



Mobile Solution Proves Elusive For Cable as Sense of Urgency Mounts

Business models and tech solutions remain to be worked out

By Susie Kim Riley, Founder and CTO, Camiant

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Industry executives repeatedly stressed the importance of a mobile connection at the recent National Cable Telecommunications Association Show in San Francisco against a backdrop of aggressive planning on the part of the Bell companies for closer tie-ins between their new IP-based landline and mobile platforms. No longer is the issue simply a matter of having a mobile service in the package bundle; now it's a matter of having the ability to offer branded content and communications applications to users no matter where they are.

A blunt assessment of what's at stake was offered by Cox Communications CEO James Robbins during a keynote panel discussion at the NCTA Show. Robbins cited "the notion of partnering with mobility players" as the force that will change the profile of cable companies in the years ahead. "I hope we can indeed do that to get to what the consumer wants, or they're going to leave us behind," he said.

The call for a partnership was forcefully echoed by Sprint COO Len Lauer, who said "The cable MSOs have a window right now against the ILECs. Let's seize it."

Lauer stressed the common ground cable and Sprint have when it comes to facing competitive challenges. "The enemies are SBC and Verizon," he said. "So we have common alignments in terms of who's on our dartboards in our offices."

Time Warner Cable is already working with Sprint PCS in an MVNO (mobile virtual network operator) arrangement in Kansas City, and Sprint, which is the midst of acquiring Nextel Communications, has interconnection and long-haul transport agreements in place with a number of MSOs on the fixed voice side. The top three MSOs – Comcast, Time Warner Cable and Cox – recently formed a consortium for purposes of establishing a national footprint for a play in mobile, whether it's through a partnership with one or more cellular companies or through some kind of equity investment.

A high-ranking industry official, speaking on background, said the mobile consortium initiative had reached a new level of intensity. "These guys are really trying to make a deal with a wireless provider," the executive said. "There's a lot of talk back and forth, but they aren't very communicative about the details."

But at press time, over a month after the show, there still was no news of progress on the negotiating front. Tom Nagel, vice president of business development at Comcast Cable, hinted at why getting to a deal is no cakewalk. He described three options open to cable – simply cutting a deal to bundle a branded cellular service with the cable bill, much as some Bell companies are doing with DBS services; leasing "buckets of minutes" and branding the service under the MSO's name in an MVNO relationship, or taking an ownership position either by purchasing a stake in an existing mobile operator or licensing spectrum and building cable-owned mobile infrastructure.

The bundled service approach gets the cable operator into the business fast and at minimal cost, Nagel noted, but it leaves "us no assets to work with for purposes of innovating the kinds of services our competitors will be able to provide." The MVNO approach adds depth and some innovative viability to cable's mobile play, he said, but it's not an easy deal to negotiate. "The difficulty is we're big," he explained. "In a hyper-competitive industry like mobile, bringing in another competitor may or may not be what they want to do."

Either avenue in the ownership approach presents problems, where, on the one hand, purchasing a stake in an existing operator locks the cable company into a specific technical platform that may not be optimal for what cable companies want to do, and, on the other, obtaining spectrum and building infrastructure takes time which the industry might not really have if it is to meet the telco challenge head on.

"The great part about building our own infrastructure is it could be transformational," Nagel said. "You could skip 3G and go to 4G if you think that's where customers want you to go. You can clearly begin to integrate products across all your platforms and do it in a way that's beneficial to you without having to accommodate a partner."

Lauer made clear which way his company wants to go in any deals with cable. He said his company is not interested in loose marketing affiliations where cable companies would combine Sprint PCS services on a single bill with other cable services. "We don't have an interest in that play, because we believe in convergence of devices, convergence of content and convergence of where that customer might be located from an access standpoint," he said. "We really want to work with cable companies that have a common view of differentiating, changing the game for the consumer. If they do that, we think we're a great partner."

That perspective would appear to take Sprint beyond the MVNO level as well, suggesting that what the carrier really wants is an equity-based partnership. But people close to the cable side suggest the big MSOs are not ready to go back into the kind of power-sharing relationship they tried in the past with @Home Network, especially when it involves bringing in an outside party.

This leaves something more in the way of a compromise where the relationship might go deeper than MVNO through some kind of complex investment sharing strategy for purposes of creating an integrated fixed and mobile environment for the offering of cobranded voice and next-generation services – a kind of "Sprint Plus Cable" that is only available to cable subscribers. As cable operators look for mobile solutions at the business level their technology suppliers are making some headway in an intensive effort to accommodate the requirements of service integration across the wireline and wireless infrastructures.

"Many people are working on what this stuff looks like," said Susie Kim Riley, founder and CTO of Camiant, a leading supplier of policy servers and applications tool tied to the PacketCable Multimedia platform. "It's not simple."

The difficulties have to do with the fact that a way must be found to ensure IP-based multimedia traveling over a mobile network finds the intended user. "There's an unbelievable amount of signaling that goes on in cellular," Riley said. "This adds an extra burden to the control plane intelligence in the packet domain."

The cable industry is working on version 2.0 of the PacketCable standard, which would include means by which integration could be accomplished at both the physical layers and the operational layers. For example, a lot of attention is being given to the IMS (IP Multimedia Subsystem) architecture as a framework for cable's integration with mobile, noted Mike Clement, voice-over-cable solutions manager at Siemens Network Convergence.

"We're working with CableLabs as part of the PacketCable 2.0 specifications team to model the IMS architecture in a way that works for cable," Clement said. IMS, which is defined in slightly different ways by the 3GPP and 3GPP2 standards for UMTS (Universal Mobile Telephone System) and CDMA2000, respectively, leverages SIP (Session Initiation Protocol) to support IP-to-IP sessions within and between any wireline or wireless network.

The problem for cable is that various initiatives using SIP as the signaling protocol for IP-based mobile applications apply the SIP mechanisms in different ways. "SIP is a very flexible tool," Riley said. "What we need to create is an environment where if Sprint, for example, is using IMS with SIP for multimedia, that traffic should play in the Comcast SIP domain, even if it's not IMS."

The solution lies in establishing certain points of interfaces where different SIPbased architectures can be "spliced together" with some type of "handshake" that serves to translate the messages across the interface, she said. This is on top of the processes that must be engaged to allow data from one network to access the other.

Along with agreement on the technical structure there has to be agreement on business rules and how they are expressed for purposes of allowing traffic to flow between networks and ensuring that a user authorized for access to an application in one network has authorization to access it from the other. This, too, will take time to work out.

But, given that SIP and PacketCable Multimedia are both in play, there's nothing holding back tech development and testing of the processes, Riley said. "SIP allows sessions to be set up using IDs that represent the end users," she said. "PacketCable Multimedia is about saying you can manipulate how the network allocates resources to the data flowing over the network."

While some cable operators are waiting for the next version of PacketCable to be formalized, others are working closely with suppliers in the field to put solutions together they can use even ahead of standardization. "The use of dual-mode (Wi-Fi/

cellular) phones is one of the early experiments," Riley noted. "CableLabs is working on PCMM 2.0 to harmonize IMS for cable. But because all of this is being built around the PCMM and SIP components operators already have implemented in their facilities, they would benefit from moving ahead with the work on mobile integration."

Nagel acknowledged much remains to be worked out before cable becomes a substantive player in mobile, making it impossible to say when Comcast or any other cable company will be in a position to offer a branded national mobile service. "We have a value chain we have to work with, including the handset suppliers, the operations system developers and the mobile service providers, and each has a piece as to when the date is," he said. "We haven't figured out relative to the cost curves and other issues when that date will be."