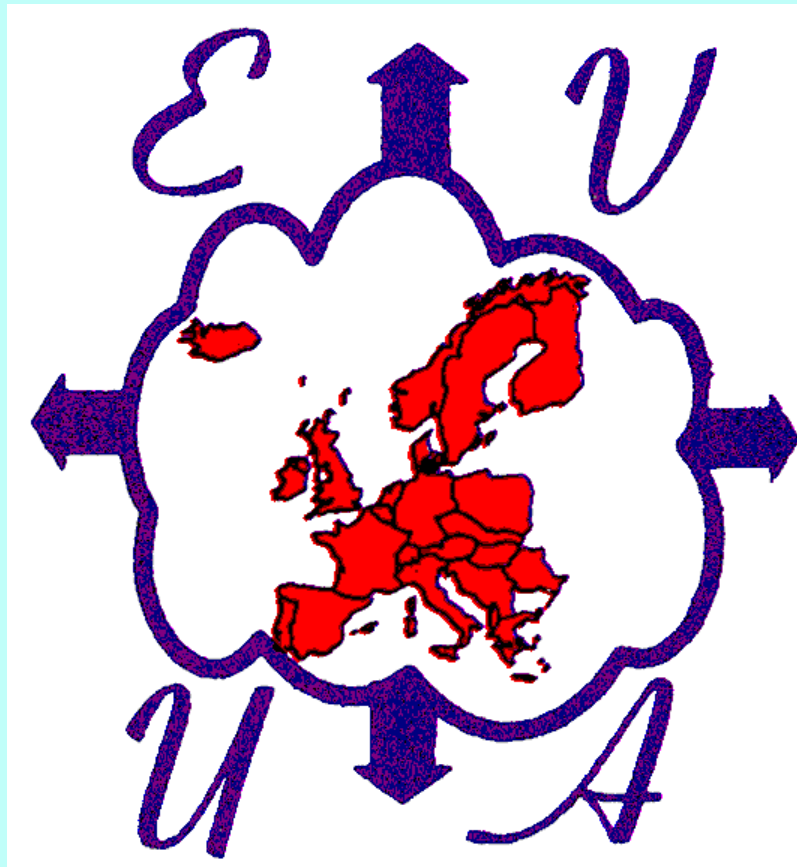


# Global Virtual Networks: Virtually Here?

By: Phil Barton  
Chairman of the  
European Virtual Private Network Users Association  
(EVUA)



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# Formation of the EVUA

- **INITIATIVE OF RANK XEROX AND ICI IN 1993**
- **AIMS:**
  - **CUSTOMER DRIVEN MARKET PLACE**
  - **COLLECTIVE NEGOTIATION**
  - **SERVICE MANAGEMENT FORUM**
- **CURRENTLY > 50 MULTI-NATIONALS**
- **MEMBERS WITH GEOGRAPHICAL SPREAD AND > US\$15 million EXPENDITURE PER ANNUM**
- **COMBINED PURCHASING POWER > US\$ 2 billion**

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# WHY VPN - The Business Case

## Private Networks

- Requires investment
- Multiple voice compression schemes
- Low circuit utilisation / coverage
- Multiple management platforms
- Expensive fall back options
- Various contract time scales
- Large Management overhead
- Non-core business
- Subject to management flavour of the day
- Fixed Cost

## VPN

- No investment
- Single voice compression
- Economy of scale
- Single management centre
- User defined billing
- Single contract
- Single management interface
- One-stop-shopping
- Large coverage
- On-net and off-net service
- Competitive pricing
- Local support

### KEY MESSAGE

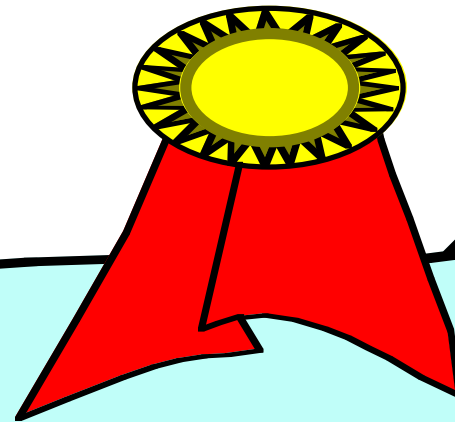
Private networks can be very cost effective BUT  
VPN often provides higher functionality and is  
cheaper than Public IDDD PLUS it is less hassle  
than Private networks which makes it easy to sell

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## **CONTRACT BT/UNIWORLD**

- **Service Level Agreement**
- **Easy-Start pack**
- **No commitment discount schemes, 1 year contracts**
  - **Benchmarked Tariffs - IDDD**
  - **Common Service Base**
  - **More Points of Presence (POPs)**



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# Trends In Networking

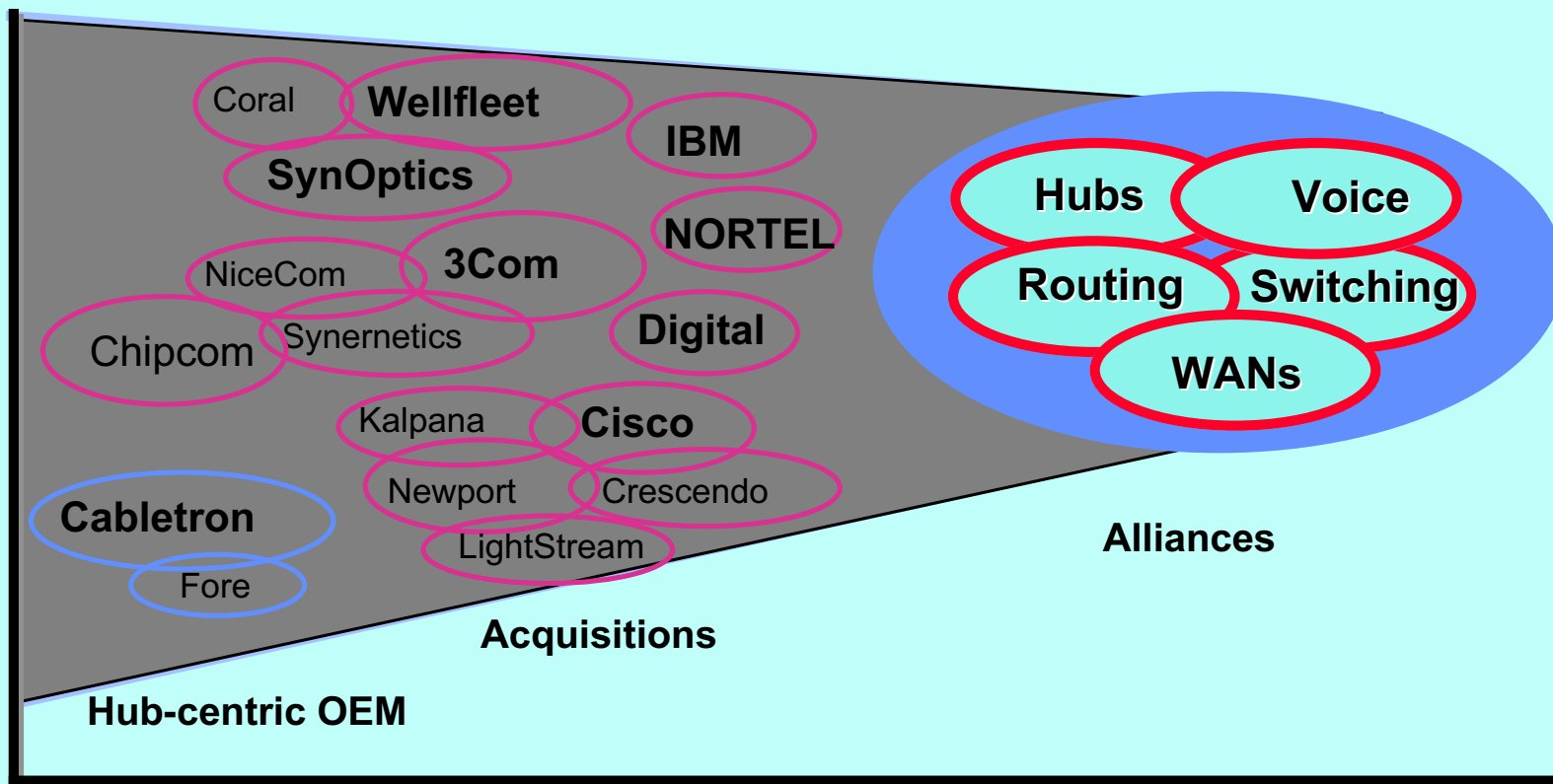
- **Convergence of Technology**
- **Grouping of Global Partners**
- **Switched Virtual Networks**
- **Network Services not Bandwidth**
- **Enterprise Network Management**

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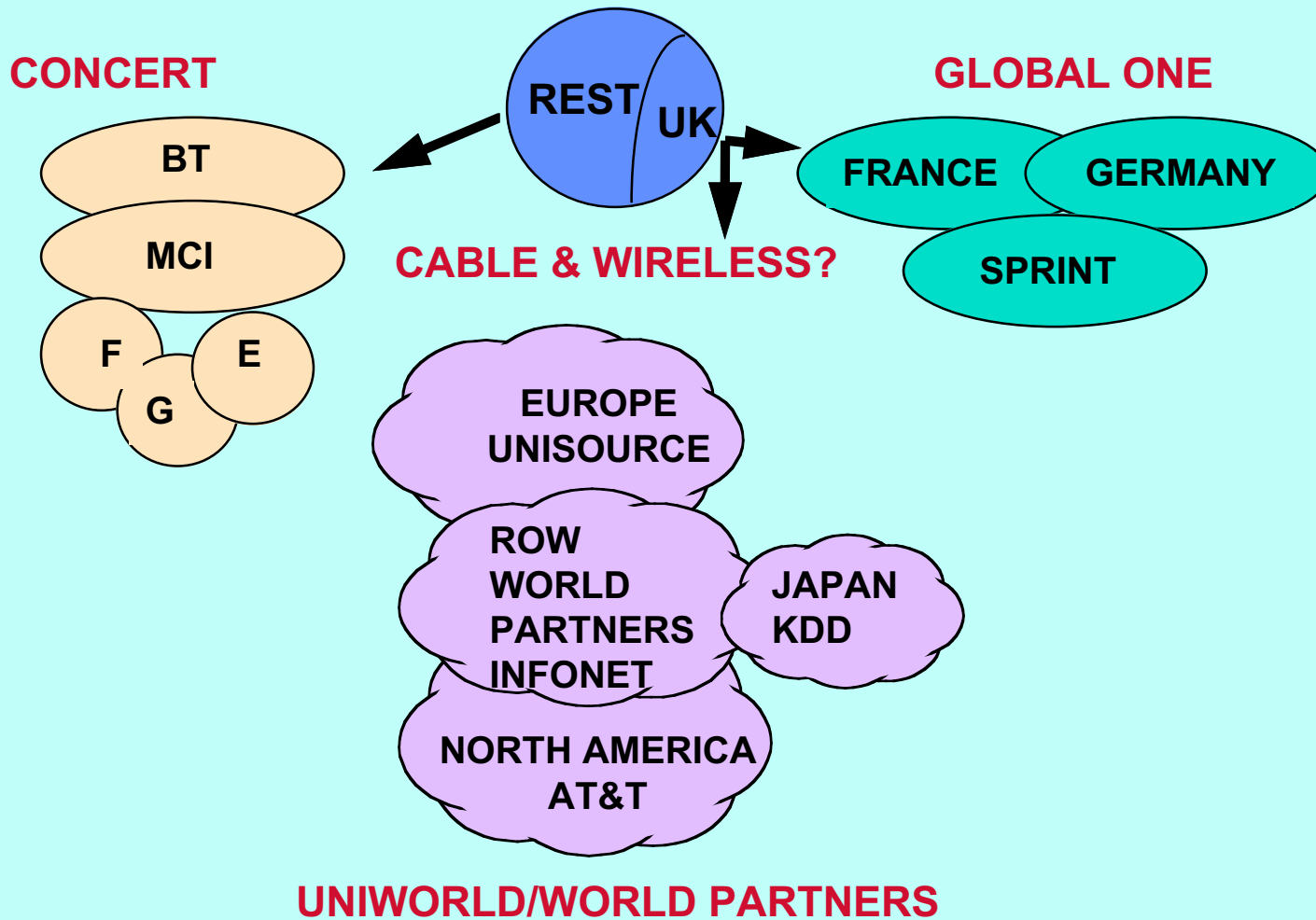
# Technology Is Converging

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# Global Partnerings



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# Leading to Switched Virtual Networks

## Customer Benefits

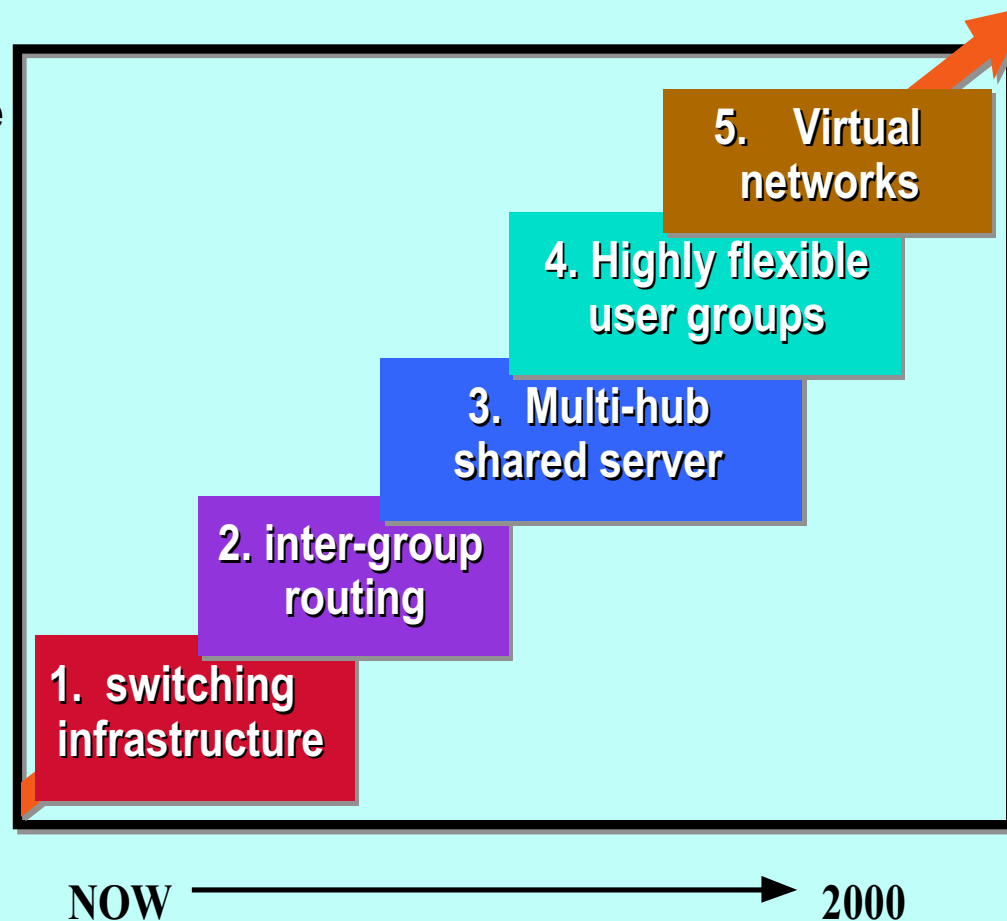
geographic independence  
optimum remote connect

policies by group

server flexibility

user flexibility

individual groups  
software changes



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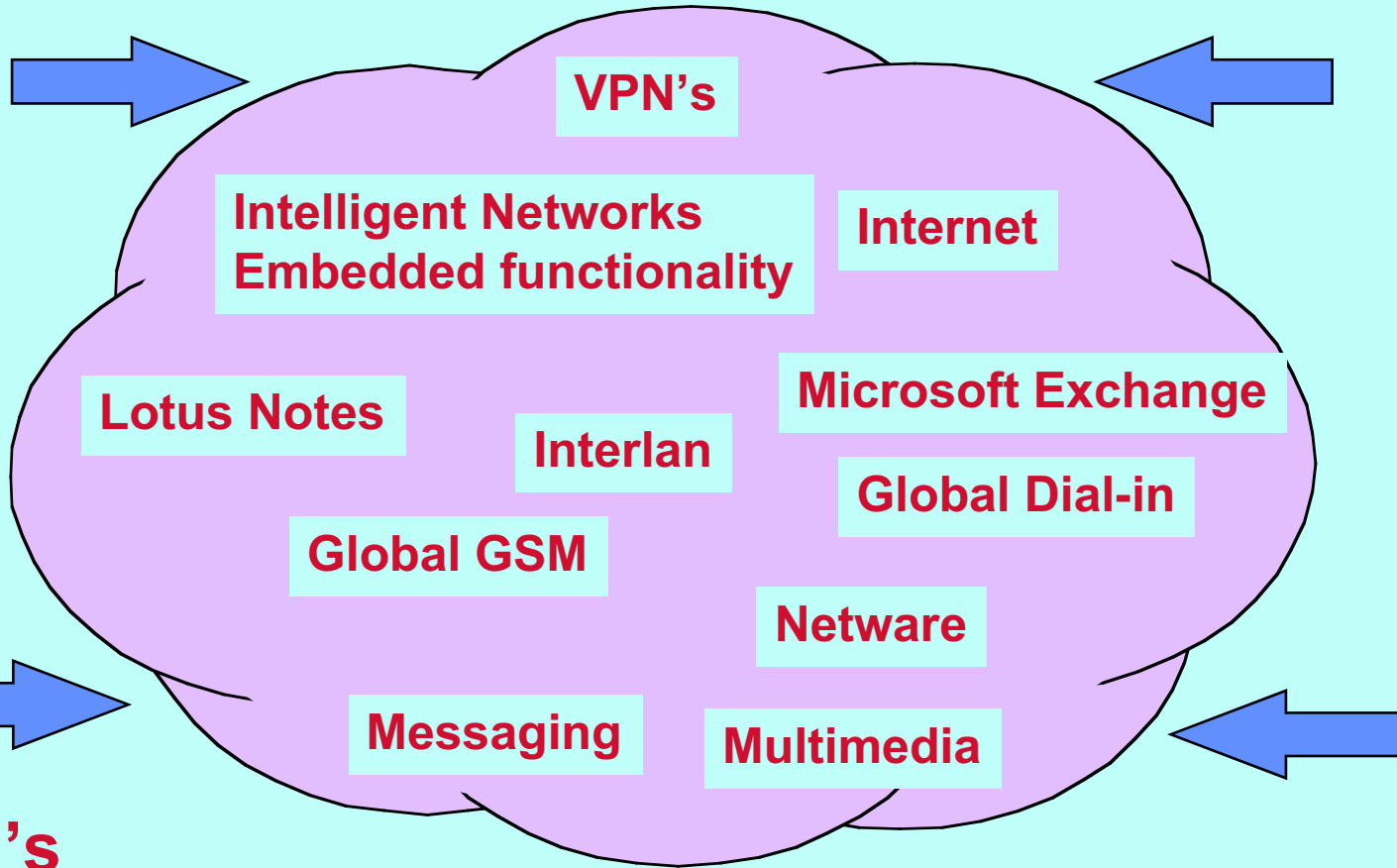
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# Services Not Bandwidth

**PTO's**

**IBM**



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**VAN's**

**Microsoft**

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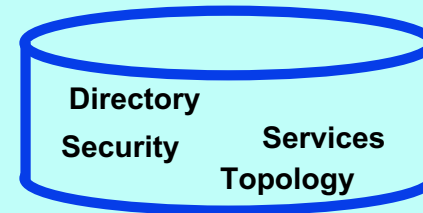
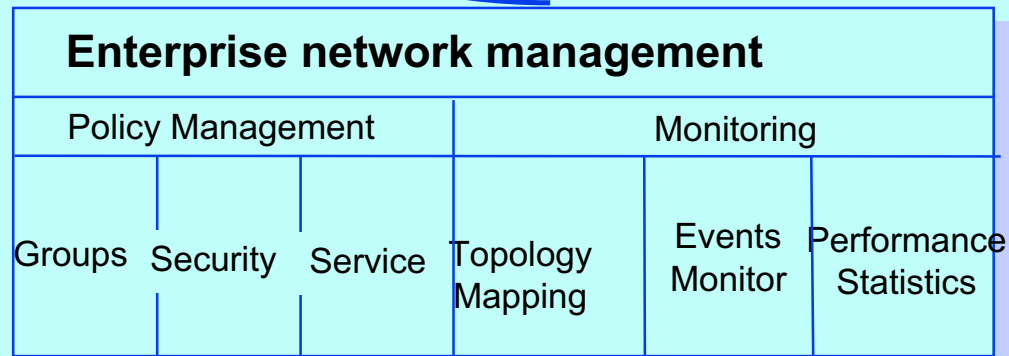
# Enterprise Network Management Architecture



**Network Manager**

**Database**

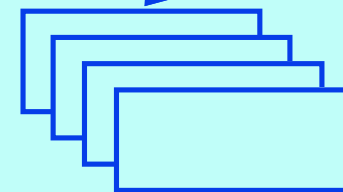
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**Configuration Server**

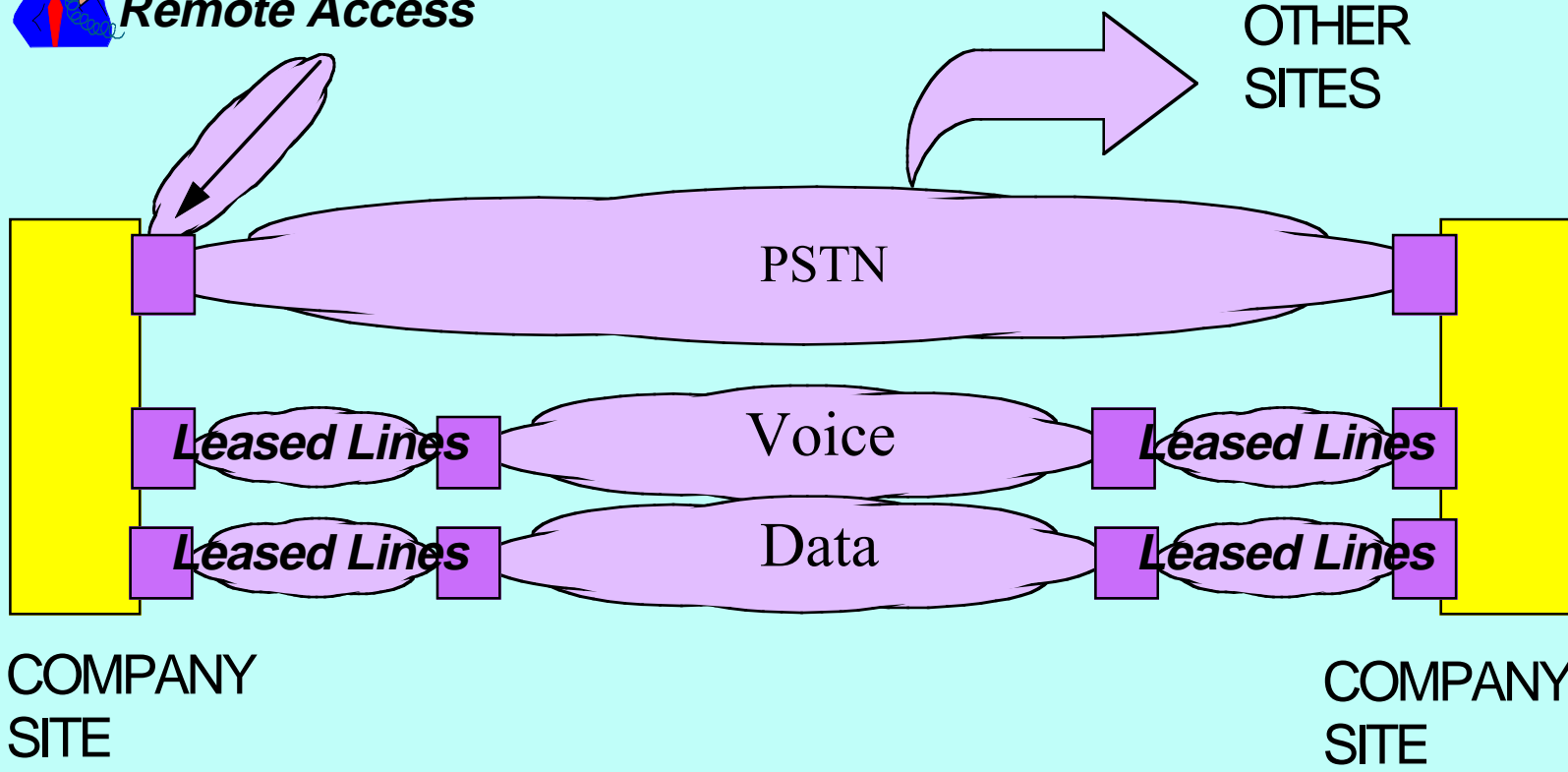
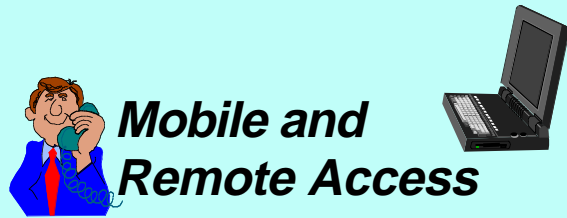
**Autodiscovery and RMON Services**

**Distributed  
Intelligent  
Service Agents**



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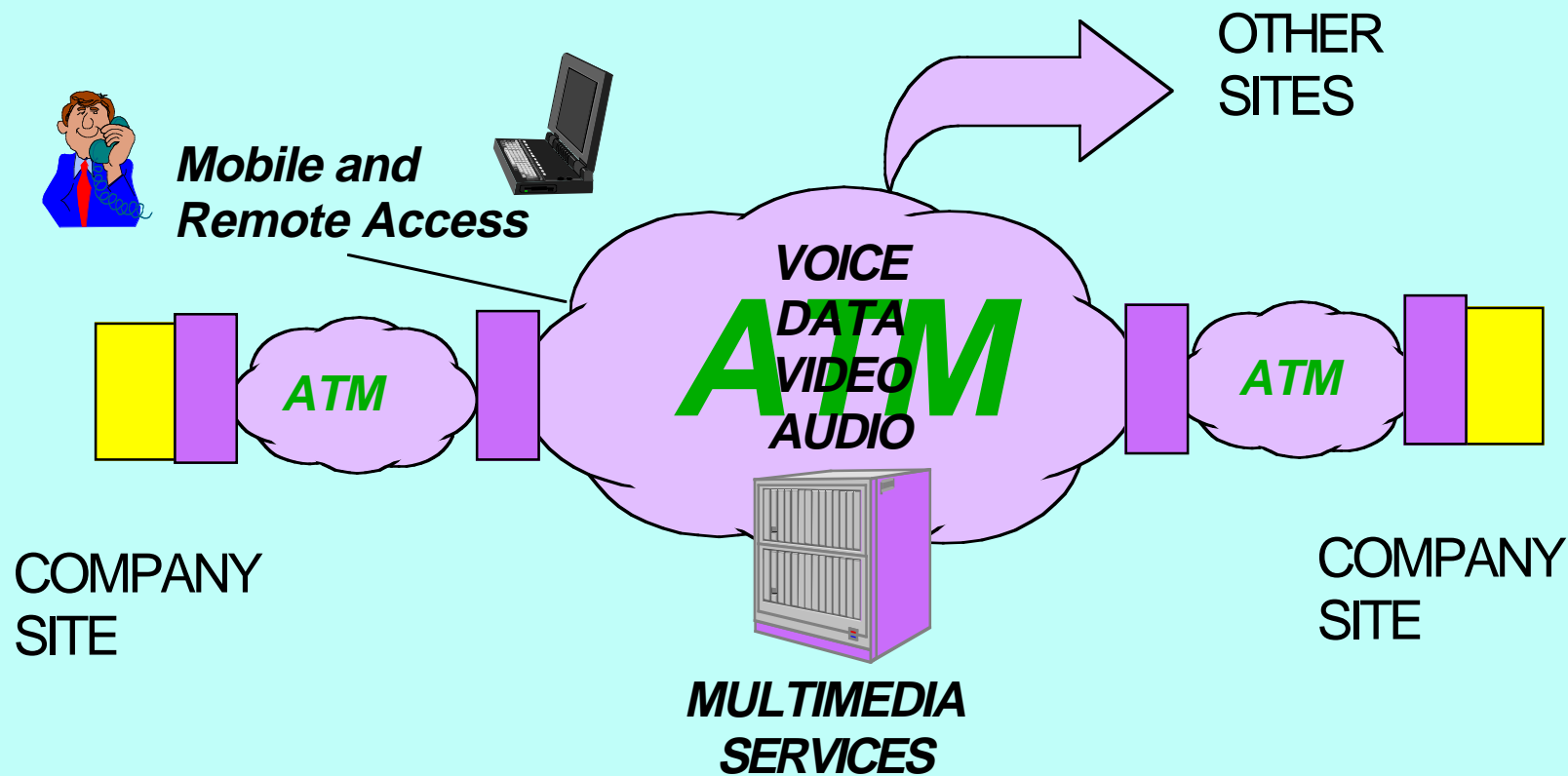
# Today's Network Service



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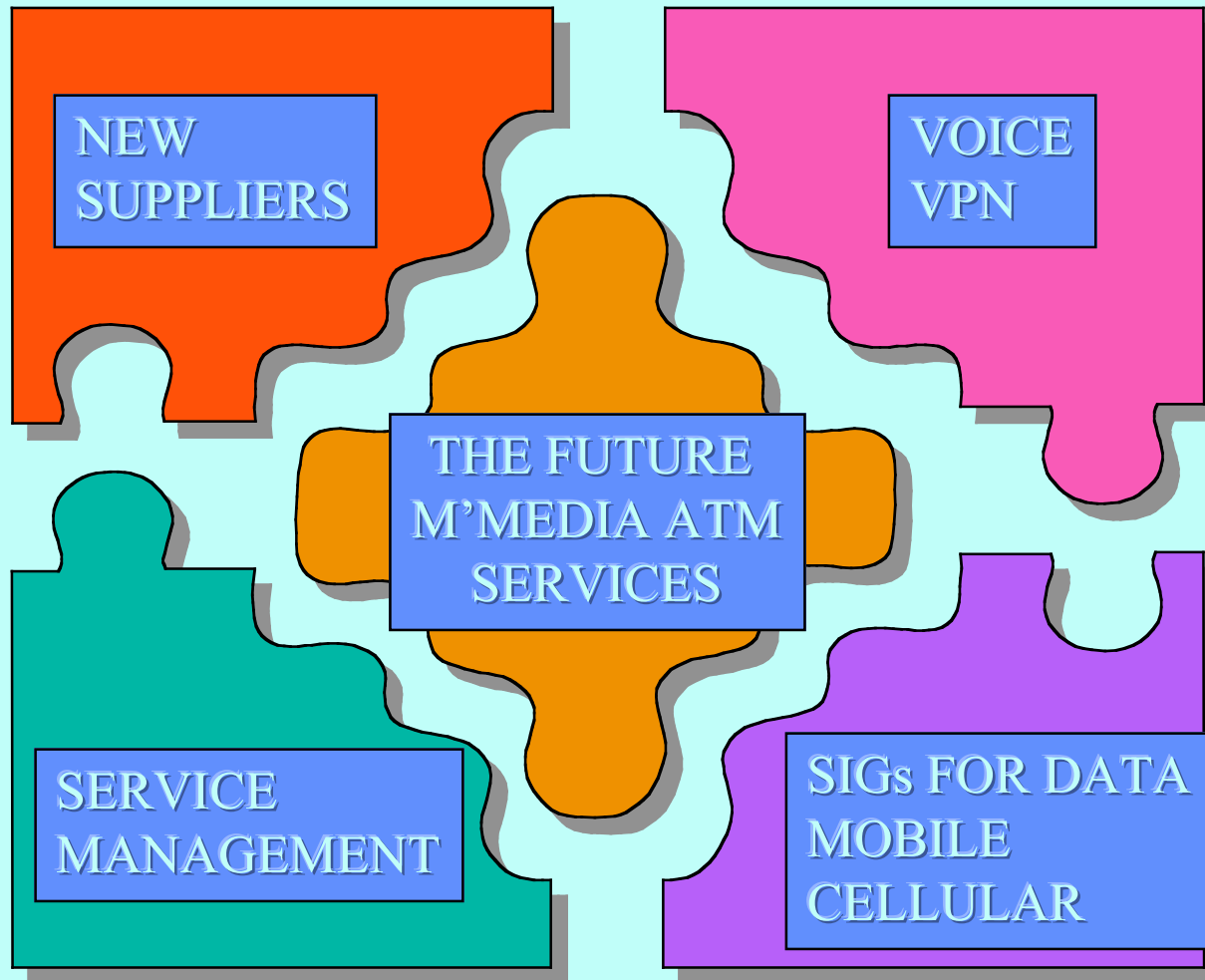
# Network Service 2001



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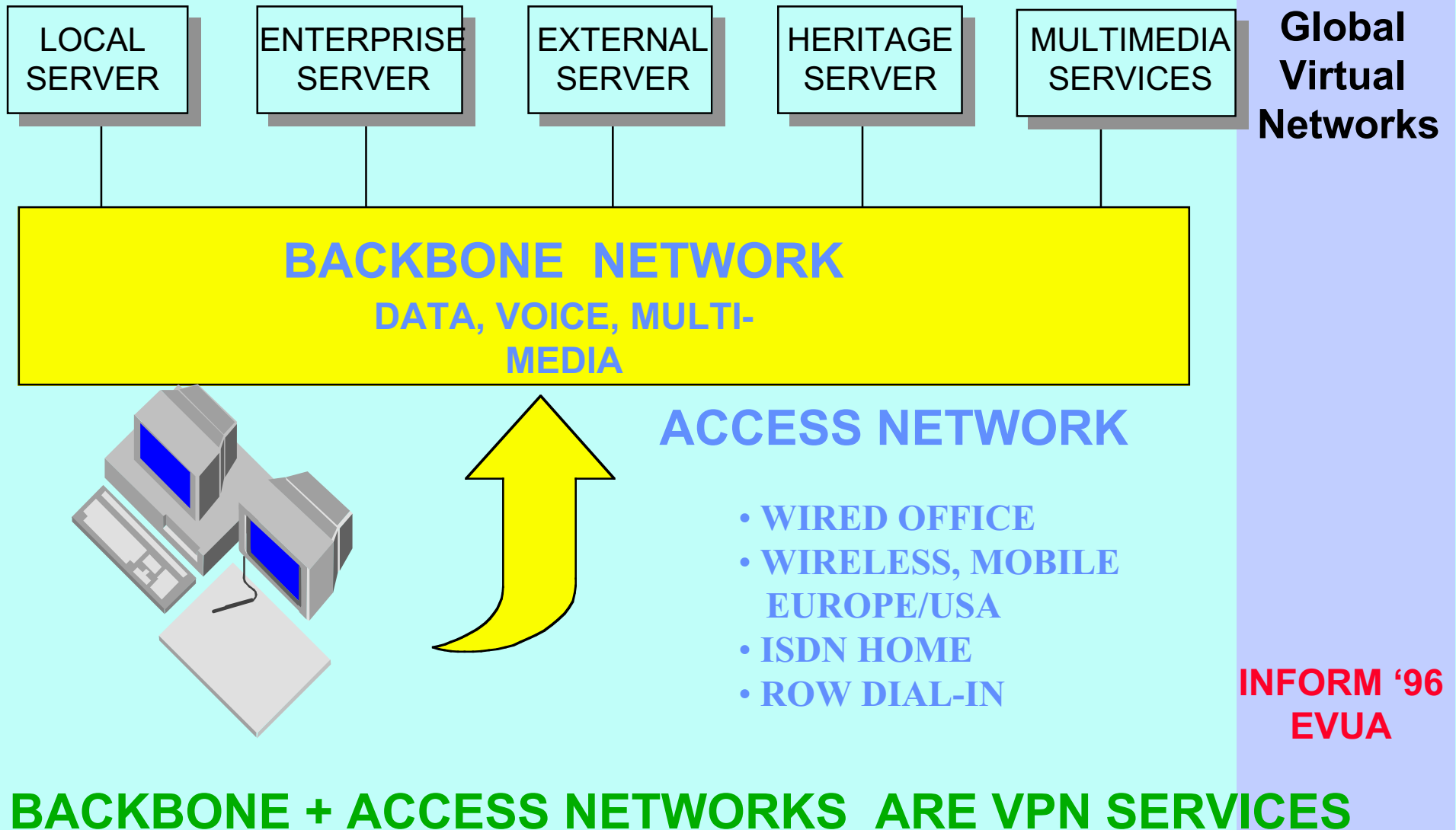
# EVUA Strategy



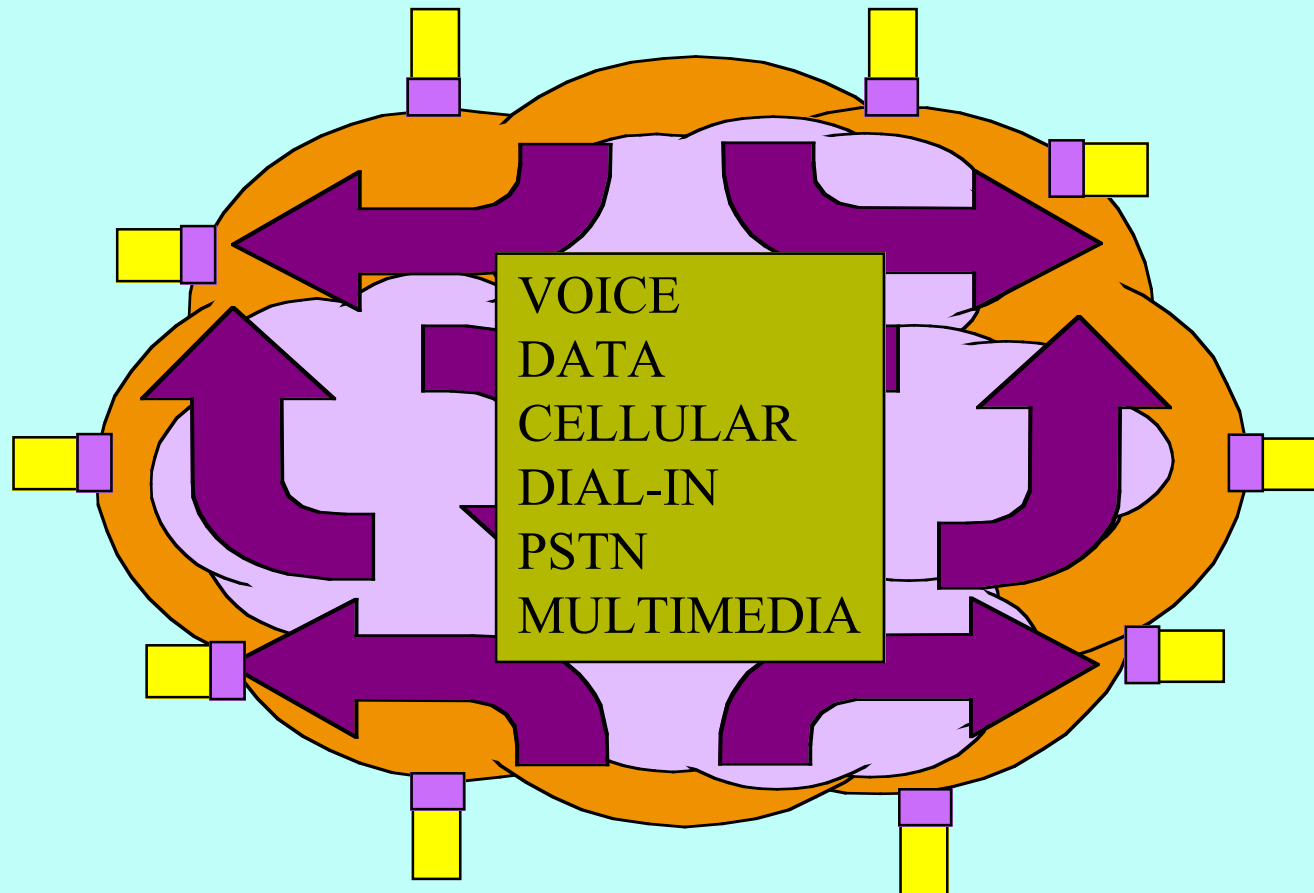
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# Infrastructure 2001 Vision



# THE FUTURE Network Service 2001

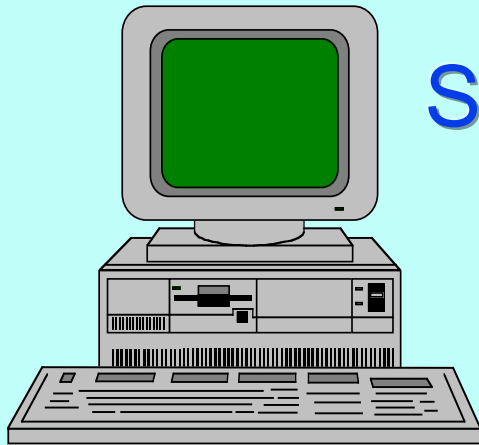


**Sites Globally Interconnected on a Virtual Network**

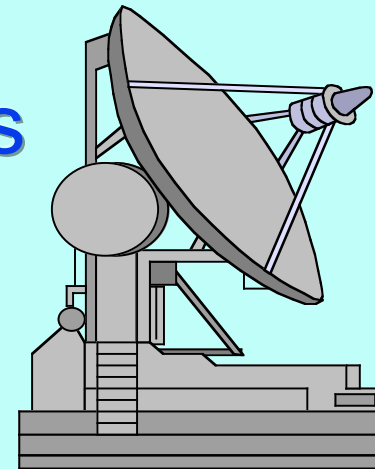
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# EVUA'S INFRASTRUCTURE 2001 VISION

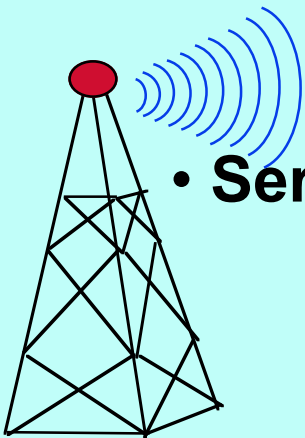


## Short term milestones

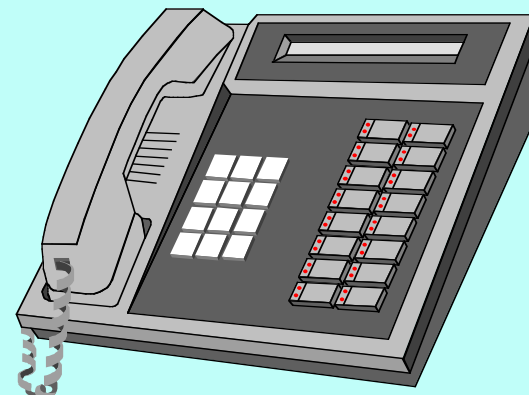


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- **Integration of voice and data on access lines  
(Initial voice + Frame Relay)**
- **Mobile communication on top of VPN services  
(GSM + Inmarsat)**



- **Services for Mobile Workers**



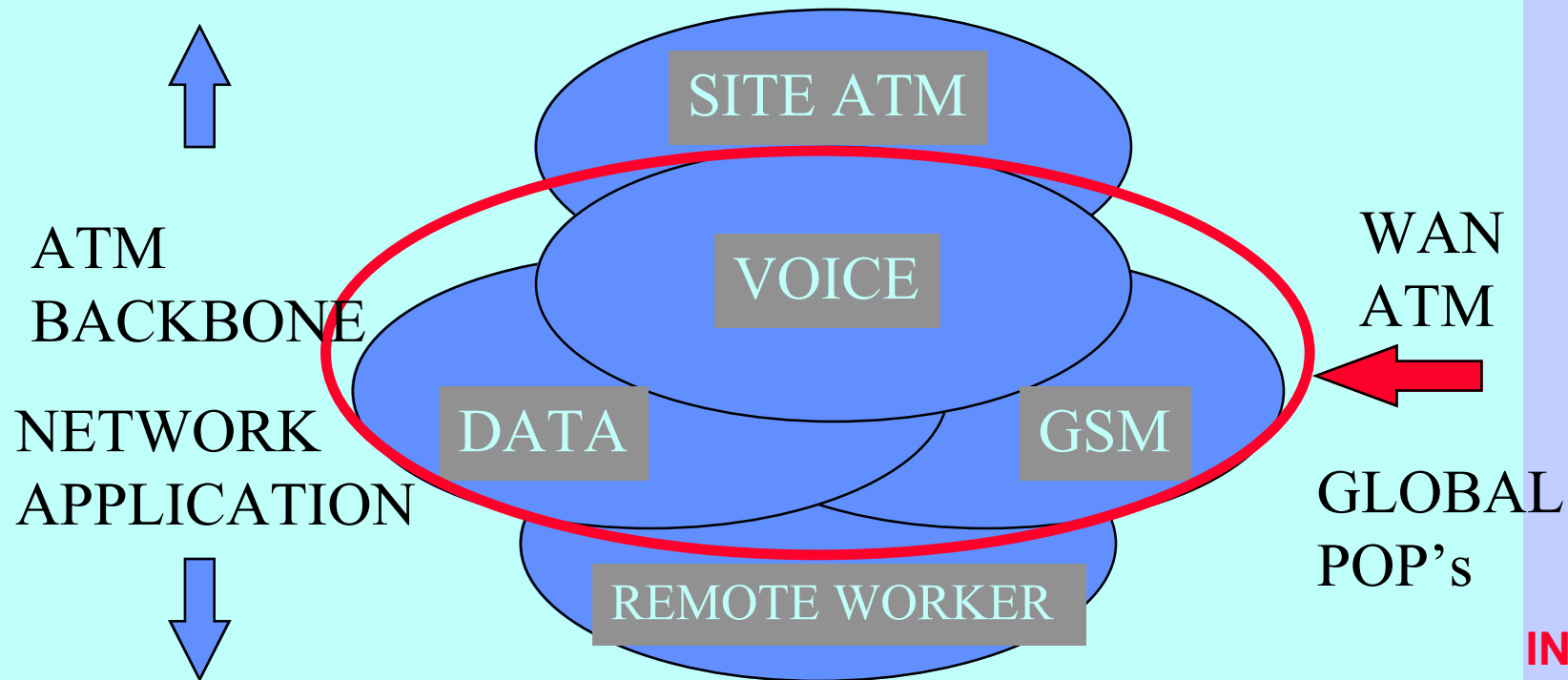
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# NETWORK VISION

## How Does All This Relate?

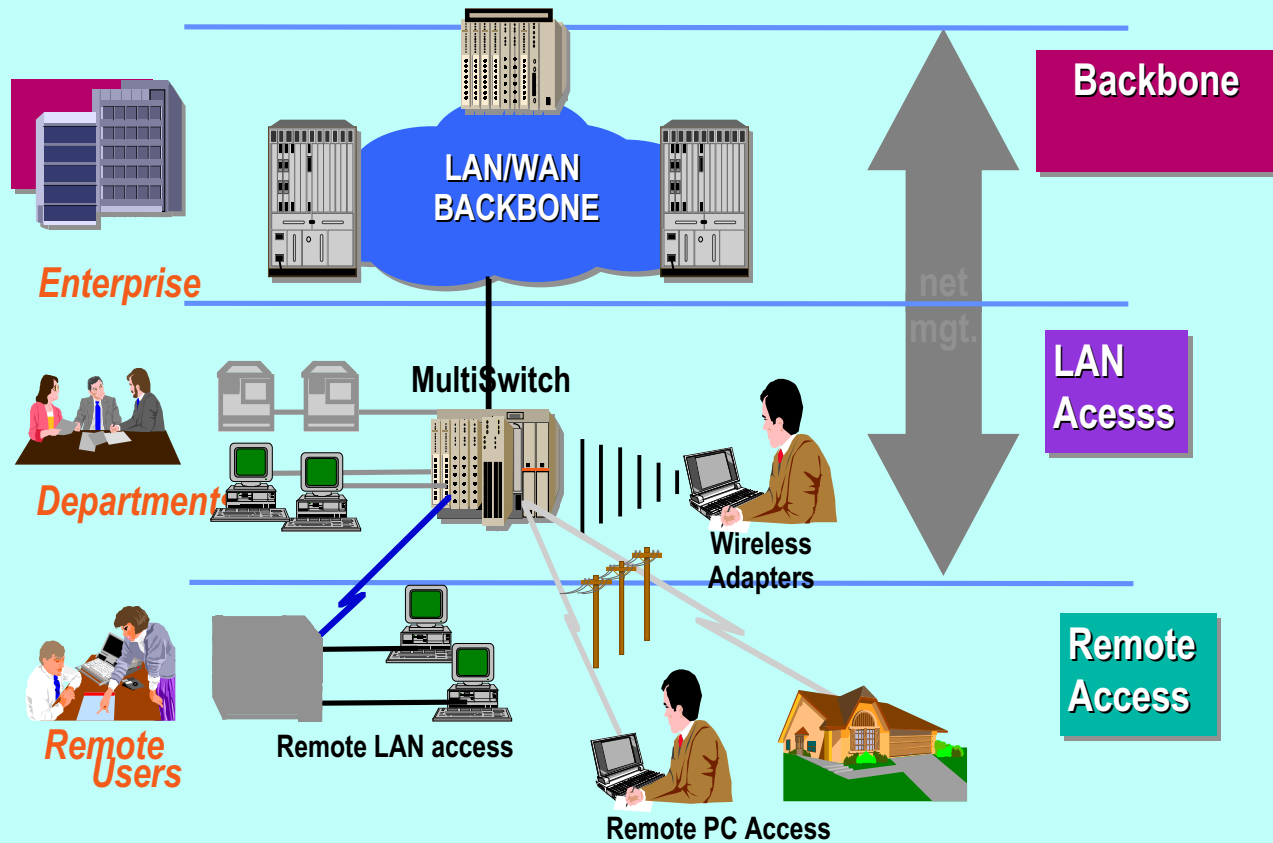
### THE BACKBONE NETWORK



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# Next Generation Networks



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# Networks needs to support our business

## Global Virtual Networks

- Project teams form dynamically on a Global basis
- Applications need to be Global (Office, R&D, Manf & Distr)
- Workers want to connect when they are out of the office
- Applications need to use distributed resources
- People move, servers move, clients move
- Applications integrate Voice, Data, Video *yet*
- Service Management must be easy
- Security needs to be maintained
- Existing investments should be optimized
- Any solution must be reliable



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