

# THE ATM & IP REPORT™

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## INDUSTRY NEWS

**DSL Deployment Update: 15 Million and counting.** Bill Rodey, President of the DSL Forum, says DSL is doing much better than people realize. Worldwide DSL lines in service have reached 15 million, and that is just the beginning. Rodey has an ambitious goal, 200 million DSL lines, 20% of the world's copper telephone lines, in service by 2005.

With the demise of DSL service providers such as Rhythms and Northpoint, many critics have tried to present DSL as a failed technology. Certainly, 2001 was a difficult year, but a tally of DSL subscriber lines around the world shows a very different picture, with 15 million lines in service at the end of 2001, a **300% increase** in one year. One Asian country, South Korea, has as many DSL lines as the United States. (See article on page 16). Meanwhile, Germany has become the engine of broadband growth in Europe. The following is an international accounting of DSL lines (rounded to the nearest million).

Asia/Pacific.....	7 Million
Europe.....	3 Million
Americas.....	5 Million
Total DSL Lines.....	15 Million
Other Broadband.....	11 Million
Total WW Broadband.....	26 Million

**Quote of the Month:**

*"Fred: If you write more of this garbage, I'm threatening to write yet another... column on the subject, bringing in even more evidence that ATM's days are numbered. ;-) I'd also like to...make a large monetary bet with Tom Nolle or one of the other Luddites who believe ATM's best years lie ahead."*

Dave Passmore, Research Director,  
The Burton Group

(Responding to a column written by BCR editor Fred Knight on BCR's eForum)

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## SPECIAL REPORT: ATM & MPLS SERVICE PROVIDER SURVEY 2

As we wrap up our series of conversations with the chief network architects, planners and engineers at a number of the largest service providers, one of the big questions we sought to answer is whether they really believe in the MPLS story and whether that will lead to a major transformation of Layer-2 data network architectures towards an IP-centric converged model. Here, the answers are somewhat ambiguous. At first, they all say *"Oh yes, we are very interested in an upgrade path to MPLS."* And when? *"Perhaps in a year or two, depending on when the standards and interoperability issues are resolved."* Well, that last condition is the "gotcha" which means it could be a while.

It is true that MPLS is viewed as a desirable future upgrade to new or existing multi-service (ATM) switches. One factor that does seem to dominate current thinking is a desire to take advantage of fast growing IP-VPN services, and a view that the integration of Layer-2 and Layer-3 VPNs can best be facilitated via MPLS.

On the other hand, there is an entrenched belief that IP/MPLS backbones will be limited to lower-QoS, best-effort IP services. The prevailing view is that higher-QoS and especially real-time traffic will stay on ATM for the foreseeable future. Vendors of MPLS-centric switch/routers bear the burden of proof convincing service providers otherwise.

The good news is that large ILECs and IXC's, despite much publicized CAPEX cuts, have budgeted funds for the acquisition of new multiservice ATM/MPLS platforms. If you want to learn more about this exciting and dynamic market, please turn to the Service Provider Analysis and Q&As beginning on page four.

## THE NETWORK LETTER:

### Caspian Networks CTO Dr. Lawrence Roberts Releases Latest Internet Traffic Report

**FACTS:** Dr. Roberts studied trunk port capacity and utilization rates for 20 Tier-1 ISPs in U.S. over a two year period from Jan. 2000 to Jan. 2002.

**FINDINGS:** His findings suggest Internet backbone traffic is growing at 3 times (3x) per year, or 200% annually. Internet traffic is now projected to grow by a factor of 2.5-3x per year for next few years.

**ANALYSIS:** Roberts' latest figures are substantially lower than the previous growth rate of 4x reported last summer. However, it would be a mistake to conclude from this latest study, as some in the trade press have already done, that Internet growth has slowed dramatically in the past six months. Roberts' explanation is that the earlier growth rate appears to have been an anomaly, an unusually high peak, possibly due to a spurt of new buildouts. His latest measurements cover a longer period and should better represent the long term rate of growth.

For comparison, noted academic researcher Andrew Odlyzko (along with associate Kerry Coffman), has conducted extensive research on this issue for several years, and believes that the natural long run rate of Internet growth is around 100% (2x) per year, with a variability ranging from 1.7 to 2.5 in any given year. (Continued on page 2)