



## Editor's Foreword

By Joe Pavlat

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# NXTcomm 2007, IPTV, and the future of networks

North America's largest telecom oriented trade show was held in Chicago's McCormick Place June 18-21. This event has a colorful history, beginning as SUPERCOMM, then morphing into GLOBALCOMM and TelecomNext last year when the two sponsoring organizations, USTelecom and the Telecommunications Industry Association ended their joint sponsorship. The two groups have gotten back together again, and the result is yet another name, NXTcomm. NXTcomm 2007 looked a lot like the Chicago event of previous years, although there was a general feeling that overall attendance and the number of exhibitors was down a bit from last year.

A major theme this year for both conference sessions and exhibits was IPTV, which according to some analysts is growing at a rate of 100 percent per year. CEOs from AT&T, Cisco, Motorola, and the Chairman of the Federal Communications Commission (FCC), as well as CTOs from major suppliers and customers presented their visions for an increasingly connected broadband world. All emphasized that Video on Demand (VoD) and mobile video would require increased broadband availability and faster networks. This is a huge opportunity for both the carriers and equipment suppliers. FCC Chairman Kevin Martin, via satellite from Washington, told the crowd, "The ability to provide video may be an important and key component to deploying these additional broadband networks and making that kind of infrastructure and investment. I think it's critical that we make sure we are facilitating that investment – not only to make broadband more available throughout the country, but also for more competition on the video side." Fiber will be pushed out closer to the consumer and higher speed networks will be required.

In a recent chat, Mike Coward, CTO and cofounder of Continuous Computing, provided significant insight into some of the issues facing network providers. Bandwidth usage is increasing exponentially due to a steady increase in the number of broadband customers and the bandwidth each one is using. Metro Area Networks are already choking, and many providers are throttling bandwidth to keep the network from melting down. It's running near or at capacity. Mike argues that it is perilously close to melting down, and video is one of the reasons. IPTV is seeing annual growth rates of approximately 100 percent, with no slowdown in demand in sight. This means that by 2010 approximately 400 times as much bandwidth will be needed than is available today. This will necessitate significant upgrades to the network, and broad rollout



of 10 Gigabit Ethernet will be mandatory. Mike also points out that the game is changing. Carriers used to have a largely captive audience for both transport and content. Now, content is increasingly decoupled from transport. This suggests that content providers such as Google and YouTube will become more dominant and command a greater share of consumer revenue. The reason is simple: subscribers value content more than transport. So, will tomorrow's sophisticated data networks become commoditized like the electricity grid? Perhaps, although carriers will have the opportunity to differentiate themselves by emphasizing seamless coverage and quality of service.

For the fourth year, PICMG sponsored a pavilion booth, known as the PICMG Technologies Showcase. More than 40 PICMG member companies exhibited their products and technologies, and all seemed pleased with the booth traffic. Several live demos were on display, along with static displays of AdvancedTCA boards and shelves, MicroTCA systems, and AdvancedMC modules. Motorola showed a sophisticated live demo of a MicroTCA system developed for the Swedish government that helps hearing impaired customers in shops communicate with sales personnel and employees. A portable videophone enables a customer using sign language to communicate with a translator in a central location who then talks to the shop staff. I did ask one of my good friends at Motorola if a simple pad of paper and pencil wouldn't be simpler. I love technology, but ...

CompactPCI and AdvancedTCA Systems editors took advantage of the opportunities NXTcomm afforded to speak with a wide range of companies, including Agilent, AFORE, Cavium, Dialogic, XES, Performance Technologies, Tail-f Systems, XES, Telrad, and Allot Communications, among others. We look forward so sharing their insights in future issues of this publication.

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