



Message From The Chairman

Dear IPCC Members:

Our industry is making a big comeback! I'm happy to see that there have been many positive reports and success stories in the news – some of which are highlighted in the IPCC newsletter. I'm also happy to report that many of these successes are obtained by IPCC members! We're no doubt on our way to a strong recovery and I want to give a huge round of applause to our members who have played a significant role.

The IPCC has been working hard to promote the industry and the successes over the past few months. We've had some real strong traction and want to continue the momentum. In the last few weeks, we completed several documents including:

- Lawfully Authorized Electronic Surveillance for Softswitch-based network – a great accomplishment by our Legal Intercept group.
- Leveraging Legacy Networks while Delivering Enhanced IP Services
- Hosted Services Architecture document

We've been getting some great publicity from these documents and will continue to develop reference materials to educate the industry on packet communications.

Elections are also coming up! We have a group of highly enthusiastic executives that want to move the industry and IPCC to the next level. Please watch your email for election ballots.

And, the long awaited Service Provider Board will finally become a reality. We have a great group of service providers and integrators who are extremely excited about being a part of the IPCC and providing us with the guidance and assistance to develop projects that are of most interest to them.

The fall will be a busy time for all of us but I hope that you will find some time to work with us on the projects we have planned. Please watch your emails and the IPCC web site (WWW.PACKETCOMM.ORG) for more information.

I look forward to seeing all of you at Fall VON in Boston, September 22-25. As always, please feel free to contact me if you have any news, information or questions.

Regards,

Michael Khalilian
Chairman & President
m.khalilian@packetcomm.org

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Industry Recognition For Convedia

Convedia Corporation, a leading provider of open, standards-based IP Media Servers, was honored recently by Technology Marketing Corporation's (TMC) INTERNET TELEPHONY magazine with a prestigious TMC Labs Innovation Award. As a recipient of the award, Convedia was recognized for their demonstrated vision, leadership, and attention to detail.



Convedia's award winning family of carrier class IP Media Servers reduce capital and ongoing operational costs by consolidating the functions of traditional announcement servers, interactive voice response units

(IVR/VRU), conference bridges, messaging equipment, and speech platforms onto a single shared media processing platform. Convedia's media servers are controlled by application servers and softswitches through open control protocols such as SIP, VoiceXML, MGCP, MSML/MOML and PacketCable NCS.

Customer, Scalability Milestones For Sonus



Sonus Networks announced that Asia Internet Holding Co. Ltd. (AIH) has deployed Sonus' Open Services Architecture (OSA) and voice infrastructure solutions to deliver wholesale voice over IP (VoIP) services to telecommunications service providers and carriers in the Asia Pacific region. AIH recently announced that it will begin offering its "A-Bone VoIP Service" on June 23.

In 1995, AIH constructed the "A-Bone", an Internet backbone network covering the Asia Pacific region, and began operation of the network in 1996. The A-Bone provides direct connections to Asia Pacific countries, and also transports traffic to the

United States, Europe and other areas of the world. The A-Bone offers high-speed, high-quality Internet access services for corporate users and Internet Service Providers (ISPs) located throughout the region. In addition to Internet connectivity services, AIH provides virtual private network (VPN) services to enterprises.

To expand its service offerings, AIH has deployed Sonus' GSX9000 Open Services Switch, the Insignus Softswitch and the Sonus Insight Management System. With the Sonus infrastructure in place, AIH will offer wholesale VoIP services to service providers and carriers in the region. Customers using the new A-Bone VoIP service will be able to provide cost-effective, high-quality

voice services to enterprise and consumer users. Additionally, AIH is planning to leverage the Sonus systems to offer VoIP services directly to enterprise customers in Japan.

Sonus Networks also announced that the Fusion Communications next-generation VoIP network now supports more than 2.3 million subscriber lines. Fusion launched its Sonus-based network in April 2001 with 150,000 subscribers, and over the two years has increased the number of business and residential customers by more than tenfold. Fusion has implemented the Sonus voice infrastructure solutions in 18 locations distributed through Japan, with plans to expand the network further.

Multiple Customer Wins For Alcatel

Alcatel announced that it has signed a Euro 15 million frame agreement with TELEKOMUNIKACJA POLSKA (TP) to supply solutions that will extend the digitalization of TP's switching system. Alcatel solutions will also allow TP to meet growing customer demand for new bandwidth-intensive, value-added services such as fast Internet access, data and video transmission. Under the agreement, TP will purchase a full range of telecommunications equipment from Alcatel including access, switching and transmission solutions.



Also, China Telecom has awarded its first commercial Next Generation Network (NGN) contract to Alcatel. The contract was awarded by China Telecom's subsidiary Shanghai Telecom to Alcatel Shanghai Bell, Alcatel's flagship Chinese company and the leading Chinese telecom technology vendor. This follows China Telecom's successful NGN trial with Alcatel Shanghai Bell in 2002. Next Generation Networks allow ser-

vice providers to evolve from their traditional voice services to a full range of multimedia services. When completed by end of this year, Shanghai Telecom will be able to provide fully integrated voice, data and multimedia services via Asymmetrical Digital Subscriber Line (ADSL) and Ethernet to its broadband residential and enterprise customers. These services include broadband IP telephony, video telephony and video conferencing, personal communication assistant (PCA), IP Centrex, VPN and unified messaging.

Customer Win, Product Milestone For Cisco

Cisco Systems announced that Gong Verlag, the publisher of magazines such as Ein Herz für Tiere, Die Aktuelle, Gong and TV Direkt, has installed a Cisco end-to-end IP network in its new Munich headquarters. The infrastructure will allow the publishing and printing house to benefit from services such as voice over IP, unified messaging, wireless phones and local area networking - with a vastly improved return on investment compared to the traditional LAN and private branch ex-



change (PBX) systems previously in place.

The move to a gigabit switched IP infrastructure, prompted by the merger of five locations into a single building, will allow Gong to improve its journalists' workflow, deploy databank applications, such as a global directory and streaming media ser-

vices, and use computer-telephone integration to enhance customer care. The potential return on investment provided by Cisco's IP networking solution prompted the publisher to cancel existing contracts for legacy PBX platforms.

Additionally, Cisco announced that it has deployed more than 50,000 Internet Protocol (IP) phones to more than 200 customers in Australia.

Santera Makes Inroads Into Rural Telephony



As rural and independent network service providers search for ways to lower costs and increase revenues, Santera, a Tekelec company, continues to meet the needs of this unique market. Today Santera announced that SanteraOne is available to carriers that qualify for low-interest financing

from the Rural Utilities Service. In addition, Santera introduced two new switching products: SanteraOne RS, a next-generation switch with a smaller media gateway for independent and rural carriers; and SanteraOne ESA, an emergency backup softswitch that gives carriers with remote systems the ability to continue carrying traffic in cases of a fiber cut between the host and the remote systems.

With SanteraOne RS, which is scheduled to start shipping in Q4 2003, IOCs can cost effectively deploy a next-generation service platform with a switch tailored to fit their specific network needs. SanteraOne RS utilizes the same software and hardware as SanteraOne, making it possible to scale seamlessly as business grows.

The market for hosted IP telephony and integrated access services with Centrex features will increase to \$7.8 billion by 2009 from \$61 million last year, according to a study released today by Frost & Sullivan.

News From Around the Industry

- VocalData has successfully secured \$12.5 million in series C funding. This funding will enable the company to capitalize on the growing momentum in hosted IP telephony by expanding existing sales efforts, building international distribution channels, and strengthening customer engineering support.
- Alcatel announced that, after finalizing all customary closing procedures, the acquisition in shares of TiMetra Inc., has been completed. TiMetra is based in California and specializes in IP/MPLS service routing at the network edge. deliver streaming video, music and pictures to its more than 112 million customers
- AT&T plans to offer wireless Internet access in more than 2,000 locations in the fourth quarter. The access points for Wi-Fi, will allow travelers to connect laptop computers and other portable devices to company data networks at hotels, airports and convention centers in 20 countries.
- EarthLink added 102,000 broadband subscribers for a total of 993,000 in the second quarter, but its dial-up group shed 80,000 subscribers in the quarter, bringing its narrowband subscriber base down to 3.88 million.

Catena Wins FCI Broadband



Catena Networks today announced that FCI Broadband, a local and long-distance carrier serving the Toronto metropolitan area, is using Ca-

tena's CN1000 Broadband Loop Carrier (BLC) to deliver lifeline voice and high-speed Internet access services to its subscribers.

Because the CN1000 provides Plain Old Telephone Service (POTS) and Asynchronous

Digital Subscriber Line (ADSL) service on every line, FCI Broadband can software-provision broadband service to any subscriber, as service orders are received. This dramatically reduces operational costs and accelerates time-to-revenue.

NexTone Wins Convergia, Reaches Milestone

NexTone Communications, the leading provider of session controller technologies for secure peering of packet networks, today announced Convergia Networks has deployed NexTone's core Multiprotocol Signaling Switch and edge Multiprotocol Session Controller in its global VoIP network. The NexTone solution enables the simple, cost-effective interconnection of



multiple carriers' VoIP networks. A world-class provider of communication services and broadband solutions with points of presence (PoPs) in 35 countries already, Convergia will rely on the NexTone solution to save time and money in expanding its VoIP service footprint into Vene-

zuela, Mexico and Uruguay.

NexTone also announced that global deployments to carriers and service providers have surpassed 1 Billion minutes of VoIP traffic capacity on NexTone's industry leading session controllers, the Multiprotocol Session Controller (MSC) and Multiprotocol Signaling Switch (MSW).

Cellcom Deploys Telos

Technology, Inc., a leading provider of Softswitch distributed mobile switching solutions, IP based CDMA1X base stations for voice and data communication networks, and Cell Communications Nigeria, Ltd. ("Cellcom") announced today that they are expanding Cellcom's wireless network with CDMA 2000 1X technol-



ogy in the main cities of Lagos and Abuja using TELOS' next generation wireless network solution, the Sonata SE.

Scheduled to be fully opera-

tional in Summer 2003, Cellcom's network expansion plans will increase its subscriber capacity in Lagos to over 40,000 users and in Abuja to over 10,000 users while providing superior improvements in network coverage as well as voice and data transmission quality.

The Telecommunications Industry Association, an equipment suppliers' trade group in Arlington, Va., estimates that spending by phone companies on high-speed Internet access equipment will grow to \$16 billion this year, from \$11 billion in 2002 and \$7 billion in 2001.

Packet-based Comms—Market Research

"At last, the bleeding stops," begins the latest information technology spending survey report issued by investment firm Goldman Sachs. The quarterly report, which polls 100 IT managers at multinational Fortune 1000 compa-

nies, said 2003 IT spending was now "back to roughly flat" (-0.4%), up from results in an April survey, which reported a 3% drop in spending. 13%.

According to In-Stat/MDR,

total worldwide cable modem subscribers reached 27 million in mid-2003, and is expected to hit 34 million by the end of the year. By 2007, In-Stat/MDR projects that there will be 68 million worldwide cable modem

Multiple Contract Wins For UTStarcom



UTStarcom Inc. , announced that it has signed a contract valued at approximately \$30 million with China Netcom Corporation to expand deployments of its IP-based PAS (Personal Access System—iPAS) equipment in the Shan-dong Province of China.

UTStarcom signed its first contract in West Africa in the country of Mali for its iPAS solution with Sotelma. Over

next several quarters, Sotelma intends to deploy approximately 50,000 lines of UT-Starcom's iPAS system in the capital city of Bamako, with an option to expand into several other cities in the future for a total of 100,000 lines.

Additionally, the company announced that it has signed an agreement with Asia Wireless Communication Company (AWC), a subsidiary of TelecomAsia Public Company, to deploy its iPAS solu-

tion in key business districts in the Bangkok metropolitan area. Further contracts will be awarded to cover other parts of the business and residential areas in Bangkok.

AWC covers approximately 1,600 square kilometers of central Bangkok and has more than 600,000 subscribers. AWC will utilize UT-Starcom technology to offer its subscribers a number of value-added services, including 64Kbps data service.

Industry Recognition For CBeyond



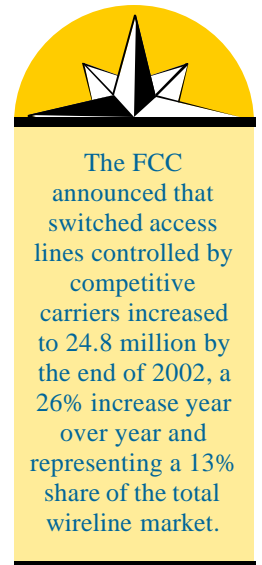
Cbeyond Communications, a provider of integrated local, long distance, high-speed Internet, Internet-based applications and anytime access to online account management tools for the small business market, has been named the strongest integrated access service provider for small and medium businesses (SME) in the U.S. by Stratecast Partners (a division of Frost & Sullivan) in its May report on the telecommunications industry.

Stratecast Partners conducted the assessment based on interviews with 13 of the top telecom service providers and evaluated the companies on pricing, financial stability, commitment to small and medium business customers, service options and ease of use.

"Cbeyond embodies characteristics important to attracting SME customers. These characteristics include highly competitive pricing, complete focus on SMEs, high-touch customer care, single bill and fully managed solution," the

report concluded.

Stratecast Partners named Cbeyond a market leader in pricing, commitment to SMEs, and ease of use. The report called Cbeyond "the best example of the execution of the true competitive local exchange carrier (CLEC) ... The Company has garnered success in its tightly focused geographic regions by offering highly innovative IP-based services and as an IP-based solution, Cbeyond has the ability to deliver enhanced VoIP features."



The FCC announced that switched access lines controlled by competitive carriers increased to 24.8 million by the end of 2002, a 26% increase year over year and representing a 13% share of the total wireline market.

Time Warner Cable Deploys Primal

Primal Solutions, Inc., announced that it has successfully deployed Connect IXC, an integrated IP mediation and rating solution for Time Warner Cable. Time Warner Cable is now delivering the first VoIP cable primary-line residential telephone service, Digital Phone, a Cisco Powered Network service, to cus-



tomers in Portland, Maine.

The Primal solution collects data from Time Warner Cable's network and turns the network data into call detail records. Primal's solution summarizes the call detail re-

ports and sends them to the existing billing system so that phone charges appear on customers' regular Time Warner Cable monthly statement. Primal's Connect IXC also enables Time Warner Cable Digital Phone customers to see the detail of their calls online on a secure web site.

Customer Win For Elix



Elix, specialist in interactive business solutions for contact centers, announced that Banco Mercantil del Norte (Banorte) of Mexico, an affiliate of Grupo Financiero Banorte, has chosen Elix's IVR as its

preferred interactive voice response platform for telephone banking services. The IVR platform will help Banorte to handle the more than 20 million calls its contact center receives per year; 80% of these calls, on average, are now handled automatically.

Part of Banorte's strategy is to promote the use of this channel to their customers by offering more self-service options such as payment of utility and credit card bills, transfers between accounts, product sales, and loyalty programs.

BellNet Selects SnowShore Networks



SnowShore Networks, and BellNet Corp., announced its selection of SnowShore's N20 and A1 Media Servers for deployment in one of Japan's leading carrier networks.

SnowShore media servers will power BellNet's portfolio of SIP services as part of its C-Asp™ Business Architecture

offering, with services including IP Centrex, enhanced IP Conferencing and messaging. BellNet's solution featuring SnowShore's N20 Media server is currently deployed as part of a live carrier trial at a major Japanese service provider.

The deployment is estimated to generate more than \$2 million of sales for SnowShore's N20 and A1 Media Servers

over the next 18 months as BellNet's portfolio of SIP Services are delivered.

The roll out and adoption of its C-Asp Business Architecture in mid-2003 through 2004 is projected to result in initial deployments of more than 10 SnowShore servers, as the system integrator rolls out IP Centrex services to its established base of enterprise customers.

According to Allied Business Intelligence (ABI), the IP phone handset market will be \$9B by 2006.

Visa International Selects Kabira



Visa International and Kabira™ Technologies Inc., providers of the Infrastructure Switch™ software for high-volume, real-time transactions, today announced that the two companies have entered into a two-year global strategic alli-

ance. This alliance will facilitate new product development opportunities for Visa utilizing Kabira's expertise in high-speed transactional switching software and solution frameworks built on the Kabira Infrastructure Switch.

Visa and Kabira will explore opportunities to use Kabira's

model-driven, high-speed transactional solutions to benefit Visa's member financial institutions, merchants and cardholders. The relationship calls for the companies to work closely together to identify Visa initiatives requiring high speed network services and high-volume real-time transactions.

Level3 Acquires Telveer

Level3 acquired Telveer Communications Inc., a provider of IP-based voice and data services headquartered in Dulles, VA. Consideration for the acquisition was approximately \$30 million in Level 3



common stock.

"Telveer is an important building block in our ongoing

effort to build a more significant presence in the voice-over-IP market," said Jack Waters, group vice president and president of softswitch services.

Should Your Company Target The China Market?

By David Sullivan, Managing Director, Alliance Digital, Inc., Beijing, China

Alliance Digital

With China increasingly on the focus list of small and medium-sized packet communications solution vendors, the questions for executives and boards about how and if to enter the competitive China market remain difficult.

There is no doubt China is one of the largest and fastest growing packet communications markets in the world with remarkable opportunities. China's four major service providers, China Telecom, China Netcom, China Unicom, and China Mobile all have major IP and NGN infrastructure plans both in the wireline and wireless space. Even with relatively low penetration rates, China is already first in the world in mobile and cable TV subscribers and second in fixed-line, internet, and PC users. There will be significant growth for many years to come.

While the opportunities are great, so are the challenges. There are language, cultural, and commercial differences and barriers. China's service providers prefer to work with large, established equipment vendors and systems integrators. Customers and local China business partners require local technical and commercial support and China's domestic vendors are increasingly developing sophisticated solutions and driving down costs, just to name a few.

So should you go to China? If you have unique solutions with a strong value proposition and can follow the advice below, the answer may be yes.

The following strategies should be considered and executed when entering the China market:

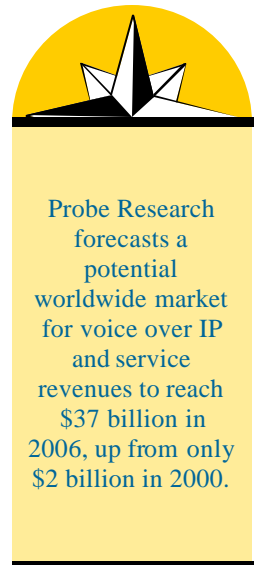
- 1. Commit to the market** – do not view China as an opportunistic market; China takes time and investment to develop; Customers often require free trials and evaluations; Customers and business partners want to work with vendors that plan to invest and stay in the market; If a vendor is not prepared to commit for at least 12 – 18 months with limited to no returns, consider not entering China; Be flexible with cooperation models – consider OEM/private labeling, technology licensing, local development & manufacturing, or revenue sharing models;
- 2. Partner with the leading players** – promoting directly to service providers is extremely difficult for smaller vendors; Established Chinese and multinational equipment vendors and systems integrators have invested millions of dollars and years of time in China; Identify the gaps in the leading vendors' portfolios and propose cooperation models to them; These vendors have strong sales and service networks, can finance the projects, and have gained the trust of the customers;
- 3. Understand the local requirements and commit to developing the features** – vendors that develop the features required by the China service providers will win the contracts and these contracts can be significant

nationwide network contracts; While feature requirements may be different than North America, do a cost-benefit analysis before turning down requests; Localize whenever possible to reduce costs and show your commitment;

- 4. Strongly support your China business partners** – China OEM and channel partners need stronger support than in other markets; It is best to have some form of local China business and technical support as channel partners and customers favor those companies that do; Besides pre-sales and post-sales support, vendors with in-country customer demand generation and business modeling support are preferred;

The China market can be lucrative for small and medium-sized packet communication vendors. The keys are to commit to the market and be flexible in finding the right cooperation models, partner with the leading China and multinational vendors or SIs, and provide sufficient technical and business support to these partners. The China market can be rewarding for those vendors with the right products and right strategy.

Alliance Digital provides China-focused business development, technical marketing & support, and representation services to leading packet communications solution vendors. Please contact Alliance Digital at info@alliance-digital.com or visit www.alliance-digital.com for more information.



Upcoming Events

Fall 2003 VON Conference & Expo

September 22-25 at the Hynes Convention Center in Boston.

www.pulver.com/von/

As a member of the IPCC, if you are planning to attend the Fall 2003 VON Tradeshow and Expo, you can receive significant savings by using priority code: IPCC. By using the special priority code: IPCC, you can register to attend the Fall 2003 VON Conference for:

VON Package - US\$ 1895

Full Conference - US\$ 1595

Both of these prices reflect an additional \$300 savings from Pulver's "Early Bird" pricing. If you are interested in just the Fall 2003 VON Expo, you can register for as little as US\$ 75 by using the same priority code. There are already over 70 confirmed exhibitors <http://www.pulver.com/von/exhibit.html> in the exhibit hall. Delegates with an "Exhibits Only" Registration will have access to the exhibit hall as well as the VON Keynotes. Please note that this offer expires on July 31, 2003.

China VoIP Conference & Expo

September 23-25, 2003, Beijing, China

www.china-voip.com

The IPCC will be giving a keynote speech on the advancement of softswitching and next generation networks around the world. IPCC members will also have an opportunity to participate on a softswitching panel.

Next Generation Networks: 17th Annual Conference

November 3-7, 2003 Boston, MA

<http://www.bcr.com/ngn/>

Payam Maveddat, the IPCC TAC Chair, will be leading a Birds of a Feather session on Wednesday, November 6, 4:45 pm - 5:45 pm.

For additional information on the above listed events, please contact Lily Sun Higman at: LHigman@packetcomm.com / +1-925-275-6674.

Special Offer From Frost & Sullivan

Frost & Sullivan and the IPCC have joined forces to offer IPCC members a unique opportunity to obtain high quality, strategic, insightful, objective market research and analysis for a minimal investment. The purpose of this is to allow IPCC members the opportunity to use market information from Frost to grow and position themselves for the exciting years ahead. Only IPCC members can receive Frost & Sullivan's Voice over Packet Subscription for this unprecedented price (more than a 75% savings). This opportunity allows member companies to fully capitalize on the advantages of access to quality market research and strategic analysis.

IPCC Members Only Subscription is set up by Frost & Sullivan. Each subscribing company receives:

- Access to www.frost.com, your source for all unlimited access to content including reports (see complete report list below), articles, news, and more.
- Unlimited access within your company in North America.
- Access to Frost & Sullivan's New Research Analyst Briefings: a live audio conference for new publications to field questions and discuss findings.
- Only full IPCC members may receive this service.

For further information, please contact James Brehm, Account Manager, Frost & Sullivan at jbrehm@frost.com / +1-210-247-3868.



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2694 Bishop Drive, Suite 275
San Ramon, CA 94583
USA

Phone: +1 925 275 6635
Fax: +1 925 275 6691

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About The IPCC

“The International Packet Communications Consortium (IPCC) is the premiere forum for the worldwide advancement of the next generation networks through products, services, applications, and solutions utilizing packet-based voice, data and video communications technologies available today via any transport medium including but not limited to copper, broadband and fiber optics.

The IPCC establishes a common terminology for the softswitch-based architecture, and it promotes interoperability, conducts research, and liaises with governmental and industry organizations to address industry issues that service providers and vendors face. By providing a variety of educational seminars and by fostering the Open Network and Standard Interfaces, the Consortium accelerates the advancement and usage of softswitch-based networks.

The IPCC membership includes wireline and wireless service providers and carriers, governmental agencies, standards bodies, and equipment and software vendors representing all network elements involved in the softswitch-based and next generation network.”

Upcoming Technology Documents

Over the course of next few weeks, IPCC will release a number of Technology White Papers to its consortium members. A brief overview of these documents is as follows:

• Voice Over 802.11:

The document will address the following areas:

- Scalability
- Reliability
- Quality of Service
- Features and Applications
- Signaling
- Regulatory Issues

• Softswitch OAM&P:

The document will address the following areas:

- Scalability
- Reliability
- Quality of Service
- Features and Applications
- Signaling
- Regulatory Issues

Comments and suggestions to the newsletter and activities are welcome. Submissions to the monthly IPCC newsletter should arrive no later than the 15th of each month. All comments, submissions and ideas for new technology documents/projects should be sent to the attention of Michael Khalilian, m.khalilian@packetcomm.org.