

SuperComm Voice Over Internet/E911 Conference

It is time to roll up our sleeves to get the job done

The timing of this conference and these remarks couldn't be better. With the release by the FCC of the Notice of Proposed Rulemaking on E911 Requirements of IP-Enabled Service Providers, the stage is set to bring industry and public safety together to solve the challenges of Enhanced 9-1-1 in the Voice Over Internet environment.

This is obviously an issue of great interest. The release last Friday afternoon brought the FCC's internet service to its knees as folks from across the country downloaded the document and the respective comments of the commissioners.

The notice proposes a radical and daunting challenge to the Voice Over Internet service providers to include Enhanced 9-1-1 in their offering and to do it in a hurry.

There have been many voices nay saying in the past few weeks that the notice could be the death knell to Voice Over Internet, and that it is unfair that Voice Over Internet service providers are expected to do in 120 days what the wireless carriers couldn't do in 13 years, and even longer for MLTS. Some complained that the Local Exchange Carriers will surely block their efforts, and that it is an impossible goal.

On our side of the fence, some were demanding that anything other than the exact same level of service as wireline 9-1-1 was unacceptable. Some, it seems, just wanted to complain rather than to join you in finding the solutions.

I will grant you that the timeline is aggressive, but I will suggest to you that it should not have been a surprise to the Voice Over Internet industry that Enhanced 9-1-1 was going to be an essential service requirement.

We have all seen the growing recognition that Enhanced 9-1-1 is a national priority. In fact it has been called a national trust, an expectation by our citizens that when they need help in their most dire moment, when they have fallen victim to violent crime, struck down by a medical crisis, or loss of property due to fire or other cause.

It is clear in the comments by each of the commissioners that Enhanced 9-1-1 is a major priority for the FCC, and we have seen in the last Congress, and again in this Congress, that it is truly a national priority.

I suppose the real surprise is that some people were surprised by the demand to make certain that the connection between the public and the emergency responders be safe and secure.

While we all understand why 9-1-1 is a national imperative, let me tell you a couple of stories that serve as reminders to me. They are among the many reasons that I stay focused and supportive of pursuing the best solutions to secure the 9-1-1 networks.

9-1-1 is personal. I have been involved in taking calls from the public calling for help for 32 years, first as a dispatcher for a small fire department in the pre-9-1-1 days, and then as a dispatcher, supervisor and now manager of the Marin County Public Safety Communications in California.

During those years I have fielded or supervised the call taking of countless horror stories: cardiac arrests, house fires, robberies, rapes, murders, motor vehicle accidents, and much more.

One call stands out and serves as a continuing reminder that 9-1-1 is personal.

For every caller, when they dial 9-1-1, they are more likely than not dealing with a terrible personal tragedy – they need help and they are often not able to think as clearly as they might normally. There is a mix of fear and relief.

Fear of the situation they are facing, and relief that they are talking with a well trained operator who can summon the help that is needed.

We turned on the Enhanced 9-1-1 system in Marin County in November 1984. I was a newly promoted operations manager, with my desk located inside our dispatch center in the basement of the Hall of Justice building.

A couple of days after the start of the service, a 9-1-1 line rang. It was a novelty at the time, few real calls had come in, so more out of curiosity than anything else, I punched in on the line to listen to the call taker handle the call.

I still remember the shock and horror when my parents address scrolled up the 9-1-1 Automatic Location Identifier informer screen. The woman on the line could not be understood. She was wheezing and gasping for breath – she was unable to talk.

Within minutes the fire department and paramedics arrived on the scene to help my mom. Today, almost 21 years later, she is doing well, but my personal story of 9-1-1 doesn't end here.

Around five or six years ago, my mom was the first in her neighborhood to jump at the offer by the cable company to move her residential telephone service to the cable.

She saw the financial incentive for buckets of minutes for long distance calls so she could call my sister in Massachusetts more frequently without worry of the cost.

It worked great up until November of 2002 when a major storm hit Marin County, winds knocking down trees throughout my mom's neighborhood. The battery feeding her cable telephone connection went dark after 3 or 4 hours, leaving my parents without telephone service for the five days of the power outage.

Across the street and next door, their neighbors had phone service, but my folks were frustrated and annoyed because they didn't understand that the box in the basement was a battery.

A few weeks later, the LEC reconnected my parent's house to the Public Switched Telephone Network.

So, while I have been involved in emergency dispatching for over a third of a century, it was the lessons from my mom that have reinforced to me a commitment to seek excellence, not just for my mom, but for everybody we serve.

You see, we cannot afford to fail. It is not the fear of a CNN truck camped in front of my office, but rather, concern that we missed the mark and somebody suffered further injury, or that they lost their life or property because we did not do the best that we could do.

The fact of the matter is your mom or dad, your sister or brother, your friends and neighbors are going to be the ones who choose to buy the Voice Over Internet services.

Your customers are going to be drawn by the price point and feature set that can only come from IP features and functionality. They are going to appreciate the comparative look and feel to the phone system they grew up with. Your market share will grow and your financial reports will track as predicted or even better.

Unless and until your service misses the mark in handling the most important call in your customer's life.

When your customer needs 9-1-1 there is no room for failure.

Time is against us. As your customer base accelerates, so will also the need and demand that your 9-1-1 interconnection work each and every time.

Anything less puts lives and property at risk, and no explanation or disclaimer or blocking will make sense to anybody, especially a news reporter asking why?

The products you offer to the consumers must assume the tendency for the public to not pay close attention to detail, and so you must make certain that the "telephone" services that you provide be "mom-proof" and "babysitter friendly".

While the requirements imposed by the FCC are considered and implemented; we must remain focused on the big picture.

We have a dual purpose.

It is an imperative that E9-1-1 is available from any communications system interconnected with the public switch telephone network, and IP presents a unique opportunity to drive changes in our nation's public safety answering points.

Our current system of 9-1-1 networks is a kluge and for the most part a disconnected patchwork of stand alone systems that often lack the ability to switch calls between neighboring selective routers.

Migrating to an interconnected IP network affords tremendous opportunities to enhance the capabilities of the local public safety answering point by allowing voice and data to be transferred freely as needed, and introduces other vital players in the public safety realm into an advanced 9-1-1 network.

For example, how easy would it be to route advanced automatic crash notification information from a telematics system provider to a local PSAP through an IP network? Or perhaps popping up an Instant Message window for a report by a hearing or speech impaired person, routed to the correct 9-1-1 public safety answering point? Or even passing still pictures or video seamlessly from the caller's communications device to the call taker?

The possibilities are only limited by imagination. My guess is that your research labs are working hard at developing new gee-whiz products that will be commonplace in a few short years, or more likely, a few short months.

It is time to move 9-1-1 onto the next generation network. The NENA Next Generation E9-1-1 program is the forum for bringing the players and possibilities that will feed into the cooperative efforts and yield the standards for an IP 9-1-1 network.

The guiding principal must be that a citizen in need of emergency assistance must be able to summon help from whatever communications device that they are accustomed to operating.

It is true that the current order limits the service requirements to Voice Over Internet services that are interconnected to the public switched telephone network.

The "I2" solutions meet that challenge and the timeline and milestones are now very clear to accommodate that public safety requirement.

But let's not get derailed from our ultimate goal – identifying the solution or multiple solutions that will provide "I3" 9-1-1 routing and location services for the nomadic and mobility Voice Over Internet consumer.

Therein lays our pathway to the future network design. Your solutions for the nomadic consumer will present new and unique solutions for a myriad of other problems.

The language in the FCC order is quite demanding for interconnected services, but it also clearly encourages innovation.

As we move into this new frontier, we need to remember the lessons we have learned from the past: Regulation tends to strangle innovation, legislation can cause delays, and delays are costly in real lives and real property.

I am proud of the contributions by NENA, especially in this particular arena. We strayed from mainstream public safety conventional wisdom to come together with the Voice Over Internet community to find solutions and drive this critical agenda.

There is no doubt that the work done to date, the VON Coalition/NENA agreement set the bar for FCC and Congressional policy on Voice Over Internet Enhanced 9-1-1 services.

The citations of the NENA work that are included in the FCC order and the statements by several of the commissioners provide a lesson in leadership.

The extra-regulatory cooperative agreement spurred early efforts to route 9-1-1 calls and connect to 9-1-1 networks in a migratory fashion, making the requirements in the FCC order a no-brainer, and set the agenda for our two-pronged approach – dealing with the here and now and preparing for tomorrow

We are not done – As Commissioner Copps said, now it is time to roll up our sleeves to get the job done.

NENA is committed to seeing this through to completion. We are committed to working with industry to make certain that we don't kluge ourselves into a corner and that the synergy of effort produces the framework for the Next Generation E9-1-1 internetwork.

At the end of the day, we all want the same thing. We want to know that the services we provide to the public help, not hinder them during their time of crisis.

Closing points:

- There needs to be a comprehensive training and education program developed to serve the needs of the consumer, the PSAP community and the VOIP industry.
- PSAP Readiness needs to be a coordinated effort to assure that value-added features of VOIP are systematically implemented.
- The National Coordination Office is vital to our vision of regional implementation of the IP-enabled PSAP.
- NENA has set the standard for the IP-capable PSAP to best serve the consumer, the PSAP and the first responder.
- NENA supports the early entry of reasonable I3 solutions.