

## Pakistan Telecommunications Authority



Government of Pakistan

**PAKISTAN TELECOMMUNICATION AUTHORITY**

# VoIP Services

## Public Information Bulletin

This is to inform all users and service providers of VoIP that PTA encourages legal and authorized usage of VoIP services and applications. There is an impression in the general public that the usage of internet for telephony (VoIP) is allowed and IP bandwidth obtained from ISPs / DSL operators can be used for VoIP, whereas the Act, Rules and Regulations govern otherwise.

Under the present **technology neutral licensing regime**, VoIP services can be provided by Local Loop (LL), Long Distance International (LDI) and Cellular Mobile Operators licensed by PTA. It may also be clarified that IP bandwidth provided by ISPs / DSL operators is for “**data**” only and it cannot be used for “**voice**” i.e. making calls.

In addition, all “VoIP Product Developers” shall also be permitted to offer limited VoIP based call termination and origination, with prior permission from PTA. PTA guidelines are available on PTA website: [www.pta.gov.pk](http://www.pta.gov.pk).

PTA shall continue efforts to curb **illegal grey traffic call terminations / origination** within Pakistan.

For more information contact:  
Director Licensing  
PTA HQs, F-5/1, Islamabad  
Tel: 051-9221444, Fax: 051-2878139

PID(1)/06

1. Clear messages published nationally
2. Example of a Proactive Regulator
3. ISP and DSL Providers are ‘Data’ only, NOT ‘Voice and Data’
4. The authorities will continue to prosecute illegal Grey traffic



**BITEK INTERNATIONAL PRESENTS**

## **Challenging the Regulator**

**Presented by Graham Butler**

**President and CEO**

**Bitek International**



**23<sup>rd</sup> TELECOMMUNICATION CONFERENCE**



**Bitek**  
INTERNATIONAL Inc

# Arguments For & Against FCC Net Neutrality

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**FOR  
Net Neutrality?**



**AGAINST  
Net Neutrality?**

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## **Competitive Neutrality**

Universal service support mechanisms and rules:

- Do not unfairly advantage or disadvantage one service provider over another
- Do not unfairly favor or disadvantage one technology over another

- **AT&T states**  
VoIP is an information service and should be exempt from CALEA
- **Net2phone states**  
Recommends a hands off approach by the FCC
- **Coalition of 12 VoIP providers**  
'For Net neutrality' VoIP is an Umbrella term that embraces any number of distinct service platforms & architectures
- **Global Crossing**  
There is no rational basis for, subjecting VoIP communications to the various legacy inter-carrier compensation regimes

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**Their argument is that VoIP is an information service not a telephone service**

- **The Electronic Privacy Information Center (EPIC)**  
VOIP services should NOT be free of government regulation
- **NTCA (560 Rural regulated local carriers)**  
VoIP telephony services lack the characteristics that would render them “information services” within the meaning of the statute, and instead bear the characteristics of “telecommunications services”
- **NENA (National Emergency Number Association )**  
There are many scenarios in which a call to 911 will not be properly routed or reach a 911 center at all

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**Their argument is that VoIP is in fact a telephony service**

# The FCC has clear definitions about VoIP



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**The FCC has not yet defined VoIP as a Telephone service**

Date	FCC Compliance Requirement
28 <sup>th</sup> Nov 2005	E911 compliance
12 <sup>th</sup> Mar 2007	FCC Deadline for CALEA plans
14 <sup>th</sup> May 2007	Full CALEA Compliance or face fines
31 <sup>st</sup> May 2007	Disability access extended to VoIP
Soon	What next?



**All indications show basic intent to regulate VoIP**



# The Importance of VoIP Security

Graham Butler  
President & C.E.O  
Bitek International Inc

Caribbean Seminar:  
Issues in Telecommunication economics and financing  
10 - 13 September 2007, Antigua and Barbuda



**Bitek**guardian

**Bitek**  
INTERNATIONAL Inc



## VoIP Security



- In today's climate, Information Security is critical.
- The ability to regulate public information technology is a key weapon against modern threats.
- Operators and Regulators need tools to address IP based communications issues, such as:
  - National Security and Criminal Threats through Lawful Intercept
  - Grey Traffic Bypass
  - Data Capture
  - Illegal Websites







## Communications Management

- Proper VoIP regulations must be enacted to allow economies to remain competitive, and to eliminate national security and criminal threats.
- Bitek specializes in the management of IP data through detection, monitoring, tracing, recording and blocking.
- Bitek has the ability to track and trace VoIP, email and IM to aid in the elimination of criminal activity.





# VoIP Security Process



**Bitek's Guardian Solutions work in three basic steps:**

1. Identification - Real time and Fully Scaleable.
2. Capture - Mass Storage Systems
3. Delivery - To governments, regulators or security services





## Lawful Enforcement

- For decades, governments have had the ability to wiretap traditional phone lines. **This has been an essential tool for law enforcement agencies in capturing criminals.**
- Now communications are rapidly moving to IP platforms. You will have to provide the technology to allow “wiretapping” for IP platforms.
- Can you track and trace VoIP, email and IM pursuant to the specifications of a detailed court order.





## CALEA

- Many countries require communications providers to integrate the ability to track and trace communications into their technology systems.
- In September 2005, the FCC issued an order extending the Communications Assistance for Law Enforcement Act ("CALEA") to providers of broadband Internet access and interconnected VoIP services. The U.S. court upheld that order.





## Future Direction

- As technology moves to IP based platforms, it is clear that governments are revising their laws and regulations to take this into account.
- Regulators worldwide are recognizing that communications are moving towards exclusively IP based platforms, and are rewriting their regulations to emplace the same requirements on VoIP providers and ISP's as on traditional telephone companies.





Questions?

