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President and CEO

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Company Focus: Serves 300 public-safety agencies and 10,000 users in parts of six states

What has been the biggest change in the industry during the past year?

As the Project 25 (P25) standard becomes more mature and developed, it becomes more relevant. Nearly every new radio system we are trying to sell is P25 based or upgradeable to P25. Now, it's the snowball that's beginning to roll down the hill.

The development of P25 from Phase 1 to Phase 2 is helping as well. TIA is on the verge of approving the Inter Subsystem Interface (ISSI). (Editor's Note: TIA has published four of the six Scope 1 ISSI documents, with the final two Scope 1 documents and three Scope 2 documents to be completed by end-2008. The remaining 13 Scope 2 documents are estimated to be completed by early 2010.) If you shoehorned it, with Phase 1 systems, you could buy mobiles and portables from different vendors. With Phase 2, it becomes easier to buy base stations and repeaters from multiple vendors. As the standard matures, it becomes more relevant. We are closer to having customers issue requests for proposals (RFPs), which say they want Phase 2 compliance. I know an RFP that was issued that read it wants Phase 1 now, but it wants a price today for what it will cost to take it to Phase 2.

The evolution of mobile-wireless data for public safety has been big during the last year, especially moving from slow-speed data to broadband data. In Iowa, we have six to 10 public-safety departments with broadband connections to data. Some are doing the cellular air card thing. The change is people are now buying and installing their own private broadband networks using Wi-Fi or unlicensed 900 MHz solutions.

Mobile broadband wireless is a new opportunity that wasn't there a year or two ago. Having a broadband connection opens up a whole new realm of opportunity in our world for selling applications or hosting applications for those networks. We're doing both. One application is video. As soon as a police officer gets the opportunity to stream video to his patrol car, he wants more. Because of this, we have had to develop lots of competencies in new areas for us — such as IP video surveillance. Public safety wants the ability to look inside schools or banks. I think during the next few years, it's going to revolutionize the way public safety responds to incidents.

People are implementing broadband wireless with unlicensed technologies, which is something you wouldn't have seen a while ago, but that's the best they can do right now. They are taking the risk of potential interference to get broadband capabilities. However, as all the 700 MHz stuff shakes out, it's going to mean a licensed, high-power product for public safety, and that's going to be a good thing.

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What FCC policies have most impacted the industry during the past year?

I think Cyren Call Communications' original idea is a great idea: having a private entity build, manage, and maintain a hardened network primarily used by public safety and excess capacity being shared with other users. Public-safety networks and terminal equipment are incredibly expensive. That trend just can't continue. Paying more than $5,000 for a high-tier portable radio is just ridiculous. We have to have more business models that spread network costs over multiple public-safety agencies and leverage the scale of commercial users to lower terminal pricing. Racom and its customers are familiar with this model; it works, and it works well. Many, if not all, of our customers would not be able to afford as much network or as many terminal capabilities as we provide them if they had to fund it all by themselves.

Racom was one of the first in the country to implement the public/private concept, and when we started in 1994, there weren't many public-safety agencies that would embrace the concept. Now, it's becoming more accepted every day, which I would say is mostly driven by cost. We operate a hardened public-safety network that's built for wide-area coverage and interoperability. The reasons people choose our network are interoperability, coverage that is greater than they could get with a private network, and because they can share the cost with other users. This concept is expanding — Motorola has its statewide network in Illinois, Starcom21, and M/A-COM has its own in Florida, SLERS. The concept is now proven and successful by multiple U.S. operators. Interestingly, the concept has never been foreign to users in Europe; it has been the norm in the United Kingdom for decades. Customers who once thought they would never "subscribe" to a mission-critical voice network are beginning to rethink that idea.

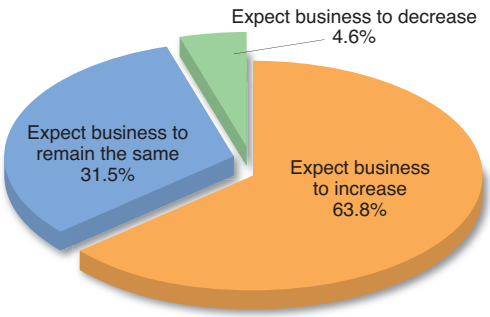
While the Cyren Call concept at 700 MHz for mobile broadband data

is great, I worry about having one nationwide license holder and one network builder. If you're a small network operator/SMR/dealer, you could be left out of the future for broadband wireless for public safety. Why? In my mind, only a cellular carrier can afford one nationwide public-safety license. If the Verizons and AT&Ts are the only ones who can afford to buy the multiple-billion-dollar 700 MHz license required to work with public safety, it turns all dealers into agents for the cellular company if they want to play in that 700 MHz future, which isn't a terribly exciting prospect.

How will data applications affect two-way radio dealers and SMRs?

As we are transitioned to IP, I see many dealers and SMRs being less prepared than they should. The skill sets required of our people are dramatically and rapidly changing. We've had to invest a lot of money in people and training to get prepared, and I'm not sure some others have been able to do that. The new demarcation point for our radio systems is no longer a radio room; it goes all the way to the police chief's desktop computer.

2007 Dealer Outlook



Source: MCC Snapshot Survey, March 2007

> "One nationwide public-safety licensee could turn all dealers into agents for the cellular company, which isn't a terribly exciting prospect."

What are the most promising data applications for private-wireless users?

As data speeds change and you can deliver 1 Megabit of data per second over a network, video is probably the single largest change. We've had to develop competencies in video surveillance that we didn't have. But in developing those, you develop a whole new set of customers and applications. With public safety, you have an automatic point of entry. If you have a relationship with them, it's easier to differentiate yourself from pure video surveillance companies. We are expecting growth of 10 times our current sales in the next three years in public-safety video applications.

What are your thoughts on the FCC's third report and order (R&O) on narrowbanding?

We have lots of customers spending money to narrowband to 12.5 kilohertz in the natural course of upgrades. But the state of Iowa, for instance, isn't looking at VHF spectrum to do the upgrade because of narrowbanding, spectrum crowding, etc. The state is looking at other spectrum. Other customers are gradually spending money on portables that are narrowband compliant. However, large utilities with VHF/UHF repeater networks don't know what to do. When the spectrum goes narrowband, they won't get the coverage they need.

Is there enough research and development (R&D) ongoing for mission-critical communications technology?

The easy answer is no, but I'm not sure that's a complete answer. A full-featured portable radio is a $5,000 piece of equipment. That's ridiculous when I have a cell phone that I paid $199 for with the same capabilities. But the market for mission-critical communications is small; much smaller than for a cell phone. So I think there is a lot of R&D going on in mission-critical communications based on the size of the market it is serving. There is a lot of R&D in IP and how we take that out to the radio itself. But $5,000 for a portable radio is ridiculous.

That's another reason why the Cyren Call idea is a good one — scaling. That's the only way prices will be able to drop. One of the P25 goals was that with multiple vendors, the price would drop; we will never see small agencies move to P25 equipment until that happens.

What new technologies will affect the industry in the near future?

Broadband data, whether it's unlicensed or 700 MHz, is going to be huge for us. The opportunities lie in selling and designing those systems and the applications that will go through those systems.

How is the 800 MHz rebanding process going?

Our network is about 80 percent channels that are Racom controlled and 20 percent that are customer channels. So, 20 percent are being rebanded because they are licensed to our customers.

I think that the Sprint Nextel negotiators are smart, well trained, tough, and savvy. I'm not sure our industry of folks was prepared for how good they are and how much detail they require. That has been a real wake-up call. We've developed a whole new set of processes to track time and detail that we never tracked before. That's not necessarily a bad thing, but it's a lot of work and time. I don't think rebanding will ever get done close to the current schedule because of it. ■

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