

IN THIS ISSUE



Message from
the Chairman



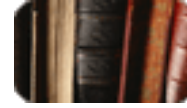
Member
Profile



IPCC
News



Guest
Columnist



Regulatory
Update



VoIP
Research

MESSAGE FROM THE CHAIRMAN



Michael Khalilian
IPCC Chairman
and President

Fellow IPCC Members:

We are at a very important juncture of VoIP in the industry. There is a lot of confusion about the validity of primary line replacement, enhanced services, architecture, and infrastructure requirements for VoIP/Packet Telephony. No one argues that VoIP is here to stay ... the argument is does it scale and does it make money? (Note: There are over 180M circuit switch TDM lines in North America and less than 3M VoIP lines in operation today)

The deployment challenges are not focused on regulatory issues only anymore, but are now focused on features and revenues. Also, there are new factors called "Wireless" and "Multimedia" right at the center of all the VoIP strategies.

Opportunity is knocking. Analysts are calling 2005/2006 the large scale break point for VoIP. Hundreds of CLECs are now transitioning from the UNE-P/L business to VoIP. It is about survival, and it is going to happen! Cable MSOs and 1200 independent cable companies (NCTC – Co-ops) are calling VoIP the new business and residential source of revenue and a churn buster to current satellite DBS service offerings. Wireless WiFi and convergence is becoming an opportunity and a challenge for VoIP. The IP Multimedia Subsystem (IMS) promises to merge all VoIP services into a seamless, personalized solution. It is about changing the rules of the game ... and the IPCC is on top of it!

Since we are *"the technology forum working to advance VoIP over broadband cable, wireless, and wireline,"* we can assist in the technical and marketing of VoIP and associated applications architectures.

Thank you to all the IPCC members and volunteers who are working with us today. It's critical to have everyone's participation in order for the IPCC to truly provide value to both vendors and service providers. You can help by participating in the IPCC working groups which are focused on enhancing VoIP deployments by developing white papers, etc.

We are also partnering with different industry forums, including Wi-Max, DSL Forum, and MSF. Working together, we are creating the future of VoIP.

Michael Khalilian
Chairman and President
International Packet Communications Consortium (IPCC)
m.khalilian@packetcomm.org

MEMBER PROFILE



UTStarcom

Farshid Mohammadi is the General Manager, Switching for [UTStarcom](#).

IPCC: Describe UTStarcom's VoIP strategy for 2005 in the wireline, wireless, and cable markets.

Farshid: UTStarcom's perspective from the beginning of the company has been to create a next-generation core that is independent of access and can support a variety of services natively. This decoupling of functions across layers has enabled UTStarcom to provide its customer base with a next-generation core that is access agnostic and allows them to grow without the need for a forklift upgrade or additional infrastructure purchases.

In essence, our view is to provide a seamless next-generation core across the existing seams of wireline, wireless, and cable. This multiservice platform supports converging markets which enables end users to access their services at anytime, anywhere, using the access devices of their choice.

IPCC: Forbes ranked UTStarcom thirteenth (#13) on its "Fastest Growing Tech Companies" list, and Fortune has named UTStarcom "One of the Most Admired Companies in 2005." What do you attribute to the company's great success?

Farshid: UTStarcom's success is due to the company's innovative spirit and drive to develop disruptive communications technologies. Historically, we've developed products that disrupted the telecommunications landscape, be it our PAS fixed-wireless solution, our industry-leading IP DSLAM, our all-IP CDMA 2000 infrastructure products, our mVision IPTV solution, or even our F1000 portable Wi-Fi phone. All of these products altered the way in which people communicate.

In addition, UTStarcom has also been very successful in developing products and selling into emerging and high-growth markets that aren't burdened with large investments in antiquated legacy infrastructure. We tend to develop very strong relationships with our customers through establishing an in-country presence and working to make our customers successful through the deployment of our technologies. If our customers are successful, then we are successful.

IPCC: What do you think is going to make other companies who are providing products and services in the VoIP space successful?

Farshid: Firsthand experience in deploying and running large-scale, next-generation network cores, as well as the qualified professional services organizations and product teams that can work closely with the customer and literally become part of the customer team. UTStarcom has been very successful with this model as evident by our deployment of more than 50 million lines of next-generation, IP-based networks worldwide.

IPCC: The name UTStarcom sounds like something out of a Star Trek movie. Where did the name come from?

Farshid: The name "UTStarcom" came from the merger of Unitech Telecom Inc. and Starcom Network Systems Inc. in 1995. In 1991, current UTStarcom CEO Hong Lu and several Bell Lab engineers founded Unitech Telecom Inc., a digital and wireless transmission systems manufacturer focused on providing leading-edge technology for developing countries building communications infrastructures. In 1995, Lu helped orchestrate the merger of his California-based company with Starcom Network Systems Inc., a developer of intelligent network systems located in New Jersey. Lu found a kindred entrepreneurial spirit in Ying Wu, president and chief executive officer of Starcom Network Systems. The two business-men formed UTStarcom in 1995 and entered trials for broadband and wireless products with the Chinese government the following year. UTStarcom became a public company in May 2000.

IPCC SPICES IT UP AT SUPERCOMM

Things are really shaping up for SUPERCOMM this year. Check out all the exciting IPCC activities planned:

- IPCC exhibits at SUPERCOMM featuring [VoX](#), [Global Crossing](#), [Lignup](#), and [UTStarcom](#)
- Michael Khalilian serving as SuperQuest judge
- Michael Khalilian chairing panel on VoIP services and networks
- IPCC Annual Member Meeting June 6
- Working Group meetings June 6
- Party on June 7

Vonage and Time Warner Telecom to Speak at IPCC Annual Member Meeting June 6

Our IPCC Annual Meeting is scheduled for Monday, June 6 from 1:00 p.m. to 3:00 p.m. at the Hyatt Regency McCormick Place in Chicago.

You won't want to miss it and our special guest speakers: Michael Tribolet, Executive Vice President, [Vonage Operations](#), and Tony Thakur, Vice President-Engineering and Technology, [Time Warner Telecom](#).

Date:	Monday June 6, 2005
Location:	Hyatt Regency McCormick Place, 2233 South Martin Luther King Drive, Chicago, IL 60616 (hotel is attached to the convention center where SUPERCOMM will be)
Time:	IPCC Annual Member Meeting 1:00 p.m. – 3:00 p.m.
Room:	Conference Center 20
If your company is interested in sponsoring the IPCC Annual Member Meeting please contact Debbie Hetland for details.	

IPCC Working Groups to Hold Meetings at SUPERCOMM

As you know, all IPCC members should be involved in at least one working group in order to drive industry standards and architectures for VoIP over broadband cable, wireless, and wireline. Be sure to register for the working groups that interest you.

Wireless/Wireline Convergence Working Group

Co-chaired by [UTStarcom](#)'s Farshid Mohammadi, [Nextel](#)'s Ahmed Bencheikh, [Tekelec](#)'s Payam Maveddat, and Editor David Kiswani, the Wireless/Wireline Convergence Working Group is making solid progress in specifying the industry's first paper on using VoIP to transfer calls in progress between wireless, cable, and wireline broadband networks.

The Wireless/Wireline Convergence Working Group (open to IPCC members only) will meet on June 6 from 9:30 a.m. – 11:00 a.m. in Conference Center 20.

Network Boundary Working Group

The Network Boundary Working Group is developing another industry first by writing a technical document on the functional architecture of the SBC. This working group is co-chaired by [Acme Packet](#)'s Annalisa Ouellette and [Netrake](#)'s Micaela Giuhat.

(Continued on Page 4)

The Network Boundary Working Group (open to IPCC members only) will meet on June 6 from 3:30 p.m. – 5:00 p.m. in Conference Center 20 B.

Service Providers' Interconnectivity Working Group (joint meeting with the SIP Forum Service Providers Working Group)

This working group is co-chaired by [Global Crossing](#)'s Patrick Reilly, [Time Warner Telecom](#)'s Earl Turner, and [XO](#)'s Ramani Pandurangan. The group is finalizing edits on the IPCC VoIP Interconnectivity document.

The Service Providers' Working Group (open to all service providers, carriers, and system integrators) will meet on June 6 from 3:30 p.m. – 5 p.m. in Conference Center 20.

To register for any of the Working Group meetings, please [send an email to Debbie Hetland](#) of the IPCC no later than May 31, 2005, indicating which session/s you will attend.

IPCC Exhibit #55085 Features Latest VoIP Technology

At SUPERCOMM, IPCC will have an exhibit (#55085) featuring the latest in VoIP technology from [VoX Communications](#), [Global Crossing](#), [Lignup](#), and [UTStarcom](#). Demonstrations will include VoIP applications and services, and visitors to the exhibit will be able to make phone calls and actually use the VoIP features and functions. Operational aspects of VoIP will also be demonstrated, including provisioning, OSS, and Integrated Access Device (IAD) functions.

IPCC Chairs VoIP Panel

The IPCC will host a VoIP panel chaired by IPCC Chairman and SUPERQUEST Judge Michael Khalilian with industry executives including [Time Warner Telecom](#) and [VoX Communications](#). VoIP technology comes into its own on carrier, cable, and enterprise telecom networks, promising reduced communications costs and new services. This session will provide a current update on the status, direction, and economics of service and network migration.

Date:	Tuesday, June 6
Time:	10:00 a.m. - 11:30 a.m.
Panel Name:	VoIP Networks & Services (M01A)

Meet the Luvabulls at the TMC/IPCC Party on June 7

IPCC and Internet Telephony Magazine are co-sponsoring a networking event - and the loveable Chicago Luvabulls will be on hand for photos. Don't miss it! RSVP is required at <http://www.tmcnet.com/tmcnet/supercomm.htm>.

Date:	Tuesday, June 7
Time:	5:30 p.m. - 8:00 p.m.
Location:	Top of Sears Tower 233 South Wacker Drive

Mark Your Calendars

The IPCC will sponsor and / or chair panels at several upcoming shows. Please mark your calendars for the following:

May 24-26 Baltimore	ISPCON Spring 2005	<ul style="list-style-type: none">• Participating on panel
June 1-2 Wash. D.C.	The 2nd Workshop on VoIP Security	<ul style="list-style-type: none">• Co-sponsoring two-day event
June 7 - 9 Chicago	SuperComm	<ul style="list-style-type: none">• Chair panel• Exhibit• Co-sponsoring networking event
June 7 Sydney	VoIP World Asia Pacific	<ul style="list-style-type: none">• Co-sponsoring two-day event
June 14 - 17 Singapore	CommunicAsia	<ul style="list-style-type: none">• Chair panel
June 16 Baltimore	WiFi Planet	<ul style="list-style-type: none">• Speak
August 4 San Francisco	VoIP Developer's Conference	<ul style="list-style-type: none">• Speak on panel
Sept. 20 - 22 London	Carriers World Conference 2005	<ul style="list-style-type: none">• Speak
Oct. 9 - 12 Orlando	CompTel/ALTS	<ul style="list-style-type: none">• Chair panel• Exhibit
Oct. 22 - 26 Las Vegas	Telecom '05	<ul style="list-style-type: none">• Chair panel• Exhibit
Oct. 24 - 27 Los Angeles	Internet Telephony	<ul style="list-style-type: none">• Chair panel• Exhibit
Oct. 25 - 27 San Francisco	CTIA	<ul style="list-style-type: none">• Speak

Take Advantage of IPCC's Byline Bureau

The IPCC has been approached by a number of publications who are interested in publishing articles written by IPCC members. We have agreements with Internet Telephony magazine and others. Please submit any articles for consideration to tammysnook@hightechpr.net.



Ronald F. Gruia

Senior Strategic Analyst, Emerging Communications Solutions, Enterprise Communications Program Leader for Frost & Sullivan

IMS (IP MULTIMEDIA SUBSYSTEM): A NEW FRAMEWORK TO DELIVER NEXT-GEN SERVICES

"IMS" has been the buzzword most often mentioned at recent tradeshows (including 3GSM, CTIA, and VON). Almost all equipment vendors have been talking about their IMS offerings and compliance, whereas solution providers have been delivering IMS-like offerings.

But what exactly is IMS? IMS is an access, protocol, and device agnostic specification that allows the convergence between wireline and wireless network architectures.

This framework enables wireline, wireless, and cable operators to offer a new generation of rich multimedia services across both legacy circuit switched based and new packet switched based networking infrastructures. In essence, IMS represents a disruptive technology enabling next-gen service networks.

Originally born in the mobile world as a 3GPP standard, IMS has become much more than just a wireless spec, with the IETF and now even Cable Labs using it as a blueprint for an IP multimedia and telephony core network system consisting of logical functions such as session control, connection control, and applications or services that can deliver voice and data services. IMS is a framework of logical (not physical) entities that defines a three-layered approach to services: access/transport, core/control, and application/services. IMS uses packet technologies for underlying transport and relies on SIP for call signaling between the entities.

One of the central ideas of IMS is the concept of reusing common functions (e.g. location, presence) and then integrating them horizontally. These modules can be re-utilized for many different applications, as shown in the diagram above.

This approach (functional decomposition) is far superior to the traditional vertical model, in which common functions are replicated for each application. The benefits are manifold:

- Lower capital and operational expenditures
- Higher ARPU, due to the creation of new "blended lifestyle services" enabling users to mix and match

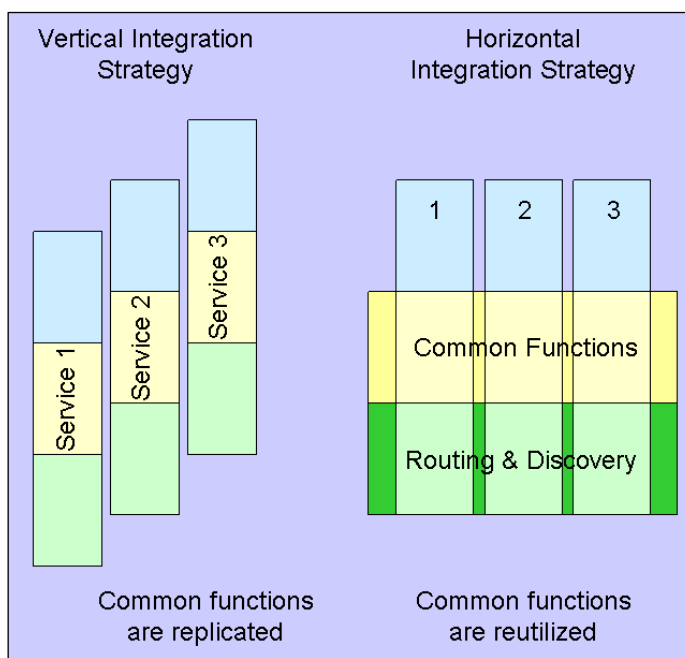
services (e.g. push-to-talk, video sharing, voice messaging, instant messaging, voice conferencing, and interactive gaming)

- A significantly shorter time-to-market (NPI lifecycle can go down from 2 years to just 3-5 months) with the aid of a rapid service creation environment
- Increased customer retention or service "stickiness"

IMS still represents an evolving technology requiring a long-term strategic plan to be undertaken by carriers. Many service providers have already begun evaluating IMS, with some trials and ongoing deployment efforts, including Sprint (Lucent), mm02 (Siemens), Telecom Italia Mobile (Nokia), and Telefonica (Ericsson), among others. Service decomposition itself is not a new idea, and it never achieved its lofty goals during the days of the IN (intelligent network). However, this time around, the benefits of the horizontal integration approach might be realized, given the fact that SIP is widely known, thereby shortening the required investment of a programmer to develop new applications. Moreover, the

value chain is much more fragmented, enabling the carriers to play vendors off each other and pick best-of-breed solutions. In some instances, standard interfaces make it easier to replace a non-performing or non-cooperating vendor.

Nonetheless, in order for IMS to really deliver all its benefits, it is sine qua non for carriers to flatten their



organizational structures, creating horizontal groups focused in specific areas rather than the current status-quo vertical silos. This shift represents a profound change in strategic management, and might require quite some time for service providers to implement. Moreover, it is yet another manifestation of the disruptive nature of IMS, a technology that undoubtedly will cause the redefinition of industries and business models.

Ronald Gruia is Program Leader and Senior Strategic Analyst at [Frost & Sullivan](#) covering Emerging Communications Solutions. He can be reached at rgruia@frost.com.

REGULATORY UPDATE



Staci Pies
IPCC Government and Regulatory Group Chair, and Vice President, Governmental & Regulatory Affairs, PointOne

FCC ACTIONS

On May 5, 2005, the FCC denied a petition by [SBC](#) that sought to relieve SBC's IP-enabled networks and applications from the current Title II rules that are applied to traditional telephone networks, such as providing competitors access to that infrastructure at wholesale prices. The FCC voted 4-0 to reject the petition on procedural grounds, stating the petition was premature and too vague in that it failed to define what services, locations and companies that should fall within the relief sought.

STATE ACTIONS

On May 3, 2005, Connecticut's attorney general sued [Vonage Holdings Corp.](#), accusing the company of "misleading customers" about the limits of 911 emergency calling. The lawsuit, the second by a state attorney general, was spurred by an incident where a Vonage customer in Connecticut who dialed 911 for a medical emergency reached a recording.

15 new VoIP experts and projects!

3rd Annual VoIP WORLD Asia Pacific 2005

7-9 June 2005, Hotel InterContinental, Sydney, Australia

Top tier speakers



The Hon John Della Bosca
Minister for Commerce
 New South Wales, Australia



Mike Terrill
Program Manager, Network Convergence
 Boeing, USA



David Beckley
CO, Enterprise Services
 Westpac Bank Australia



Craig Hinkley
Senior Vice President, Network Architecture and Strategic Director
 Bank of America, USA



Grant Symons
Executive Manager, Telecommunications Licensing
 Australian Communications Authority



Michael Khalilian
President
 International Packet Communications Consortium (IPCC), USA



Hot!

Asia Pacific's only dedicated forum for end users returns by popular demand!

Case studies - *Boeing *Westpac Bank *AC Neilsen *Royal Automobile Club of Queensland *Brown Brothers *Edith Cowan University *Department of Corporate & Information Services (NT) *Moriats Holdings *Department of Veteran Affairs *Victorian Office Telephony Service (VOTS)

- **MAXIMISE** your investment in VoIP technology
- **WORK** as a single team across the enterprise
- **QUANTIFY** the ROI for business managers
- **IMPROVE** performance, reliability and security
- **STREAMLINE** people and project management

PLUS! Don't miss separately bookable masterclass, **SIP in the Enterprise**. Led by Jay Batson, Chairman, SIP Forum & Alan Johnston, Board Member, SIP Forum, Boston, USA

Gold sponsors:



ERICSSON
TAKING YOU FORWARD



NEC

Endorsed by:



IPCC



SIP FORUM



SPAN
INTEGRATED TELEPHONY SOLUTIONS



terrapijn
B2B media


Researched and produced by:




www.terrapijn.com/2005/voip_au



Attention Supercomm Attendees!

Join INTERNET TELEPHONY And The Chicago Luvabulls At The Top Of The Sears Tower!




Complimentary appetizers, cocktails and soft drinks.
 Plus photos with the Luvabulls against the backdrop of the Chicago skyline from the 100th floor of the Sears Tower, compliments of INTERNET TELEPHONY.

Where: Sears Tower, 233 South Wacker Drive
When: Tuesday, June 7, 2005 at 5:30 - 8:00pm

Co-Sponsored By:



International Packet Communications Consortium
 The Industry Yo!P Forum - Making It Happen!
www.packetcomm.org

R.S.V.P. Required

Internet Telephony Conference & EXPO

Sears Tower

Chicago Luvabulls Dancers

VoIP RESEARCH ROUND UP

DID YOU KNOW ... ?

- According to a new study from [ABI Research](#), annual global sales of "dual-mode" mobile phones, which can connect to either a conventional cellular service or a Wi-Fi network, are likely to exceed 100 million during the final year of this decade.
- The international telecommunications industry is in the early stages of a migration to Voice over Internet Protocol (VoIP), reports In-Stat (<http://www.in-stat.com>). The big question is when will a mass migration to VoIP occur? 2005-2009 is the consumer and small business VoIP ramp-up period, and migration to VoIP will peak in the 2010-2014 time frame, the high tech market research firm says. This time frame is largely dependent on carriers' strategies for migration to the Next-Generation Network (NGN).
- Voice-over-IP service revenues are poised for phenomenal growth in North America, according to an [Infonetics Research](#) report issued today. That report predicts a growth rate of 1431% for VoIP service revenues, as they increase from \$1.3 billion in 2004 to \$19.9 billion in 2009. That increase is predicted despite the fact that most businesses recently surveyed by Infonetics expect to provide their own VoIP, using a service provider pipe and premises-based VoIP gear.
- Two-thirds of the Global 2000 are expected to implement VoIP by 2006, according to [Deloitte Services LP](#) (eWEEK, December 4, 2004).
- [Gartner Inc.](#) expects the market for VoIP services to continue to expand at double-digit rates in 2005.
- The amount of venture money put into the telecom market was \$371 million in the first quarter of 2005, according to the latest results from the [MoneyTree Survey by PricewaterhouseCoopers, Thomson Venture Economics, and the National Venture Capital Association](#). On a quarter-by-quarter basis, funding was up from the \$326 million of the fourth quarter of 2004.

For information on becoming an IPCC member, please visit our website at www.packetcomm.org or contact Debbie Hetland at dhetland@packetcomm.org.

IPCC INDUSTRY NEWSLETTER

Copyright © International Packet Communications Consortium

CHAIRMAN & PRESIDENT Michael Khalilian
(321) 230-3070 m.khalilian@packetcomm.org

VICE PRESIDENT OF MARKETING Manuel Vexler
(512) 233-5736 mvexler@packetcomm.org

PROJECT MANAGER Debbie Hetland
(510) 744-4020 dhetland@packetcomm.org

PRESS CONTACT Tammy Snook
(407) 667-9355 tammysnook@hightechpr.net

NEWSLETTER DESIGNER Barry Malawski

IPCC HEADQUARTERS

39355 California St.
Suite 307
Fremont, CA 94538
Main Phone: 510.744.4020
Fax: 510.608.5917
www.packetcomm.org
info@packetcomm.org

COPYRIGHT & LEGAL NOTICE

International Packet Communications Consortium and Packet Communications Forum are registered trademarks. Other product names, company names, brand names, and trade names that may be mentioned within this Newsletter may be the trademarks, service marks, trade names, and/or logos of their respective owners.

Where the Business of Technology Comes to Life

CommunicAsia 2005 Summit

14 - 16 June 2005
Raffles City Convention Centre, Singapore

Full conference programmes @ www.CommunicAsia.com/Summit.htm

In Conjunction With: **CommunicAsia 2005** Exhibition: 14 - 17 June 2005 • Singapore Expo

Organised by: **Singapore Exhibition Services Pte Ltd**
47 Scotts Road, 11th Floor Colibell Towers, Singapore 228255
Tel: +65 6738 6776 Fax: +65 6732 6776
Email: events@esaiworld.com
Website: www.esaiworld.com

Worldwide Associate: **OES Overseas Exhibition Services Ltd**

Official Broadcast Media Sponsor: **CNBC**

A Part of: **IMIX** International Media Exchange

Official Media Group: **DOWJONES**

Hosted by: **iDA** INFOSOURCE DEVELOPMENT AUTHORITY OF SINGAPORE

Official Airline: **SINGAPORE AIRLINES**

Official Airline: **ALLWORLD EXHIBITIONS**

Conferences are co-presented with Asia-Pacific Satellite Communications Council, Frost & Sullivan, Global VSAT Forum and Oyum