INTRODUCTION

My name is Vincent Kelly, and I am the President and Chief Executive Officer of USA Mobility, the nation’s largest provider of paging services. I have been with the company and its predecessor, Metrocall, for 19 years and I understand well the communication issues that arise during times of emergency. I am very proud of our performance during Hurricane Katrina, and I appreciate the opportunity to share with the panel USA Mobility’s experiences and observations.

I will describe our preparation for and response to Katrina, as well as the many advantages that basic paging technology offered during Katrina relative to other more expensive forms of wireless communication. I will then offer some ideas about how the telecommunications industry and government agencies can enhance our collective ability to respond to hurricanes and other emergency situations in the future.

BACKGROUND

USA Mobility was formed in late 2004 by the merger of Arch Wireless and Metrocall Holdings, then the nation’s two largest independent paging and wireless messaging companies. We provide traditional numeric and alpha numeric or “text” paging services as well as advanced two-way text-messaging services. While the mass market for paging services has declined in recent years as mobile phone users have increased, paging devices continue to play a critical role for first responders, and are still used extensively by police officers, fire fighters, and rescue workers. In addition,
hospitals and health clinics, as well as government agencies, rely heavily on paging services. We also serve over 80% percent of Fortune 1000 companies.

The reasons for this continued use of paging by these mission critical organizations are simple and straightforward: 1) paging’s low cost relative to mobile telephony, 2) paging’s reliability due to our simulcast networks and long battery life, and 3) paging’s network ubiquity, where USA Mobility maintains the largest paging network in the United States. Our paging network reaches more than 90 percent of the U.S. population, including the largest 100 markets and more than 1,000 cities overall. As of September 30, 2005, USA Mobility provided service to over 5.1 million messaging devices.

USA Mobility provides these services through a network architecture that combines digital satellite transmission with an extensive system of terrestrial transmitters and paging switches. Our network currently includes approximately 15,500 transmitters and 324 switches. Messages destined for pagers may be sent by telephone to one of our switches, or via the internet to our Network Operations Centers. These messages are uploaded via satellite and relayed to our earth based transmitters, which are located on the tops of buildings or on towers high off the ground—often at the 300 to 400 foot level. Our transmitters broadcast at power levels in the 3,500 watt Effective Radiated Power or “ERP” range. This is contrasted to mobile phone transmitters that typically have their antenna at 100 feet and broadcast at approximately 90 watts ERP.

Multiple ground-based paging transmitters in a given network area receive messages from the satellite and broadcast the information in a “simulcast” fashion to individual pagers through our high-powered transmitters. This simulcast technology,
using multiple high powered transmitters to send the same message to a single pager allows USA Mobility to provide a wide coverage area and strong in-building penetration. What this means is that a paging user may be near a transmitter that has been knocked off the air due to high winds or loss of power, but unlike a mobile phone customer who needs his local transmitter to be working, there is a high probability the paging user can still receive the message as it is being broadcast through other transmitters many miles away at very high power.

Carter C. Blumeyer, a Communication Specialist with FEMA during Hurricane Katrina, reported his experience with paging and the Reflex technology protocol we deploy on our two-way network to an Industry newsletter:

“I am with an Urban Search and Rescue for FEMA and with the cell and data service down and systems being flooded. . . . ReFLEX is working fine and communications are flowing through the units! We are allowing people to send e-mails to loved ones to let them know they are alive and well.”

Our customers at Women’s Hospital and Tulane Lakeside Hospital also praised our performance. One customer told us:

“Pagers were used by Medical Staff for communicating with the doctors and nurses in transporting the Mom’s and Babies from one facility to another. Text messaging was the only way to get critical messages out to the doctors and nurses since phone lines were all down or all circuits busy.”
USA Mobility was the first vendor to contact the hospital and supply the facility with backup emergency response equipment.

And Tulane reported that:

“It wouldn’t be economically feasible for a facility the size of Tulane to provide cellular service to all their essential employees, so we depend on USA Mobility to provide us with a dependable means to stay in contact with our employees that is cost effective. Your dependability became more evident when other cellular and paging providers lost service after Hurricane Katrina and your service is still going.”

PREPARATION FOR KATRINA

USA Mobility’s preparation for Katrina, as with all other predicted hurricanes, began well in advance of the storm’s arrival. Beginning early the week of August 22nd, our Network Operations Center maintained a close watch on the storm. The Network Operations Center provided regular updates to our network team and management. Once the severity and geographical scope of Katrina became apparent, we took several measures to minimize the storm’s impact on our services.

First, we tested our systems extensively. At each paging switch, we tested the battery systems, generators, and Uninterruptible Power Systems (UPS) to ensure that they were working properly. We also tested portable generators and staged them in and around the anticipated strike area for deployment to transmitter sites as needed. We placed Portable Transmitter Trailers, also known as Coverage on Wheels or COWs, just outside the strike zone, so that we could rapidly deploy them once the damage had been assessed.
Second, we deployed critical personnel to strategic locations. Our field services team assigned personnel from across the region to establish positions immediately adjacent to, yet outside, the primary path of the storm to minimize response time once it was safe to mobilize. This team was supplied with network equipment sufficient to rebuild 25 transmitter sites, generators to power our transmitters, and other basic necessities such as fuel, food, and water.

Third, we established backup switch capability at our Plano, Texas Network Operations Center to ensure that paging messages could be stored and retrieved if damaged switches in the strike zone or local telephone outages interrupted local operations. This solution allowed customers to activate their pagers and retrieve messages by dialing a toll-free number and entering a PIN. The toll-free telephone numbers and instructions for this emergency service were provided to key health care and first responder customers and posted on our company web site.

Fourth, USA Mobility supplied thousands of additional pagers to federal, state, and local emergency response organizations. As I have already mentioned, pagers are heavily used by first responders because of their proven reliability in severe emergency conditions — most notably during the terrorist attacks of September 11, when other wireless technologies failed.

I quote from a letter we received on September 18, 2001 from Lisa Thompson, Wireless Communications Systems Manager, Arlington County, VA, Public Safety Emergency Communications Center, regarding the events of September 11th 2001, “I wanted to take a moment to tell you how fantastic paging has been throughout the Pentagon incident. From the initial wireless message to notify our Police, Fire, EMS,
County Manager and ECC staff, to the recall of all dispatchers, Police Officers, Firefighters, paging has performed flawlessly.”

During Hurricane Katrina and other hurricanes, police officers, firefighters, hospital workers, and government officials were also able to use USA Mobility pagers to communicate when land lines and cell phones were not in service.

**THE STORM’S ARRIVAL**

Because of these preparations, USA Mobility was well situated to respond effectively to Katrina’s landfall on the morning of Monday, August 29. The hurricane initially interrupted operations at 284 of our 586 transmitters along the Gulf Coast, but we were able to maintain partial network coverage during the storm and immediately thereafter. Most of these interruptions were due to loss of power.

The battery power at our paging switches enabled them to remain in service during the storm and for approximately 10 hours thereafter. In the hours following, as batteries and landline services failed, seven of the nine paging switches in the area were out of service. The traffic from six of these seven switches was re-routed immediately, and messages were available through the toll-free PIN solution I have already described. Traffic from the remaining switch was re-routed early Wednesday, August 31.

After the storm passed through Louisiana and Mississippi, USA Mobility responded quickly. Our work crews promptly deployed generators — first to those sites critical to health care and public safety personnel, and then to perimeter sites around New Orleans, Gulfport, and Biloxi for service to rescue and aid agencies. While we were able to reach several sites on the North side of Lake Pontchartrain, as well as sites to the West
and South of New Orleans, key sites in the Metairie and New Orleans areas were inaccessible due to flooding or limitations imposed by officials.

By late in the day on Tuesday, August 30, we were able to restore paging service with street level coverage throughout most of New Orleans utilizing one of our mobile transmitters or “COWs” at our tower site in Metairie. Service in the Gulfport and Mobile areas was restored by Thursday, September 1 through a combination of sites powered by portable generators and coverage trailers.

ADVANTAGES OF PAGING TECHNOLOGY DURING EMERGENCIES

As this brief description reflects, paging services withstood Hurricane Katrina and were fully restored faster than wireline, cellular, or broadband PCS services. Why is this? There are three important explanations, all of which relate to paging’s unique network attributes.

First, paging technology is less affected by outages in the wireline network. Because the transmitters are satellite-controlled, USA Mobility’s network is less dependent on the traditional wireline telephone network than mobile phone services. As a result, USA Mobility was able to restore service after Hurricane Katrina more rapidly than mobile phone providers. In the areas hardest hit by the storm, we restored service within 48 hours, while most other providers took much longer. Put simply, our use of satellite technology makes paging more reliable for emergency communications than other wireless technologies.

Second, paging technology is inherently redundant. Because emergency information is simulcast by different transmitters to a single device within a broad coverage area, messages may still be relayed if a single transmitter or group of
transmitters in a network fails. Katrina severely damaged individual components of the USA Mobility network, but we still maintained basic service in the area struck by Katrina during the passage of the storm and much of the time immediately following.

Third, paging and messaging devices used by USA Mobility are highly reliable. These devices are predominantly powered by a single disposable AA battery, and are therefore independent of commercial power or the recharging requirements associated with most other wireless devices.

Industry experts and USA Mobility customers attest to the key advantages of paging technology under emergency conditions. In a March 2004 article, Dr. Peter Kapsales, senior consulting engineer for CACI Technologies, concluded that two-way paging “is more reliable and more effective than the current voice networks used by emergency workers and public employees who respond to critical situations.” Dr. Kapsales went on to say that two-way paging “should be considered a primary or backup system to improve real-time communication among emergency personnel during critical periods when voice communication is not practical or fails.”

Paging inherently lends itself to “one to many” communications. Each pager is a receiver that can have multiple addresses. One or more of the addresses on a pager can be set in common such that large groups of users with the same mission can be sent a single message and they all receive it. To the network this has no more overhead than sending a single message, but to the users the ability for large groups of rescue workers, citizens or law enforcement to all get important information at the same time can be invaluable.
IMPROVING PREPAREDNESS

Before I conclude, I’d like to say a few words about how we can improve our preparedness for emergency situations. Much has been written and said about improving public safety interoperability for voice communications over hand-held radios. And this should continue to be a priority, since voice communications obviously play an important role in any emergency response. But we must be careful not to let that discussion overshadow the public safety benefits offered by less-prominent but valuable technologies like paging. USA Mobility believes that paging is the most affordable, redundant, and reliable emergency communications solution available today. I therefore encourage the Panel to give paging services due consideration. Simply stated, paging should be a required form of communication for all Federal, State and Local emergency service personnel.

One of the purposes of this Panel is to examine how the telecommunications industry might better serve first responders such as police, firefighters, and emergency medical personnel. As I’ve already noted, pagers are widely used by these groups. Pagers are also utilized by federal, state, and local government organizations in need of an emergency communications system that provides rapid messaging for one-to-one and one-to-many communications, where voice is not required or message content is sensitive to eavesdropping. Additionally, several government agencies have expressed an increased interest in utilizing paging, in light of the failure of voice communications during Hurricane Katrina. It’s important that we consider how we can continue making use of this technology to provide our first responders and government organizations with critical emergency information.
Another goal is improving the communication of emergency information to the general public. USA Mobility endorses the Commission’s objective of strengthening and expanding the Emergency Alert System, or “EAS.” The Commission has noted that the expanded EAS should be redundant — that is, it should facilitate the distribution of emergency information over a variety of communications media and platforms. A redundant system should incorporate paging technology. USA Mobility looks forward to participating in such a system so members of the general public can receive timely alerts over as many networks as possible, including not only broadcast, DBS, and cable, but also paging and other wireless networks.

USA Mobility also urges the Commission to re-charter the Network Reliability and Interoperability Council, or “NRIC.” NRIC has played an important role in advising the Commission on the interoperability and interconnectivity of public telecommunications networks on such topics as homeland security and E911. We believe that reconvening NRIC would assist the Commission and all telecommunications providers in the cooperative effort to improve emergency preparedness.

Finally, allow me to offer a few practical suggestions for the Panel. First, the Panel should consider methods of improving the access by technicians to communications facilities needing repair immediately after a disaster, especially those supporting search and rescue or medical relief efforts. Second, to better respond to a loss of commercial power, the Panel should pursue a public/private partnership to establish strategically located, secure rooftop “disaster” locations with emergency power and access to adequate fuel reserves. Third, the Panel should work with the Department of Homeland Security and FEMA to advocate better communication between responders
and service providers and allow telecommunications providers to either place temporary coverage trailers in the agencies’ “staging areas” or a coordinated “safe” location which would improve the wireless access of both the government and the affected community.

In summary, USA Mobility is proud of our network’s resiliency and our contribution to the restoration of communications in the area. We commend the work of this Panel and look forward to partnering with other communications providers to learn from this disaster and to improve our ability to respond to any future emergencies that our nation may face.