Freescale Takes Software Approach to Small Cells

BY ANDREW BERG

Small cells have emerged as a big part of meeting the data crunch. They're a cheaper solution promises to reduce CapEx and OpEx, while helping operators meet the impending data crunch.

Stephen Turnbull, wireless marketing manager for digital networking for Freescale, says his company is able to differentiate from other infrastructure vendors on a number fronts, starting with the company's many years in the business. However, he's says it's the company's flexible software approach that really sets Freescale apart from the rest of the pack.

"We have a portfolio that covers residential, enterprise and in-building solutions," Turnbull said, saying the company's software is based on a common archi-

Turnbull

tecture found in chips of all sizes, from pico cells to macro cells.

Turnbull says that while most of the activity in small cells up until now has been residential deployments, the push to LTE has operators on the verge of major metro cell deployments by the end of this year and into early 2014. And, he says, that's not happening in just one or two markets.

Freescale is currently working with customers in China, India, Japan, Latin America, Europe and North America. The company is also working with CPqD as it works to meet capacity when Brazil hosts the Olympics and the World Cup.

Freescale will be demoing a number of products here at CTIA 2013 at booth 3766. ●

CTIA Testing Days 1, 2, 3

As the CTIA masses arrived, Global Wireless Solutions, Inc. ("GWS") continued its testing of the network performance of four national wireless carriers throughout the Sands Expo and Convention Center. Tuesday's tests provided insight into the stability of each network as they became more loaded with traffic on the first day of CTIA 2013. GWS performed indoor testing using Rohde & Schwarz's SwissQual Ranger backpack benchmark solution. In addition, GWS also performed data testing using a GWS-developed speed test app

Tecore CEO Salkini Aims for Coverage in the Wild

BY ANDREW BERG

Jay Salkini, president and CEO of Tecore Networks, knows a thing or two about rural coverage. The company's Network in a Box (NIB) System in Yakutat, Alaska, which was deployed just months prior by Cordova Wireless provided the lifesaving communications for two stranded hunters. Wireless Week caught up with Salkini to get his thoughts on the challenges and opportunities involved ensuring that wireless truly ubiquitous.

Are there particular challenges, opportunities in getting reliable wireless broadband access to rural areas?

Rural areas have always had the challenge to make the cost model for the infrastructure fit the subscriber base and the unique architectural requirements of a rural deployment. The deployment of 3G and 4G technology in these markets is no different. For over twenty years, Tecore has focused on providing solutions that fit these models and architectures. Whether its deploying the network in a distributed architecture, optimizing backhaul bandwidth or delivering customized features for the target market the requirements of the rural markets are unique and require a customized architecture to

Jay Salkini, president and CEO of Tecore Networks

deliver a suitable solution for these markets. So the answer is threefold:

1. Devices – As mentioned previously, the smart phones and devices need to be there. The rural markets do not present the volume or users or demand that drives specific model development. Therefore the devices in their network must come from the defined set of the larger operators. Without devices, the technology cannot move forward.

2. Distributed Architecture – Centralized control does not work for areas that do not have reliable low-cost backhaul with significant bandwidth. The rural market has

no less expectations of service than urban areas. To provide this service the architecture of the network must be put in place that best serves the community. A drop in a backhaul link cannot leave a rural market without service. This requires a unique approach. This is what Tecore has done for twenty years.

3. Interoperability and Roaming – To provide a competitive service in the rural areas, the smaller operators need the opportunity to roam on the larger networks out of market. This is sometimes difficult for the rural operators to negotiate but for their networks to survive, roaming both inbound and outbound is a critical component to delivering the service.

What do you think will eventually drive North American carriers to build out their networks in rural areas?

There are a combination of things that will drive the technology forward:

1. Commodity handset supporting necessary bands

2. Increasing subscriber demand for services

3. Companies like Tecore that can deliver the technology in the proper architecture to fit the market. ●

CTIA Testing continued from page 4

loaded onto Samsung Galaxy S3 and S4 devices.

Testing showed that all voice calls still were successful on Sprint and Verizon networks, but AT&T and T-Mobile blocked a single call each. AT&T blocked a call near the concession stands inside the main floor, and T-Mobile blocked a call outside the main floor near the Venetian Ballroom, at a location consistent with yesterday's blocked call.

The two mature LTE networks GWS tested reacted quite differently to the onslaught of traffic on Tuesday. AT&T's LTE network maintained a firm response to the additional traffic with download throughputs at about the same level as yesterday, between 8 and 11 Mbps. Verizon's LTE network slowed significantly, with download throughputs reduced by more than half from yesterday's level, delivering about 6 Mbps. T-Mobile's DC-HSPA network experienced a slight reduction in speed, but was hard hit with failed sessions throughout the convention center on both the Ranger and the GWS speed test app. Sprint's EVDO was still the slowest, with throughputs reduced by about 35% from yesterday.

Sprint's, T-Mobile's, and Verizon's upload throughputs all were cut by 50 percent to 75 percent from yesterday. However, AT&T's upload throughputs remained somewhat steady with a 20 percent reduction, and were the fastest provided by any carrier. AT&T and Verizon LTE networks loaded websites more than twice as fast as other networks, using international standards set for browser testing. ●

CTIA @ the Show

Hunter, Ruhl Named to 2013 CTIA Board

CTIA has announced two new members to its 2013 board of directors. Effective immediately, nTelos Wireless President Conrad J. Hunter and Pioneer Cellular General Manager Richard Ruhl will serve as small carrier representatives.

According a press release, Hunter and Ruhl will serve on the board for the remainder of the year.

Steve Largent, president and CEO of CTIA, said he was pleased the pair have joined CTIA at a pivotal time

"As we continue to advocate on behalf of our members, their perspective and understanding of the policies and issues impacting the U.S. wireless industry will be helpful. I look forward to working with them," Largent said.

CTIA Awards B!G Ideas

CTIA today announced the winners for its annual B!G Idea Awards at CTIA 2013. The awards honor what the association calls the "mobile champions and visionaries who are transforming the mobile ecosystem and this year recognize the individuals who are driving global mobile innovation."

Members of the wireless industry participated in the process, voting online for their favorite B!G Idea contenders. With the votes officially tallied, the winners were announced by Sascha Segan, Lead Mobile Analyst for PCMag.com.

By category, the 2013 B!G Idea Awards winners are:

The Mobile Visionary for Vision, Strategy & Business Acumen was awarded to Wayne Irving II, CEO & Chairman, Monster Offers.

The Ingenious Innovator for Product & Service Innovation, R&D was awarded to Rip Gerber, President & CEO, Locaid.

The Commerce & Retail Commander for Commerce, Retail & Distribution was awarded to Steve Abernethy, President & CEO, SquareTrade.

The Mobile Guardian for Enterprise IT & Security was awarded to Chris Hill, Senior Vice President, Advanced Solutions, AT&T Business Solutions, AT&T.

CTIA 2013 - THE Mobile Marketplace presents THE B!G IDEA CONTEST