency. Today, 9-1-1 is the primary lifeline the public uses to reach emergency services when a one-year-old child accidently falls in to a pool and is not breathing, when a person feels chest pains and believes they are having a heart attack, when a eye witness sees a major car accident occur on the highway, when a passerby sees a suspicious package left alone near an office building, and the hundreds of other emergencies that happen every day around the country.

However, I am here to tell you that not all is well with 9-1-1. Public safety faces three major challenges to meeting the public's expectations of the future, including technology, funding, and staffing.

TECHNOLOGY

The prompt, effective dispatch of appropriate emergency services to any reported event is dependent upon obtaining the best location information possible from the caller. This essential element of competent dispatching must occur regardless of the technology used to access the emergency number, 9-1-1.

Since the beginning, the 9-1-1 and enhances 9-1-1 (E9-1-1) infrastructure has been built to process hard wire/landline 9-1-1 calls from people's homes and offices. Consumers who use wireless or Voice over Internet Protocol (VoIP) services often recall the hard wire/landline 9-1-1 service at their

home, which translates the assigned telephone number to a unique, physical address and believe that the same is true for wireless and VoIP 9-1-1 calls. Today, while technologies such as wireless and VoIP services provide a wide array of new telecommunications services to their customers, they have been challenged to provide a comprehensive and effective solution for E9-1-1 that meets the public's expectations.

APCO International applauds the leadership of Senators Nelson, Snowe and Clinton for introducing the IP-Enabled Voice Communications and Public Safety Act of 2007 (S. 428). We are grateful that this bill has taken in to consideration issues that are very critical to improving VoIP 9-1-1 services. While APCO International has not taken a formal position on the bill, we strongly support the bill's intent to require VoIP services to provide 9-1-1 service, including E9-1-1 service, to its subscribers in accordance with the orders of the Federal Communications Commission (FCC). Also, we strongly support the provision of the bill that extends liability protection to public safety answering points for VoIP 9-1-1 calls. Finally, APCO International strongly supports the provision of the bill that ensures a State and local government's ability to impose or collect a 9-1-1 fee from VoIP service providers. We believe that VoIP providers should not be able to offer services to new customers in geographic areas where the provider is not able to comply with the FCC's 9-1-1 and E9-1-1 requirements contained in the FCC's Order in WC Docket Nos. 04–36 and 05–196.

PROJECT LOCATE REPORT

Shortly, APCO will be releasing a report on location performance testing of wireless 9-1-1 calls. In August of 2005, APCO's Project Locate Our Citizens At Times of Emergency (LOCATE) began an independent study to test wireless location data delivered to Public Safety Answering Points (PSAPs) by wireless carriers. Project LOCATE's assessment of the location data delivered to the PSAP was conducted in a manner consistent with the published FCC guidelines. The effort demonstrated by Project

LOCATE showed that public safety and the wireless service providers share a common, sincere goal in improving location data delivered to the PSAP.

This is the first public safety study to review wireless E9-1-1 system performance conducted at selected sites, representing a wide variety of topography and demographics. The goal of the testing was to assess overall wireless location performance and the operational impact of inaccurate data on PSAPs. Some of the issues addressed in the study included:

- The value of the location data in terms of prompt, effective dispatch of the appropriate emergency services;
- The variables that contribute to the quality of the location data presented to a PSAP when emergency calls are made from wireless devices;
- The lessons that have been learned since the deployment of Phase II wireless E9-1-1 and;
- The best practices that can be adopted to improve the effective deployment and performance monitoring of Phase II wireless E9-1-1, as well as the processing of per call location data at the PSAP.

Since 1996, the FCC has taken action to improve the quality and reliability of 9-1-1 emergency services for wireless telephone users by adopting rules to govern the availability of basic 9-1-1 services and the implementation of enhanced 9-1-1 (E9-1-1) for wireless services. The Commission's wireless 9-1-1 rulings seek to improve the reliability of wireless 9-1-1 services and to provide emergency services personnel with location information that will enable them to locate and provide assistance to wireless 9-1-1 callers more quickly. To further these goals, the agency has required wireless carriers to implement E9-1-1 service, subject to certain conditions and schedules.

Truly effective wireless deployment will continue to require accurate location data, as defined in FCC Docket Number 94-102. However, the standard of location accuracy established by the Commission is not routinely delivered to the PSAP, nor is it required under current FCC's rule making. Further, the vast majority of PSAPs often have no means to assess the location performance deviation per PSAP based on credible end-to-end performance testing.

This Project LOCATE Final Report seeks to offer PSAPs and others a number of effective practices. The findings of Project LOCATE show that a good partnership with all wireless services providers involved is critical to timely deployment, implementation and accurate delivery of wireless 9-1-1 information.

The findings of Project LOCATE Final Report include:

1. There is a clear expectation that the PSAP, as well as traditional first responders, will have consistent and accurate location data delivered with all wireless 9-1-1 calls to the PSAP. The wireless location accuracy performance of the carriers in the designated "PSAP Test Area" did not meet these expectations.

2. The authority having jurisdiction should implement "baseline performance testing" to better evaluate and understand how the system(s) serving the PSAP(s) collects and processes location data that is delivered to the PSAP.

3. The Effective Practices contained in the study, many of which have gained consensus by public safety, should be reviewed, understood and practiced to maximize system service potential.

4. The public safety community would be best served by developing a positive partnership with the wireless service providers within their service area, demonstrating a solid

understanding of the technology and options available as well as maintaining open and candid communications regarding performance and service.

5. The supportive information contained within the Project LOCATE report should be reviewed and used properly to better understand wireless 9-1-1 services as well as better manage the expectations of the public and public safety/service stakeholders.

6. The efforts to maximize the usefulness of location data delivered to the PSAP with wireless 9-1-1 calls must be continuous and supported by appropriate federal, state and local regulatory, legislative and executive branch authorities.

PROJECT 41

In August 2006, APCO International established Project 41 - VoIP and Emerging Technology Location Delivery Challenges that is a part of Project LOCATE to address the impact upon operational practices facing the public safety communications community specific to VoIP and related technologies. APCO International's Project 41 looks to develop partnerships with vendors and service providers to improve the location information provided, provide public education to manage the expectations of consumers, and create an effective practice guide to include technical and operational alternatives for public safety answering point (PSAP) response. Project 41 is responsible for:

- Establishing strategies to ensure public safety interests related to the deployment of non-traditional technologies, funding concerns, location challenges, and other such matters are effectively represented in related forums; and,

- Establishing effective educational strategies for public safety personnel and elected officials related to current and emerging technology, location challenges, funding concerns, current public and private strategies and APCO activities.

Next generation 9-1-1 (NG9-1-1) systems will ultimately occur within a broader array of interconnected networks comprehensively supporting emergency services; from public access to those services to the delivery of emergency information to call-takers, dispatchers and first responders. This development is an evolutionary process to enable the general public to make a 9-1-1 call from any wired, wireless, or Internet Protocol (IP) based device. These advances allow the emergency services community to take advantage of enhanced 9-1-1 call delivery and other functions through new IP based, internetworking technologies. As a result, transition to both new technology and new operational environments will be essential to that process.

On March 30, APCO International and the National Emergency Number Association (NENA) released a statement that outlined that the activities of both organizations will be mutually supportive, coordinated, and focused on achieving the best transition possible to NG9-1-1 systems for the 9-1-1 community, without diminishing the ability to promptly and effectively locate the "caller" or "initial request for service location;." APCO and NENA acknowledge that:

- NENA's focus is on the technical and architectural components of NG9-1-1 systems, along with the operational environment in which those systems must operate; and,
- APCO's focus is on the operational utility of those systems, including the development of effective educational and related strategies to optimize their use by the public, the public safety community, and the governance and public policy entities ultimately responsible.

It is the goal of APCO International to be more proactive with new consumer telecommunications services to ensure they are able to provide effective and comprehensive enhanced 9-1-1 services to their customers. Unfortunately, for technologies such as wireless and VoIP services, the principle of 9-1-1 seems to have been an afterthought as they emerged on the telecommunications market place to compete with traditional telephone services.

APCO International looks forward to working closely with this Committee, Congress, the FCC and all telecommunications service providers, including VoIP services, to ensure that before a consumer buys a product or service to replace their traditional telephone services with full 9-1-1 and E9-1-1 capabilities, the provider is able comply with current public safety obligations that are inherent to today's telecommunications industry. While it is great to be able to take a picture with your wireless phone or be able to connect your VoIP phone to any broadband service, it is vital to be able to call 9-1-1 and be assured you will get prompt, effective dispatch of appropriate emergency services to the location information reported by the wireless and VoIP service provider for the event. If this information is inaccurate or missing, the results could be tragic. All of us here today have the obligation to the public we serve to ensure their safety is not compromised when a consumer decides what type of telephone service they would like to purchase.

FUNDING

The second challenge is funding for public safety when they are trying to meet the new demands placed on 9-1-1 systems with a change in the funding paradigm for 9-1-1 surcharges. There is a considerable discrepancy in the amount of revenue a 9-1-1 surcharge brings to a particular jurisdiction to maintain 9-1-1 services. While most jurisdictions with large subscriber bases may be able to generate enough revenue from wireless and wireline 9-1-1 surcharges, areas that have sparse population and few subscriber units often struggle to meet even the basic needs of maintaining a 9-1-1 services.

Funding for services from basic 9-1-1 to E9-1-1 (wireline and wireless) is provided from a number of sources. The oldest and most common form of funding is a surcharge on wireline telephone subscribers within a given service area. In many states, there is also a separate surcharge on wireless subscribers within the service area. The amount of the surcharges vary based on local and state laws. A great deal of states that distribute surcharge monies at the state level to PSAPs do so based on the number of landline telephones in the jurisdiction. Unfortunately, the number of landline phones is dwindling with

the increasing popularity of wireless telephones used as the primary residential communications service. While the surcharge model had a measure of appropriateness in years past, the expansion of access to 9-1-1 services at the PSAP from other devices and technology such as VoIP has created a pattern of diminishing revenue amidst increased expectation of service.

Future 9-1-1 services are expected to be based on radically different technology and architecture than are in existence today. There are some PSAPs that may make this transition easily and comfortably; while others will struggle and many will not be able to afford any changes. Absent new and consistent funding solutions, local/county executive decision-makers will be truly challenged to discard legacy systems, stranding their investment paid in most cases with public tax dollars, in favor of new and more expensive technology. The IP based PSAP of the future has benefits in a homogenous environment; however without adequate funding mechanisms, the disparity between the capability of PSAPs across the country now, will only be exacerbated by yet another layer of disparate technology.

The increased public interest in and expectation of effective 9-1-1 services, which is unmatched by the revenue mechanisms in place, is not solely a function of technology changes however.

The survivability and sustainability of public safety communication services, including public access through 9-1-1, cannot be assumed by any political entity. There are reasonable precautions and preparations that can improve the chance to survive disasters; however each element has fiscal impact. Local/county executive decision-makers often lack the funds necessary to implement any “back-up” processes. At a “Telephone Service Priority Summit,” convened by the FCC, it was reported that only about 10 percent of the primary 9-1-1 circuits across the country are protected by this service, which is seen by many to be an additional 9-1-1 expense in uncertain revenue times.

Significant challenges remain ahead for 9-1-1 managers seeking to reach even the basic level of service integrity at the local/county level amidst disaster. Each class of such challenges has a fiscal note attached, which has delayed the discussion and activity in many locations.

In order to address some of the funding issues and move PSAPs to deploy Phase II technologies, Congress passed the ENHANCE 911 Act of 2004. We are grateful to the leadership of this Committee that there has been considerable progress made to allocate $43.5 million in auction proceeds from the DTV spectrum. We applaud the efforts of the Committee and we continue to urge Congress to also appropriate the full authorized amount of $250 million for Fiscal Year 2008 for 9-1-1 grants programs established in the ENHANCE 911 Act. APCO International would also like to work with the members of the committee to expand the purpose of the program to ensure grant funds can be used for planning, project management, training, and equipment for computer aided dispatch (CAD) systems and IP emergency networks.

STAFFING & TRAINING

Finally, the third challenge is the ability of local emergency communications centers to adequately staff their operations. Recruiting, retaining, and training communications center personnel, call takers, and dispatchers has proven to be one of the greatest challenges 9-1-1 faces today. Having well qualified and trained staff can make the difference between life and death. Keeping this staff after they have been trained has become a daunting challenge for public safety.

To fulfill the mission of 9-1-1 and provide efficient service to the public and the law enforcement, fire/rescue and emergency medical services (EMS) agencies served, an adequate number of qualified personnel should be on duty in the communications center. When this is not the case, the quality of service can diminish and the short and long term effect on communications center personnel often leads to staffing issues, personnel being overworked because the centers are understaffed and the increase of attrition rates. Communications centers need to strive to maintain adequate staffing levels to ensure

expected services levels by the public and required by the law enforcement, fire/rescue, and EMS agencies are not jeopardized. One measure for adequate levels of staffing include developing a methodology that allows a communication center to identify the number of qualified 9-1-1 call takers necessary to answer 9-1-1 calls and other telephone lines for which the agency is responsible in an acceptable manner, within acceptable call answering and call processing times. The second measure involves developing a methodology to identify the number of qualified on-duty law enforcement, fire/rescue, EMS dispatchers necessary to adequately and safely communicate with, provide command and control assistance for and manage an acceptable number of law enforcement, fire/rescue and EMS units on a given number of radio channels. While these two functions are separate, they need to be able to work together seamlessly to ensure response times are met and lives are saved. In response to these issues, APCO International established Project RETAINS. The purpose of the program is to educate public safety and local government official as to what they have to do to retain and improve the professionalism of their call takers and dispatchers.

While the recruitment and retention of communications center personnel is the responsibility of the local officials, there is a need to develop and promote national standards for staffing and training of communications center personnel. APCO International, as an ANSI accredited standards setting organization, is working to develop these standards.

APCO International and its members are committed to funding the development of these standards, but it will take the time and cooperation of all parties involved to establish nationally accepted standards for emergency communications center personnel. Local emergency communications centers should be able use federal grants to train their staff to comply with nationally accredited training programs that meet the standards. However, currently there is no federal grant program for 9-1-1 that can be used to train communications center personnel. Most often federal grant programs go to funding equipment, but they neglect the most important element in any emergency - the human element.

Often, the first budget item that gets cut in most local governments is training. However, when it comes to 9-1-1, this is the last thing a local government should cut. Imagine if you were in a PSAP in Wenatachee, Washington and you got a 9-1-1 call from some in the Lake Wenatchee State Park without any location information. The trained call taker should be able to ask the appropriate questions to determine the caller's locations. In order to do this the call takers will need to have a reasonable understanding of the location, terrain and landmarks within their jurisdiction. Without a proper training, the local public safety agency will have to expend considerable resources (including man power) to conduct a search and rescue operation rather than a rescue operation. While seconds, minutes and hours tick away in the search, the potential for having a successful rescue operation diminishes drastically. Training in the front end of the call will most like save money but more importantly save lives. Public safety communications grant programs should be used for training, as well as equipment, however the use of these grants should be tied to the acceptance of a nationally accredited standard by the local emergency communications center.

Once again, I would like to thank Chairman Inouye, Co-Chairman Stevens and all the members of the Committee for allowing me the opportunity to speak on behalf of the thousands of public safety communications professionals that are served by APCO International. In conclusion, I would like to say that our nation's 9-1-1 systems need your support to meet the current challenges that are being faced by many of the of local public safety call centers today. APCO International looks forward to working with the members of this Committee to find effective solutions for technology, funding and staffing challenges to ensure the viability of our nation's 9-1-1 systems.