THE ATM & IP REPORT

A CONVERSATION WITH WILLIAM RODEY
CHAIRMAN & PRESIDENT, DSL FORUM

At Supercomm you are generally guaranteed two things, a maze of booths where the occupants are handing out namesake tchotchkes and people in search of the latest technology. This year the DSL Forum would like to shake things up a bit. Their booth will feature a virtual living room complete with big screen TV with IMagic, Alcatel and Thompson Multimedia showing a set top box and demonstrating real Video-on-Demand. More importantly will be demonstrations of new deployment-speeding developments in the areas of auto-configuration and interoperability.

Examples to be showcased will feature progress towards "plug-n-play" and "pack-n-go," where a traveling executive will be able to move to a different location and plug into a working DSL jack. Bill Rodey, Chairman and President of the DSL Forum, is very excited about the variety of advanced features being displayed at the Forum's Supercomm booth. Below are his thoughts on the technical advances in Digital Subscriber Line technology and the current state of the market.

TAIR: Bill, thank you for talking with us today. First, tell us about the state of the DSL market. Some people believe that DSL has somehow failed, but the numbers say otherwise.
Since the last time we talked, we have received deployment numbers on DSL growth in 2001. It was a fantastic year with 188% global growth and a total consumer installed base of nearly 19 million at year end 2001.

Our goal is 200 million consumers worldwide by the end of 2005; that's ten times the current installed base, in the next three years.

TAIR: What do you think we can expect to see in North America in terms of that goal?
Currently, North America accounts for only 35% of the global total. The reason being, some of the large telephone companies who could roll out services very fast are embroiled in an argument with the regulators.

Assuming that they solve the argument, which is in everybody's best interest, we could see a very rapid growth in North America. We are still installing 1000s & 1000s of customers per day, even though it is not being rolled out as fast as it could.

In North America, there are about 4.5 million DSL consumers. Clearly, there is a thirst for broadband data and the always-online benefit that goes along with the DSL connection is quite compelling. I see no reason that we couldn't see ten times the penetration in the U.S.

TAIR: Now let's review the latest activities in the DSL Forum.
The Forum has been very active--we have approved five new technical reports. One that is gathering a lot of attention is our TR on auto-configuration. It is an important reference showing modem suppliers how to build a product that will automatically configure itself to the network signal.

TAIR: Does this enable the customer to do their own installs?
Yes. It really helps make that happen in a streamline fashion.

In addition, we are focused on continuing our efforts to educate interested parties and regulators. We also have a big effort going on for interoperability, with the release of TR 48 – ADSL Interoperability Test Plan. We are close to establishing a contract program enabling independent test labs to provide interoperability testing services using DSL Forum test suites.

TAIR: What sort of activities do you have planned for Supercomm?
One of themes at our Supercomm booth will be 'plug-n-play' and 'pack-n-go.' We are mustering our volunteers to work on getting DSL to the point where it is plug-n-play, so you simply attach it to a telephone jack and it works.

If a person is on the move, they can unplug it and take it to their next destination and plug it in again, that's the pack-n-go aspect.

TAIR: This sounds like the Holy Grail for DSL, to be like a standard modem that anybody can buy from any supplier, plug it into any phone line anywhere, and it works.
Yes. We are not there yet nor will we be there by Supercomm, but we will be showing some progress towards it in our booth. There is really a lot of excitement about what's going on. It is the first time we have or anybody else has demonstrated the link between autoconfiguration and interoperability. The folks that are in our section from plug-n-play to pack-n-go will be showcasing the fact that all DSLAMs and all CPE in that section are interoperable.

We will also have a patch panel where a port might be labeled as a BellSouth configuration and another port might be labeled as a Verizon configuration. The CPE can be disconnected from one and plugged into another, demonstrating how the dynamic handshake happens, and how the CPE automatically reconfigures itself to the new setup. It really opens up a whole world to the opportunity of the retail availability of DSL.

TAIR: So today with DSL, the customer receives the modem or CPE from the service provider?
Correct. However, there are a lot of people who like to travel and want their same broadband capabilities where ever they go. It's amazing how quickly it's happening since the TRs have been approved.

In our technical work, we are beginning to look higher in the protocol stack. In the Supercomm effort, for example, we have a number of suppliers coming in to display exciting applications like Voice over IP (VoIP), interactive games, Video-on-Demand (VoD) and video conferencing.

One exciting part of the booth is the "Virtual Livingroom" where IMagic, Alcatel and Thompson Multimedia are showing a set top box and demonstrating VoD. The key question seems to be, whether VoD is going to be the application that propels broadband forward.

We will also be showcasing VoDSL and regular telephone service applications on a PC running simultaneously with VoD on a large screen TV. The purpose is to show how with a single telephone line you can empower your home via ADSL. There will be at least 20 displays represented by close to 20 suppliers.

TAIR: Do you think the telecom carriers are starting to reconsider the option of becoming a full service provider again, using DSL as the transport medium? I am thinking back to the Full Service Network concepts back in the early 1990s.
I think that is definitely in play. When VoD failed in the mid-1990s, the problem was getting enough content to deliver over the ADSL link. The Internet has solved that, so you can now get the content using DSL.

TAIR: Some of the big Hollywood studios are looking at distributing movies in digital format, possibly using the Internet as a distribution medium. I think their concern is pirated digital video will appear first, and they won't be able to control it.
The copyright issues have been slowing things. It looks like that is going to be overcome. We hope so. There's a lot of music and video which would be very attractive to the American audience and would help create that upward spiral.

There is going to be another attempt at implementing tele-commuting. DSL is a key enabler, the bandwidth provided will support voice, video and data and VPNs. Expect to see the Forum promote that.

TAIR: How has the DSL Forum helped to improve the spread of DSL?
With the TRs that have come out, it has really empowered the service providers to impact the cost side of their business model. When you have an automated flow-through provisioning process, it allows you to connect with the same interface to every reseller. When the equipment can be auto-configured and you don't have to send trucks to get the service up, your costs go down. So if the equipment is interoperable, you know you are not locked into a certain vendor. You can begin buying on price for that as well.

TAIR: Do you think we need a national broadband policy like South Korea?
Absolutely. That's one of the reasons Korea has been so successful. They have been so solidly behind the broadband initiatives in their country. If we want to be competitive in the world, we need to ensure an always-on broadband connected populace.

If we don't, we run the risk of falling behind countries like Korea, Taiwan, Japan, Germany and other places where they are actually making it a strategic imperative to get their folks hooked up.

TAIR: What do think we need to do as a country?
The DSL Forum is not a lobbying organization. However, my personal opinion is that our government needs to take a look at what the obstacles are to having a mass deployment of broadband and remove them.

Right now, there are a number of arguments in front the United States congress and the FCC. The government needs to embrace the importance of broadband and expedite the decision process and create a framework so that it can occur. We would like to see DSL on a level playing field with other broadband alternatives like cable modems.

TAIR: Why do you feel that the playing field between the cable industry and the DSL industry is not level today?
The cable industry is pretty much unregulated—there is no mandate for competition. Unlike the telecom industry, they don't have to unbundle their elements. They can pretty much saddle you with an ISP in the same way that they saddle you with their programming.

In contrast, the CLECs and ILECs are very unregulated. They are open to competition, which we think is a good thing. However, some of the regulatory hurdles placed on some companies make them feel like investments in equipment that could support broadband is not a good investment because of the ways in which they have to share it.

I'm not saying that they are right or wrong but we need the government to make a decision on whether they are right or wrong and set up the framework.

Globally, DSL has surpassed cable. We are putting in more than 50,000 customers on a daily basis. Globally, cable was somewhere around 11 to13 million at the end of last year; DSL was somewhere around 19 million.

We are winning the global battle; it's in the U.S., where a lot of the world's money is, that the telephone companies are moving a little slower. Yes, we are still seeing positive growth every quarter. We had 65% growth in the U.S. during the beginning of last year and the end of last year.

TAIR: Do you have DSL at home?
In my house, we implemented DSL service from Earthlink. I open Internet Explorer and I'm on the Internet courtesy of Earthlink. If I want to communicate with my office, I open up a VPN. I can have both applications open and click back and forth between them.

TAIR: There is a perception that DSL growth has stalled. What would you say to those people who perceive the industry or the technology as failing to gain popular acceptance?
DSL is growing. The U.S. installed base tripled through the year. I would say that people who have that opinion are reading a few negative stories, taken out of context, and they are forming an impression based on partial facts.

TAIR: Bill, I agree completely, I just wanted to hear you say that. I am already looking forward to seeing the DSL demos at Supercomm.