



Jeff Robertson

**Executive Director
9-1-1 Industry Alliance**

CTM Speaks with Jeff Robertson of the 9-1-1 Industry Alliance

Jeff points out problems with the U.S.'s 40-year-old emergency call system, and discusses the changes his organization is working to implement. He is speaking at the January 28 Speak and Spark on [Is America's 911 System Ready for the 9/11 Era?](#)

As Executive Director of the [9-1-1 Industry Alliance](#), [Jeff Robertson](#) acts as the voice for an organization representing the emergency communications industry. Major issues confronting members, Jeff explains, include updating the technology and changing the funding model for a severely outdated 9-1-1 system.

Robertson is speaking at the January 28 Speak and Spark luncheon discussion, [Is America's 911 System Ready for the 9/11 Era?](#)

***CTM:** How does the 9-1-1 system work?*

There are 6,500 Public Safety Answering Points, called PSAPs, in the United States. Those are 9-1-1 centers all across the country. Right now, they're all islands unto themselves; they don't talk to each other and there's no networking at all.

Say you're driving from one town to the next, and you want to report a drunk driver that you're following. You could be talking to one 9-1-1 center a hundred miles away from you that has to physically call another center and relay the information. There's no real networking today. That's a real issue.

Another issue is that mobile phones have really changed 9-1-1. When I was a police officer, cell phones had just started coming out. For an auto accident, even with lots of personal injuries, you'd be lucky to get two calls – someone had to run from the scene and go to a pay phone or knock on somebody's door and report the incident. Now, it's not uncommon to get 50 or 100 just for a little fender-bender.

The problem with that is, the traditional 9-1-1 network has traditional phone lines that "busy out." There's no intelligence in that network to say, hey, all these calls are from the same longitude and latitude... So someone else just three blocks over might be having a heart attack and trying to report it, but can't get through.

This is one of the big issues with 9-1-1 in particular, and the technology is there to fix it. If we can get the calls and get the locations, we can make intelligent routing decisions that will benefit the public.

CTM: When we talk about Voice over IP technologies, 9-1-1 often comes up as an issue. How is that being addressed?

We believe there are two issues at play with Voice over IP and 9-1-1. First of all, the traditional 9-1-1 network as we know it today is about forty years old, so it's still all analog. That's one problem; it's a technology problem. The IP packets have to get converted back into analog before they can hop on the 9-1-1 network.

To do that, they typically have to talk to... a landline phone company such as Verizon. [Then there's] are business issues: Who's going to pay for the interconnection and handle the collection of fees?

CTM: What fees are you referring to?

Most wireless phones and all landline phones in the U.S. are assessed a tariff. It's anywhere from a few cents to a dollar a month, which goes into a pool that pays for the 9-1-1 network. Since it isn't a telecom service, Voice over IP doesn't come under that jurisdiction, so there are few or no payments being made for VoIP calls.

There's a disparity when you look at your phone bill if you're a Voice over IP customer compared to a traditional phone customer. Some of the bigger VoIP companies are now collecting and remitting those fees, but that has been an issue.

So there are two issues: a technology issue and a business issue.

CTM: Your speaking topic is "Is America's 9-1-1 System Ready for the 9/11 Era?" It's an intriguing title. It sounds like we're not ready with the system we have in place now.

The bottom line is no, we're not. The main reason is that the 9-1-1 network has not changed at all since it was founded in 1969. That network worked great when we had landline phones only. We've started to see a breakdown since mobile phones were developed, and now we've got VoIP technology [as well], and alarm systems like OnStar, which can dial 9-1-1 and report longitude and latitude and other information, like whether airbags have been deployed.

So we have the technology that can determine, oh, there's an incident—but to get it through the existing analog network is very, very difficult.

CTM: So the technology exists to upgrade the network. What about funding? What's the right way to fund the 9-1-1 system?

That's a topic that there are many different opinions on. We as an association believe there should be one tariff for any device that wants to connect to 9-1-1, [regardless of whether] it's a landline phone, a mobile phone, a VoIP phone... anything that [can connect to] the 9-1-1 network.

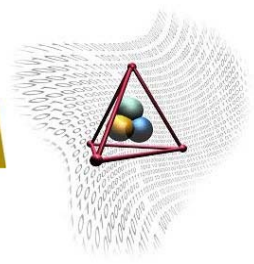
Right now, in the U.S., you can pay a dollar per month if you have a landline phone, thirty-five cents if it's a mobile phone, and twenty-five cents if you're a VoIP customer. It varies from state to state. That [disparity] isn't fair to companies or consumers. We believe there should be just one fee to connect to 9-1-1, regardless of device.

CTM: You talked about the two challenges: technology, and the business model. How far are we from working through these issues and updating our system? Are we close at all?

No, we're really not. The main reason is, we still have issues with mobile phones. They've been around for twenty years and we have a huge problem dealing with the peaks and valleys of wireless calls—locating those callers. There are newspaper headlines almost every week of somebody calling on their wireless phone who couldn't be located to send assistance.

I think it's finally time to move to an IP network and start logging whatever device it is that connects. We still have work to do there.

The good news is, the industry is finally open to looking at solutions. I think the industry has now agreed that a common platform based on a network, and networking these three sets [of call types] together, is the way to go. We just have not moved or executed yet on that yet.



Hold the Date Speak & Spark Luncheon Discussion

Monday, January 28, 2008
Noon-1:30 PM

University of Southern California
[Davidson Conference Center](#), Club Room

"Is America's 911 System Ready for the 9/11 Era?"



Featured Speaker
Jeff Robertson,
Executive Director
[9-1-1 Industry Alliance](#)
[biography](#)

Today the majority of emergency requests for help or suspicious activity come via the public dialing 9-1-1. During the last 30 years many things have changed, but the 9-1-1 network in the United States is practically the same design that was built for handling land-line calls. During this informative session on public safety, Mr. Robertson will discuss the future of 9-1-1 and the challenges America faces in creating an emergency request system capable of addressing all the new communication technologies that people use today.

Some other questions that this Speak and Spark will consider:

- What is the right way to fund a public good, such as 9-1-1, in an era of deregulation and distributed communication systems?
- Is 9-1-1 the major obstacle to increasing deployment of VoIP technologies?
- What level of reliability exists in 9-1-1 mobile calls today and what must be done to improve it?

What is a Speak & Spark Discussion?

Speak and Spark brings together CTM sponsors, USC faculty, and topical experts for an in-depth discussion around an issue of concern to the networked digital industry. The purpose of the session is to uncover critical issues and spark ideas for future inquiry.

For industry participants, it provides an opportunity to air concerns and provide "wish lists" around the topic --- while listening to a variety of points of view from nationally-recognized experts. For the faculty, it provides an opportunity to hear the concerns of industry, and to provide new ways of thinking about the topical area.

How is a Speak and Spark Discussion Conducted?

A moderator will introduce the overall session topic. Our speaker will lead off the discussion and then we will go around the room and allow each attendee to speak and give their perspective on the topic. Lunch buffet will start to be served at noon and will continue as we speak and spark each other with different perspectives on the topic of the day.

There is no charge to attend this session, but we do ask that you think through a 3-minute statement about your views on the ideas discussed above before the meeting so that you can fully participate in the discussion.

Please join us for a stimulating discussion over lunch. We hope you will be able to participate!

If you are unable to attend, please feel free to recommend this event to others.

To register by email or phone email cornejo@marshall.usc.edu or call Ruth Cornejo directly at 213-740-0980.