

IPCC NEWSLETTER

MESSAGE FROM THE CHAIRMAN

Dear IPCC Members,

As the news section of this Newsletter indicates, there have been a plethora of new VoIP deployment announcements in the last month. Research from Infonetics, over the last year and recent S&P ratings also cited herein, concur with this trend. SP deployments, however, are not all that is in bloom this Spring. The IPCC's Working Group initiatives for 2004-2005 got off to a good start at the Spring VON show in Santa Clara at the end of March. The Working Group meetings were held jointly with the SIP Forum and IPCC Service Providers group meeting.

There were over 30 attendees, twice as many as we expected, including IPCC Board Members, Vendors and Service Providers from fixed line, Cable and Wireless companies, representing North America, Europe and Japan. The two hour kick-off meeting covered the industry's evolution toward interconnection and interoperability.

We started working on a proposal for an Interconnection Test Lab where member companies can verify service quality and interconnection specifications and rules for billing, CALEA procedures, billing and operations. At the request of our members we added a new Working Group on OSS in VoIP networks. By the end of the the meetings Working Group members were energized to go off and begin their work. We will continue to report to the membership as the Goals and Objectives set at these meetings materialize into results.

The Spring and Fall conference seasons will be very busy for the IPCC. We had a very successful booth at the NCTA Show in New Orleans, May 2-5, 2004, where we demoed a fully integrated, working VoCable service provided by IPCC members. More info. on NCTA will be provided in our next Newsletter. We are moving forward with our plans for Supercomm, June 20-24, 2004 in Chicago, where we will run another VoIP demo and chair an Industry Update Session once again. Plans are underway to run three panels at CompTel in Miami, September 12-14, 2004 on CALEA, Packet Network Architectures and OSS for NGNs.

Please don't hesitate to contact me, if you would like to become involved with the IPCC's participation at these shows. We are pleased to announce that the IPCC Board has signed on a new management company, AMS. Please note the new address that is shown on the back page of this Newsletter.

Regards,

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EDUCATIONAL NOTE: CALEA UPDATE



This article provides an update on recent CALEA (Communications Assistance for Law Enforcement Act) developments since the publication of the IPCC's informational report entitled, "*Lawfully Authorized Surveillance for Softswitch-based networks*" in July of 2003. As a reminder, the overall purpose of CALEA is to improve the delivery of law enforcement services by offering a body of standards, developed by law enforcement practitioners, covering a wide range of up-to-date law enforcement topics. This IPCC report guided the industry in defining the first set of CALEA safe harbor requirements for packet communications networks. Since that time the U.S. government has stepped up their efforts to insure that their entitled law enforcement activities related to wire-tapping are not jeopardized by new technology.

On March 10, 2004, the DOJ, FBI, and DEA filed a Joint Petition for Expedited Rulemaking before the FCC. The purpose of the petition is to clarify that CALEA applies to all public telecommunications carriers, and its application is technology neutral. The FBI is upset that despite a clear statutory mandate, full CALEA implementation has not been achieved. Although the Commission has taken steps to implement CALEA, there remain several outstanding issues that are in need of immediate resolution. Before you read further, it is important to note that the language of the law clearly states that CALEA may not inhibit nor prevent the development or deployment of new technologies.

Federal and State Law enforcement agencies have asked the FCC to clarify or preferably rule on 13 issues in question. They want the FCC to:

- formally identify the types of services and entities that are subject to CALEA;
- formally identify "packet-mode services";
- initially issue a ruling finding that broadband access services and broadband telephony services are subject to CALEA;
- reaffirm that push-to-talk "dispatch" service is subject to CALEA;
- adopt rules that provide for the easy and rapid identification of future CALEA-covered services and entities;
- establish benchmarks and deadlines for CALEA packet-mode compliance;
- adopt rules that provide for the establishment of benchmarks and deadlines for CALEA compliance with future CALEA-covered technologies;
- outline the criteria for extensions of any benchmarks and deadlines for compliance with future CALEA-covered technologies;
- establish rules to permit it to request information regarding CALEA compliance generally;
- establish procedures for enforcement action against entities that do not comply with their CALEA obligations;
- confirm that carriers bear sole financial responsibility for CALEA implementation;
- permit carriers to recover their CALEA implementation costs from their customers; and
- clarify the cost methodology and financial responsibility associated with intercept provisioning.

Earlier this year the FCC announced plans to initiate a rulemaking proceeding to address the matters that it anticipated Law Enforcement would raise in its upcoming Petition. On March 12, 2004, the FCC requested comments on this matter. Comments are due to the FCC on April 12, 2004, with reply comments due April 27, 2004.

This action has created a lot of buzz in the industry and naturally some of the talk has diverged from reality. Some are saying that the FBI wants access to all forms of communication including instant messaging, email, etc. Yet only broadband Internet access service and broadband telephony service are specified in the filing. Other online services, including instant messaging, e-mail, and visits to websites, would not be covered. Broadband service providers are nervous about how this might affect their network plans.

The government says in its petition that CALEA should apply to certain broadband services but does not address the issue of what technical capabilities those broadband providers should deliver to Law Enforcement. CALEA already permits those service providers to fashion their own technical standards as they see fit. If Law Enforcement

considers an industry technical standard deficient, it can seek to change the standard only by filing a special "deficiency" petition before the Commission. It is the FCC, not Law Enforcement, that decides whether any capabilities should be added to the standard. The FCC may refuse to order a change in a standard on many different grounds. For example, a capability may be rejected because it is too costly. Therefore CALEA already contains protections for industry against paying undue compliance costs.

Matt Holdredege, Director of Business Development at Strix Systems in Calabasas California, invites you to e-mail any questions to him at: matt@strixsystems.com and notes that he is Not A Lawyer. So, please consult your own legal counsel as needed. Matt is one of the principal author's of the IPCC's CALEA document.

RECENT SP DEPLOYMENTS

Global Crossing Announces Three New VoIP Services



Global Crossing announced three new VoIP services for enterprises delivered over its private MPLS network. The new offerings include:

- **"VoIP Outbound"**: enterprise outbound IP voice traffic for long distance and international long distance to more than 240 countries worldwide. The IP voice traffic will be transported across Global Crossing's private VoIP platform for off-net TDM completion via the local PSTN. The service will be available in the summer of 2004 in North America, with phased rollouts to other regions.
- **"VoIP Toll Free"**: Originating TDM Toll Free traffic and conversion to IP for transport across Global Crossing's private VoIP platform for IP completion to enterprise locations. The service will be available in the summer of 2004 in North America, with phased rollouts to other regions.
- **"VoIP On-net Plus"**: Enterprises will be able to connect all of their locations to Global Crossing and send IP or TDM on-net traffic for completion to more than 500 cities in 50 countries without traditional long distance and international long distance charges. Call detail records (CDRs), dial plan management and performance tracking will be available via Global Crossing's self-service online tool, "uCommand". Availability is slated for Q4 2004 in North America.

In addition, Global Crossing will manage the enterprise voice service within the premises router, administrating the customer's internal dial plan, and monitoring the quality and availability to meet performance SLAs. The new offerings enhance Global Crossing's existing VoIP On-net Transport service, which enables enterprises to use an IP VPN to eliminate traditional long distance and international long distance charges for their managed dial plans. <http://www.globalcrossing.com>. This service has been available globally since May 2003. <http://www.globalcrossing.com/>

Infonetics 2003 World-wide Market Revenue Highlights:

- *Media gateways up 13% to \$745 million*
 - *Softswitch up 31% to \$380 million*
 - *Session border controllers up 359% to \$29 million*
 - *Voice application server down 9% to \$33.7 million*
- See Pg. 8.*

AT&T Launches Consumer "CallVantage" VoIP Service Expands Business VoIP



AT&T launched the first phase of its residential VoIP service at a price of \$39.99 per month. The service, which initially is available in New Jersey, uses a telephony adapter connected to a broadband line. AT&T is offering promotional pricing of \$19.99 for the first six months of service. AT&T plans to introduce the service in the 100 top markets across the U.S. during the course of the year. The AT&T CallVantage features list includes unlimited local and long-distance domestic calling, call waiting, three-way calling, call

forwarding, call logs, do not disturb, personal conferencing, locate me and online voice mail.

AT&T is currently supporting a limited 911-type service that will connect an emergency call to either the public safety answering point (PSAP) or local emergency service personnel for the address listed when registering for the service. Vonage has sued AT&T over the use of the name, claiming that it is too close to their own brand name.

AT&T announced an accelerated rollout of Business VoIP services that touch on three key areas: *Equipment Interoperability:* Alcatel, Nortel Networks, Siemens, Avaya & Cisco have been certified as interoperable with their network. *VoIP-Enabling Networking Portfolio:* VoIP-enabled options added to managed data and VPN portfolio, including an IP local service option. *VoIP Applications:* AT&T will develop IP Centrex, call center and teleworker solutions to be trialed by mid-year. <http://www.att.com>

alwaysON, Broadvox Deploy Sylantró's Platform



UK SP, AlwaysON, has deployed its Virtual Telephony solution, a new service for business users based on Sylantró's telco-grade hosted communications applications and servers. alwaysON also revealed the United Kingdom's largest rollout of IP Centrex services to date.

In a contract exceeding \$7.5 million USD alwaysON will provide

the service to Avanta Managed Services, a leading U.K. managed offices provider. Avanta is currently rolling out office facilities that will accommodate more than 5,000 users over the next 3 years. Avanta estimates savings of at least \$2.6 million USD in PBX maintenance costs annually, in addition to reductions in cap-ex requirements and installation fees. www.alwaysonvpn.com/

Sylantró announced first hosted communs. offering that allows service providers to address the consumer VoIP market and the business IP Centrex market through the same platform. Broadvox, which deployed Sylantró's hosted communications services for business users in 2002, launched residential services in three Midwestern cities. www.sylantró.com

Level 3 Readies Wholesale & Consumer VoIP Services



Level 3 Communications will rollout two new residential VoIP services aimed at broadband users in more than 300 markets across the U.S. by year's end. The services will be sold through U.S. cable operators, ISPs and enhanced service providers. The service will offer national coverage, enable local number portability, and

will meet 911 and E911 interconnection standards across the U.S. Level 3 reiterated a VoIP strategy spanning three key areas: *Wholesale services* sold directly to carriers & SPs; and; *Enterprise services* designed for small and medium sized businesses, sold through local phone

companies, value-added resellers and other distribution channels, *Level 3's HomeTone consumer services* aimed at the residential market, & sold through cable operators, ISPs carriers – Features include local phone numbers, interconnection with the traditional tele

MORE MEMBER & INDUSTRY NEWS BRIEFS

Cont'd.. phone network for local and long distance services, local number portability, voicemail, call waiting 3-way calling and E911 emergency services with Q2 availability in the US and second half of the year in Europe. Since releasing these services in September 2003 and January 2004, wholesale voice traffic has increased by more than 50 percent.

<http://www.level3.com/>

PointOne Telecommunications Deploys SIPware Prepaid Calling Card Service From Pactolus:

Pactolus Communications' SIPware Prepaid Calling Card service and Rapid-FLEX Application Server have been deployed in PointOne's Telecommunications converged network. Utilizing SIP. Pactolus solutions allow telecommunications carriers and service providers to drive down the cost and accelerate time-to-market of network-wide services.

Z-Tel Selects Ubiquity, Acme Packet to accelerate push into the VoIP market:

Z-Tel has purchased software and equipment from Ubiquity Software Corp. and Acme Packet for the development of advanced calling features. Tool kits and development products from the two firms will enable it to deliver the same kind of personalized features that it currently offers to its existing customer base.

PointOne Deploys NexTone Session Controllers:

With the NexTone solution delivering FlexControl traffic management end-to-end across the network, PointOne gains greater control over its advanced routing capabilities between domestic and

Vonage Enters Channel Resale Arrangement with Circuit City: Vonage hired Circuit City as a channel reseller for its packet telephony service, giving the broadband voice provider its first outlet into retail stores. The starter kit will be marketed to Circuit City customers with broadband connections for \$100 and will include all equipment as well as a free activation and two months of local, long-distance service for free. Vonage is also in similar negotiations with Best Buy and Radio Shack

ional networks. PointOne has deployed the NexTone Multiprotocol Signaling Switch in the core of its softswitch network. The eventual result for PointOne will be simplified interconnects for its largest customers. www.nextone.com.

BroadSoft Announces Ten New Service Provider Customers:

Ten new service provider customers have chosen BroadSoft's BroadWorks network communications platform to support hosted VoIP services for the enterprise and residential broadband markets. The announced customers include: Broadvoice, Broadweave Networks, DRD Communications PLC (United Kingdom), Eureka Networks, Inflexion Communications, ISN Communications, RealConnect, Ultimate Medium Communications, XIPTel and WorldxChange Communications (New Zealand).

Net2Phone to Provide VoIP Services in Vietnam with Largest ISP:

State-owned Vietnam Datacommunications Company (VDC), the largest provider of data services in Vietnam will market Net2Phone's VoIP services to its corporate and residential customers in Vietnam.

MCI Expands VoIP Service to Include VPN: MCI is working with BroadSoft Inc. to provide extended hosted communications capabilities to MCI Advantage customers. MCI Advantage is a network-based business VoIP solution using one network for both voice and data services. New functionality to include call screening, simultaneous ring, auto attendant, 3rd-party conferencing, and Web-based receptionist services.

Net2Phone, to offer a complete set of telephony solutions for broadband service providers globally.

Complementing its existing PacketCable-ready solution, Net2Phone's VoiceLine will now offer providers SIP-based hosted telephony services for their residential and SOHO customers in a bundle with their existing product set.

Standard & Poor's : the downturn is over.

S&P upgraded debt ratings for Lucent Technologies and Alcatel.. Lucent's corporate rating jumped to a "B" from a "B-minus," and the outlook was revised to "positive" from "negative." S&P also raised Alcatel's debt to "BB-minus" from a "B-plus."

Taqua Announces 3 More Rural ILEC Customers:

Taqua announced three more incumbent service provider (ILECs) customers for its iX7000 Class 5 packet switch: Cassadaga Telephone (serving western New York), Searsboro Telephone (serving the communities of Searsboro and Killduff, Iowa), and South Canaan Telephone.

MARKET RESEARCH CORNER



Infonetics: Equipment Market Grew 21% in 2003 and is Projected to Grow 305% to \$5 Billion in 2007: Worldwide revenue for next gen voice products totaled \$338 million in 4Q03, a 31% increase over 3Q03, as vendors benefited from a surge of budget clearing and overall trend to VoIP. After dropping 28% in 2002, the market returned to a growth phase, growing a solid 21% in 2003. Annual revenue is projected to grow 305% between 2003 and 2007 to \$5 billion, representing a CAGR of 42%.

During the past four months, there have been many voice

over IP customer wins -- and service rollouts -- from top tier carriers, including AT&T, Bell Canada, BT, France Telecom, Qwest, SBC, Telus, and Verizon," said Kevin Mitchell, lead analyst of the report. "According to Mitchell, some are "baby steps" but all bode well for 2004-2005. service revenue www.infonetics.com."

According to a February ***Yankee Group Report***, "*Demand for Internet and Apps. Drives MAN Buildout in Asia's Developing Markets*", as burgeoning broadband usage drives up the volume of traffic on their networks, SPs in the Asia-Pacific region are continuing

to upgrade their metropolitan-area networks (MANs), which are the largest bottlenecks for many providers. Australia, Japan, Hong Kong and Korea already have built highly developed metro infrastructure, which they are using to deliver new services such as Ethernet connectivity, IP VPNs and higher layer applications. Yankee sees the strongest growth in China, which by 2007 will support approximately 2.04 million Ethernet Connections. However, the buildout of metro infrastructure in Asia's developing has been slow. An explosion in Internet usage, IP VPNs and Internet Telephony is driving the increasing growth in traffic volume on service provider networks. www.yankeegroup.com.

REGULATORY UPDATE



U.S. Supreme Court Rules States Can Bar Municipal Telecom: The U.S. Supreme Court overturned a lower court ruling in a case of whether the Federal Telecommunications Act of 1996 can pre-empt state and local laws that expressly prohibit municipal bodies from offering telecommunications service.

The U.S. Supreme Court has overturned the Eighth Circuit, allowing the Missouri state law that bars municipalities from offering telecom service to stand. <http://www.supremecourt.us.gov/>

FCC Commissioners Call for Negotiated Settlement on UNE-p: The FCC Commissioners have signed a letter urging the nation's telecommu-

nications carriers and trade associations to begin a period of "good faith" commercial negotiations on UNE-p resale rates. FCC Commissioners are encouraging the parties to utilize all means at their disposal, including a third-party mediator, to maximize the success of this effort. The FCC is requesting extensions of the deadline for seeking Supreme Court review and the stay of its decision vacating its unbundling rules.

Court Challenge Stands to Cable Modem as "Info Service": The U.S. Ninth Circuit Court of Appeals declined to review a lower court's ruling that had overturned the FCC's classification of cable modem service as an "information service." The case originally arose regarding whether local municipalities could require cable operators to open their networks to other ISPs.

In October 2003, the U.S. Ninth Circuit Court vacated the FCC declaratory ruling that had classified cable modem service as an "information service without a separate offering of a telecommunications service." The FCC promptly appealed the decision. The Ninth Circuit Court of Appeals has now declined to review the lower court's ruling. The FCC has 90 days to appeal the US Supreme Court www.fcc.gov

All five of the FCC Commissioners sign letter urging the nation's telecommunications carriers and trade associations to begin a period of "good faith" commercial negotiations on UNE-p resale rates.

Please Note our New Address:

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CALL TO PARTICIPATE IN IPCC WORKING GROUPS AND MARKETING ACTIVITIES UPDATE

As mentioned in previous correspondences and committee meetings, the IPCC is moving forward with the work of its seven new working groups, initiated at our meetings at the VON Spring Show at the end of March. The topics of the working groups will shape our activities into 2005. The Working Groups focus on the issues that our service provider and vendor members have told us are most important to them. The IPCC Working Groups are described below:

- *The Service Provider Packet Interconnection Group*: captures interconnection rules and procedures for public VoIP networks. This group will focus on the challenges of interconnecting VoIP islands nationally and globally.
- *The Service Provider Application and Services Interoperability Group*: liaises between service providers and other industry forums to accelerate the interoperability and conformance testing of multi-vendor VoIP and packet solutions.
- *The Session Boarder Controllers Group*: works with vendors and service providers to define security and interconnectivity requirements for VoIP networks.
- *The Government and Regulatory Issues/Opinions Group*: works with government organizations such as, the FCC, the FBI, the European Union (EU), and the ANSI T1S1 to represent our members needs. The group also provides education and opinions on behalf of our members to governmental bodies such as FCC and FBI/CALEA.
- *The Enterprise and Customer Premise Group*: works with access providers and vendors to define and establish interconnectivity between the access layer and the core packet transport layers.
- *The Industry Resources and Education for VoIP and Packet Solutions Initiative*: ensures communications between industry organizations and individual companies in order to foster a better and faster diffusion of services and technology.
- *VoIP OSS (SLA/QoS) Group*

As mentioned in the MESSAGE FROM THE CHAIRMAN on page one of this newsletter, the IPCC's marketing Committee is working on the IPCC's participation at NCTA, Supercomm, CompTel and other shows through the end of the year. We would welcome any members who are interested to join in on our weekly marketing conference and to become involved in these and other activities of the marketing committee.

The IPCC encourages service providers, vendors and enterprise members interested in becoming involved in the work of these Working Groups or the Marketing Committee to contact:

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