

## SIPconnect Compliance Workshop

Lessons Learned

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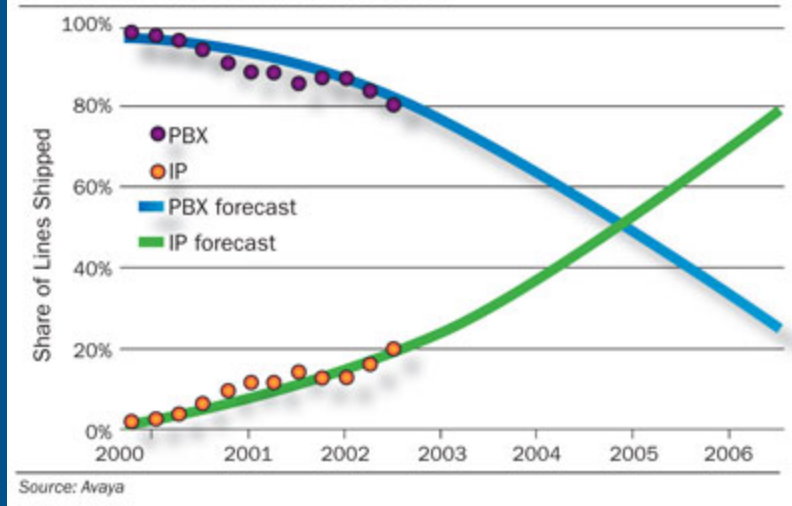


# Economic Reality – an all IP world

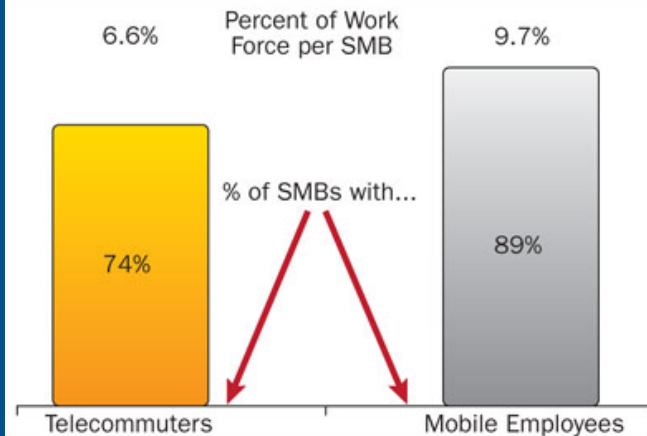
- ❖ Over 70% of all PBX's sold are now IP enabled, typically SIP based .
- ❖ By 2010 50% of the installed base of Enterprise PBX systems will be VoIP.

Telecommuters use VoIP to connect with the office.

IP versus TDM: Trend and Forecast



## About 10% of SME Employees are Mobile; 6.6% Telecommute



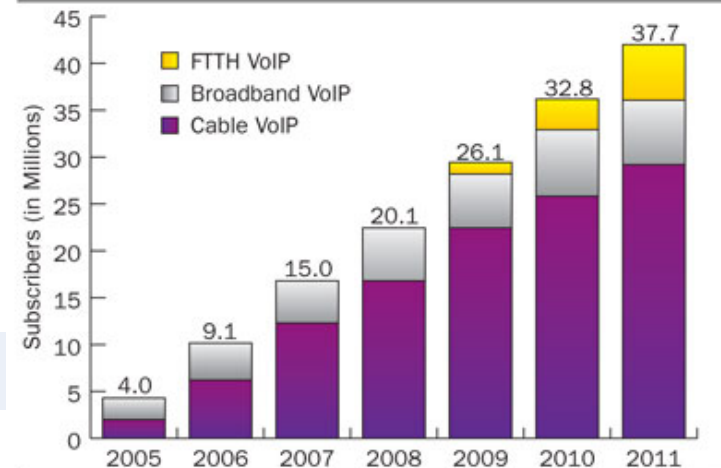
Source: AMI-Partners

# Economic Reality of Telecom

- ❖ Fixed Rate services are dominating telecommunications.
  - Triple Play from Cable Operators –
- ❖ All you can eat Fixed rate mobility services
  - Buckets of Mobile Minutes
  - \$99.00 voice - text – web
- ❖ Variable Costs for Operators have become unacceptable.
  - SS7 dips, for instance



2005 to 2011 US Consumer VoIP Subscriber Forecast



Source: Yankee Group, 2007

**Sell your used Class 5 Switch on EBAY !!!**

# The Evolution of Enterprise VoIP

## ❖ First : Replace the RJ-11

- Immediate gains in CAPEX as single wiring harness simplifies campus management.
- Greenfield ROI – NO Brainer

## ❖ Second : Replace the TIE Lines

- Integrate Enterprise wide Dial Plan Management into single IP Network. Immediate OPEX gains.

## ❖ Third : Replace the PRI (Today) SIPconnect

- All IP E2E

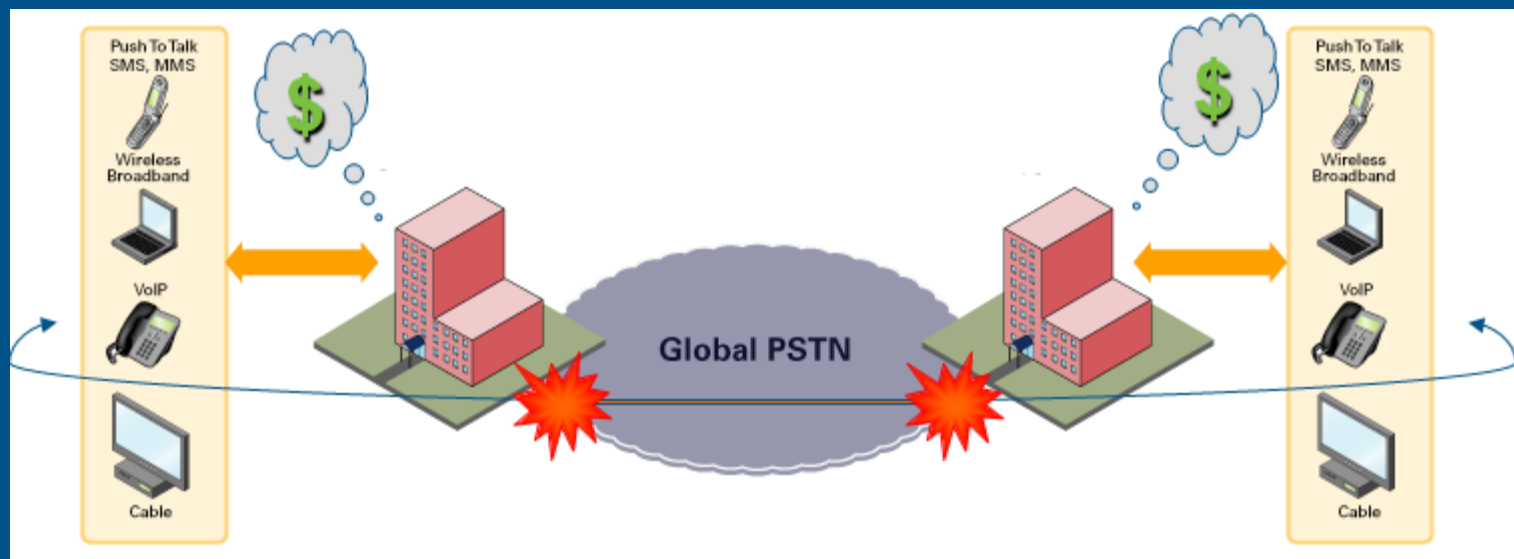
## ❖ Fourth : Peer with Business Partners

- The 40-40-20 rule

## ❖ Fifth : Seamless Campus/Mobility Integration

- Its not fixed Mobile Convergence its Substitution

# The PSTN PRI's are the Bottle Neck to new Enterprise Communications services



- **The PSTN is used as the inter-VOIP “default” network**
  - Service is degraded as it must transverse multiple networks
- Every VOIP network is an Island (apologies to John Donne!)
- PSTN Primary Rate Interfaces are the last bottleneck.

# The Lessons Learned

- ❖ Where did this information come from?
  - Informal survey of SIPconnect service providers and vendors
- ❖ Is this the end?
  - No.
  - SIPconnect 1.1 further refines best practices
- ❖ “A rising tide lifts all ships”

# SIPconnect in an Interoperability Program

- ❖ The Goal: Make SIP Trunk testing and deployment easier than a PRI
  - Significant reduction time to market
  - Concept branding
- ❖ N Paired - Service Provider and Vendor interoperability testing inefficient
  - In-house – Requires personnel timeline management
  - Equipment/Software vendor – Dependent on multiple vendor timetables, and less control
  - 3<sup>rd</sup> party test houses – Dollar resources

# General Guidelines from Service Providers

## ❖ Document the installation process

- Incorporate guides from your vendors and partners
- Develop own documentation
- Simple site surveys

## ❖ Promote a common standard

SIPconnect



## ❖ Push vendor partners to become SIPconnect compliant

- Reduced configuration permutations saves “months” of test time

# From the IP PBX Vendors

- ❖ SIPconnect compliant
  - SIPconnect becomes a “brand”
  - Branding promotes consumer confidence
- ❖ Promote the program with service providers
  - Faster interop testing saves resources aka (money) for both parties
- ❖ Implement the DIGEST authentication method
  - TLS is required by SIPconnect
  - Watch for updates from SIPconnect 1.1

# Fax and Modem Deployments

- ❖ Fax and Modem traffic is not going away
  - Fax is actually going up.
- ❖ SP's need to explicitly test fax and modem deployments
- ❖ Consider deploying a separate DS0 interface
- ❖ SIP Forum is forming task groups to address issues

# NAT & Firewall Issues for the Service Provider

- ❖ Document what you support (again...)
- ❖ Training
  - Customer facing organizations need to know what to expect
  - Train your channels
    - Proper configurations and deployment
    - Troubleshooting tips and best practices
- ❖ Potential issues in the deployment
  - Deploy a SIP-aware firewall
  - Provide configuration guidelines if the end user already has a firewall – One click configuration options.

# Now to the Economics

## ❖ Cost Savings are real :

- Network gateway costs reduced/eliminated
- “Reduced reliance on premises gateways can save 40-60%”
- Be sure you can support the services
  - Internal Enterprise or Carrier support costs will kill margins

## ❖ Additional Revenue Opportunities

- Provide DN/DID services to smaller companies
- Centralized management
- Deliver services to individual end users

## ❖ Reduce Churn with services that complement the PBX

- Provide Stickiness
- Integrate voice as an application, among others

# Conclusions

- ❖ It works ..
- ❖ It delivers the ROI it promises
- ❖ SIPconnect 1.1 in progress
  - <http://www.sipforum.org/sipconnect>
- ❖ SIPconnect 1.1 builds on success
  - Still “Voice Centric”
  - Strengthen MUST vs SHOULD implement
  - Call Transfer expansion.
  - Implicit vs Explicit Register issues
  - UM issues for 2.0

