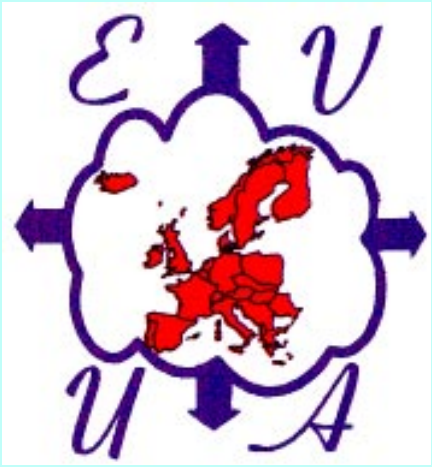
Global Virtual Networks: Virtually Here?

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



Global Virtual Networks

INFORM '96 EVUA

GLOBAL VIRTUAL NETWORKS

Phil Barton graduated from Manchester UMIST University with an honours degree in Control Engineering and Management Sciences. He then qualified as an accountant but having joined BT left that behind for the more exciting field of telecommunications.

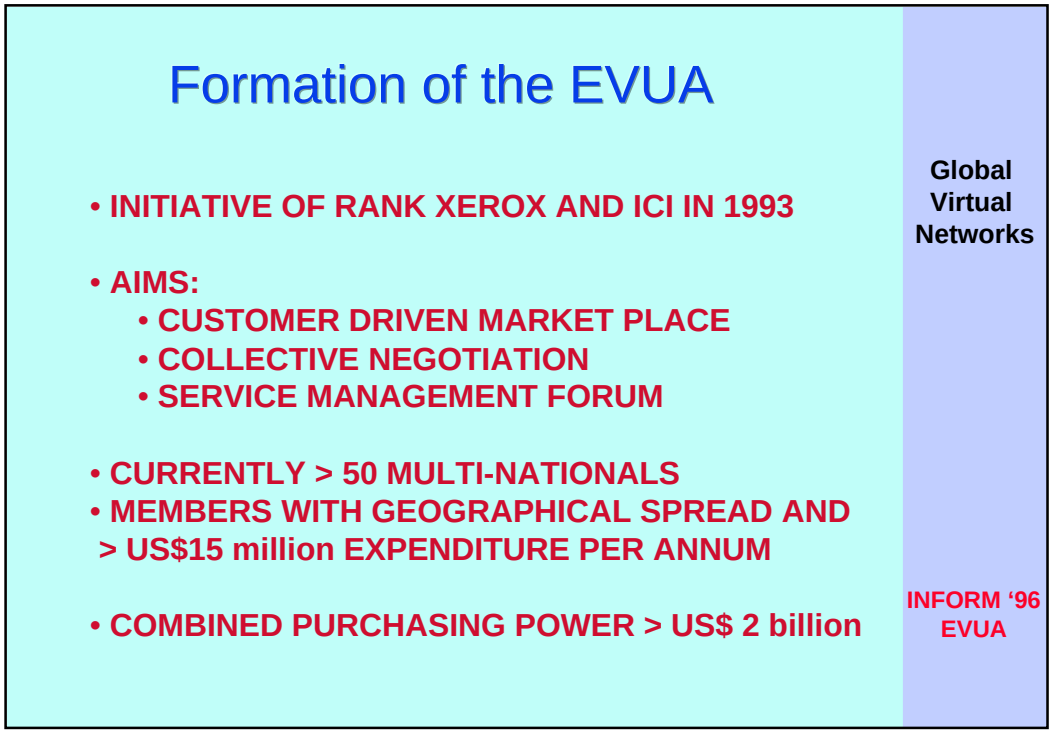
Phil has been with ICI/Zeneca since 1976 mainly in telecommunications but also in purchasing and for a time traded metals.

Phil was responsible for the global telecommunications network at the time of the demerger of Zeneca in 1993 and for two years ran the joint network and led the outsourcing project for both ICI and Zeneca. This was completed in April 1995. He is now Group Telecoms Strategy Manager for Zeneca.

During that time Phil also worked to form the EVUA and in September 1995 became chairman. Phil is also currently Deputy Chairman of the TMA (Telecommunications Managers Association)

As Chairman of the EVUA Phil has seen the development of the Global alliances and has firsthand knowledge of the capability and hype in the market place. Phil is also leading the EVUA Strategy into ATM and Multimedia and has strong views on the threats and opportunities this will bring to the Industry.

His talk will briefly cover the formation of the EVUA and then focus on the current state of VPN's across Europe and the EVUA's vision of the future giving a users view of the requirements of next generation Networks.



THE FORMATION OF THE EVUA

The EVUA was formed at a critical time in the development of networking in Europe, prior to deregulation and fighting against entrenched national interests and monopolies in 19 countries. Whilst members were interested beyond Europe and beyond Voice, the initial aims were set to achieve goals not achievable by one single company.

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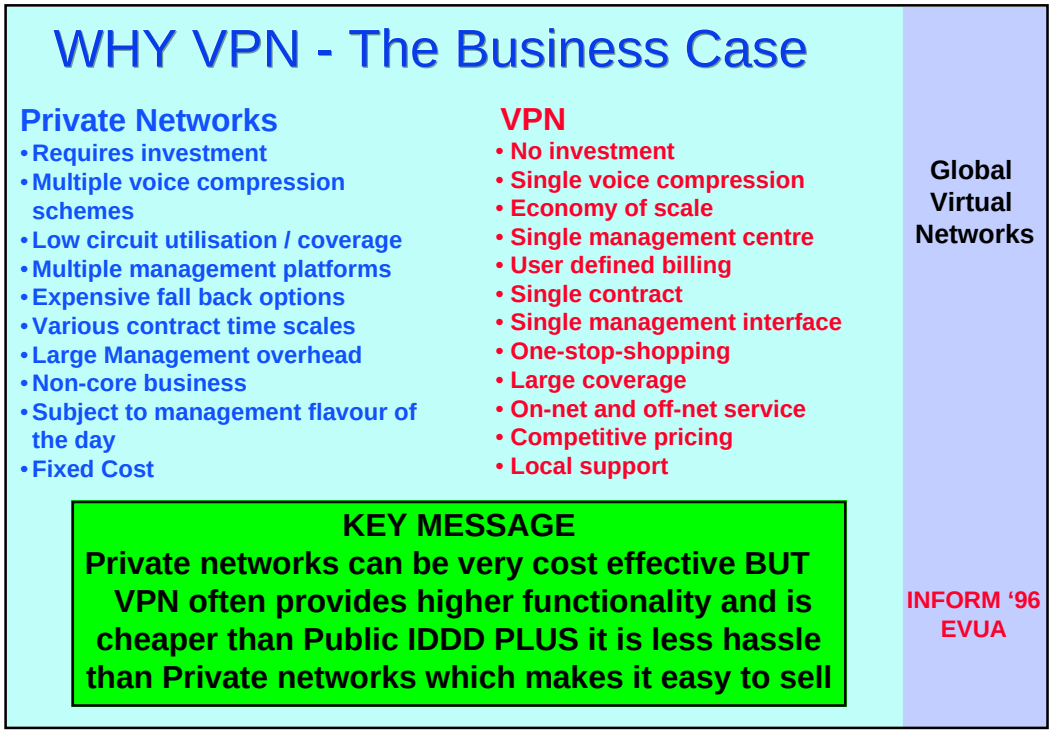

THE CASE FOR VPNs

Companies never really wanted to create their own networks. They responded to poor quality and high prices of public services. VPNs offer an excellent alternative for voice. I believe this will also be the increasing trend in the data area to support the bursty high speed requirements of LAN-LAN and especially for Multimedia.

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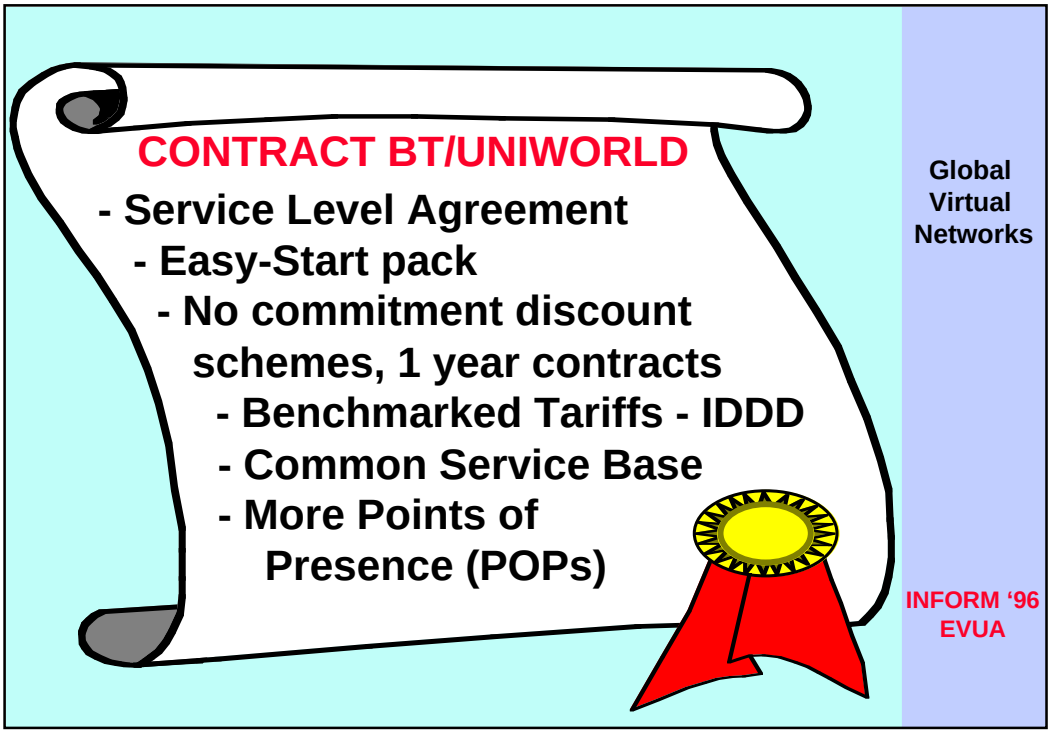

CONTRACTS

The EVUA now has in place Master Agreements with BT and Uniworld for voice services. These offer many benefits to members. Key areas are the easy start, service level agreements and common service structure and tariffs. The EVUA has significantly reshaped the Suppliers tariffing and marketing strategies for VPNs to help the user.

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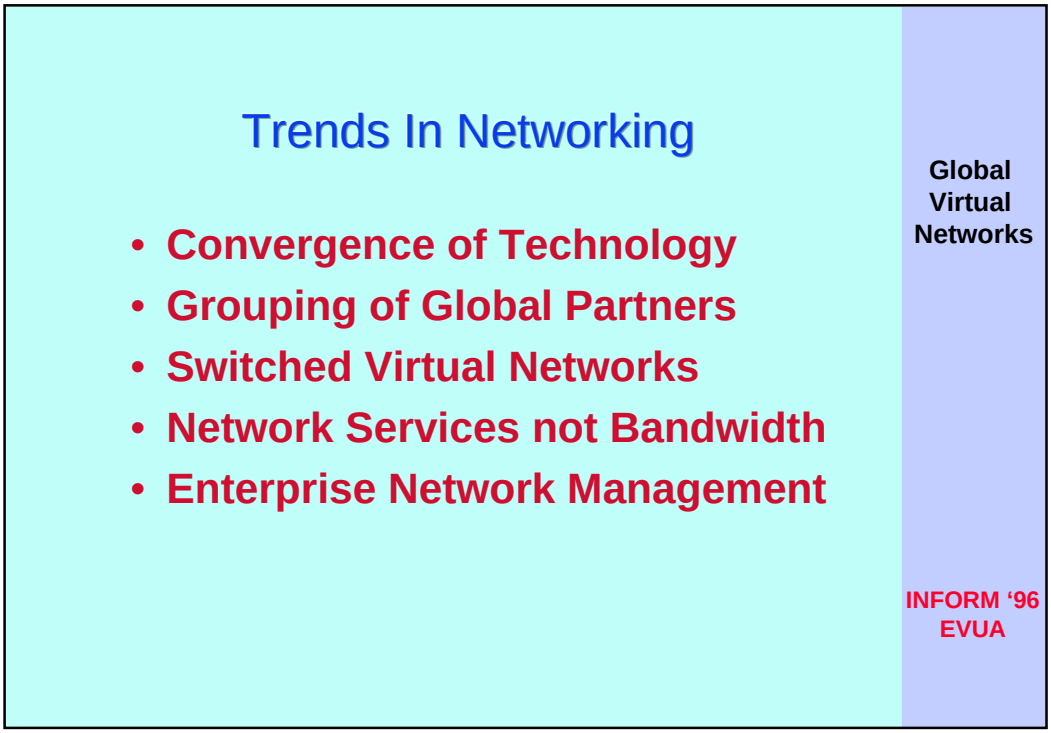

LOOKING AHEAD

Having achieved the first objective of voice networks we began to look ahead at the major shifts in the the market place and our future requirements.

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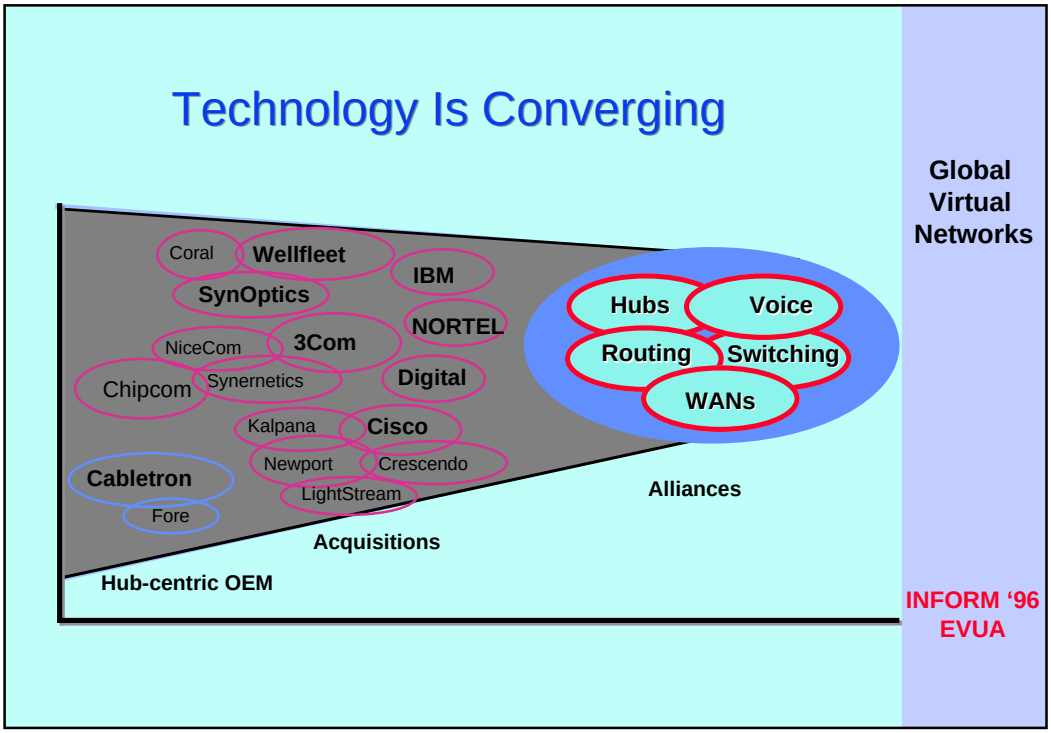

CONVERGENCE

A key move in the market place is the convergence of the LAN and WAN technologies. This is being seen in the mergers and alliances taking place in the customer equipment market. At present the main activity is in the Hub/router area but this is likely to extend to the backbone networks for voice and data. Increasingly the customer will be the service provider not the end user.

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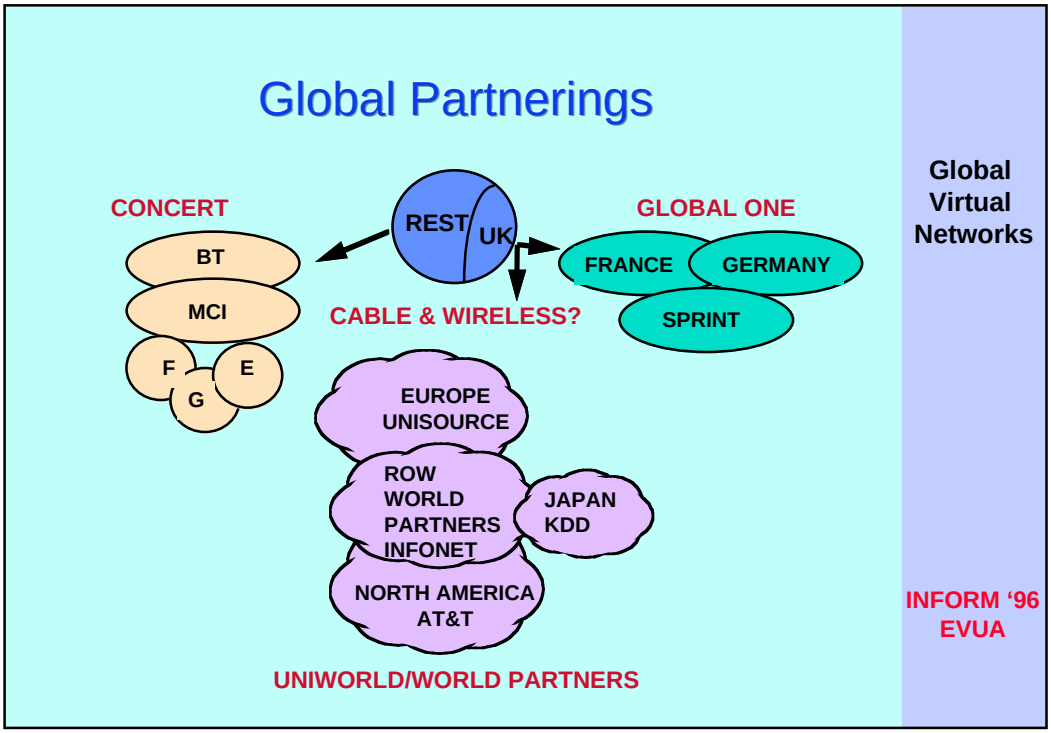

GLOBAL SUPPLIERS

The same trend of mergers and alliances is being seen among the major National Telecommunications service providers who are now forming alliances to become World Telcos. The three major ones are Concert, Global One and World Partners and it is unlikely there is room for others. Deregulation is a pre-requisite to join the game.

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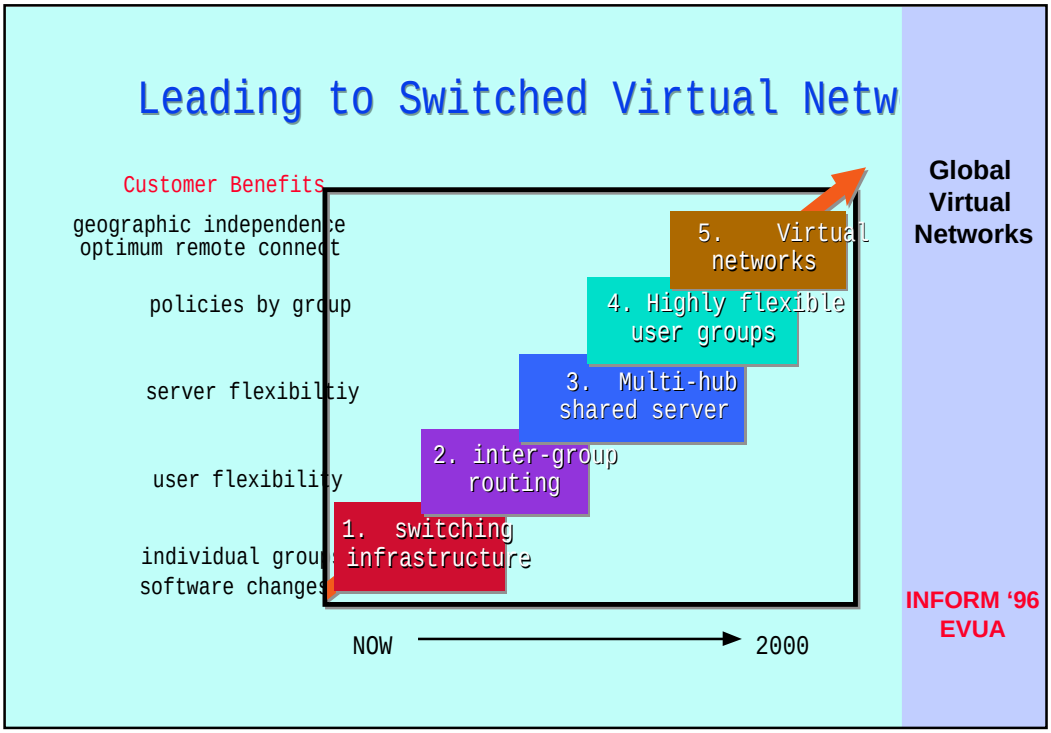

SWITCHED VIRTUAL NETWORKS

A major shift in networking technology is the move toward switched virtual networks. This shift is critical to support the Global Virtual LAN (VLANs) concept and Multimedia application services. While the products and standards are not yet fully in place users are beginning to see how these services can help support the continual office moves, virtual teams and the new emerging multimedia applications e.g. Microsoft Office 7 and Internet services.

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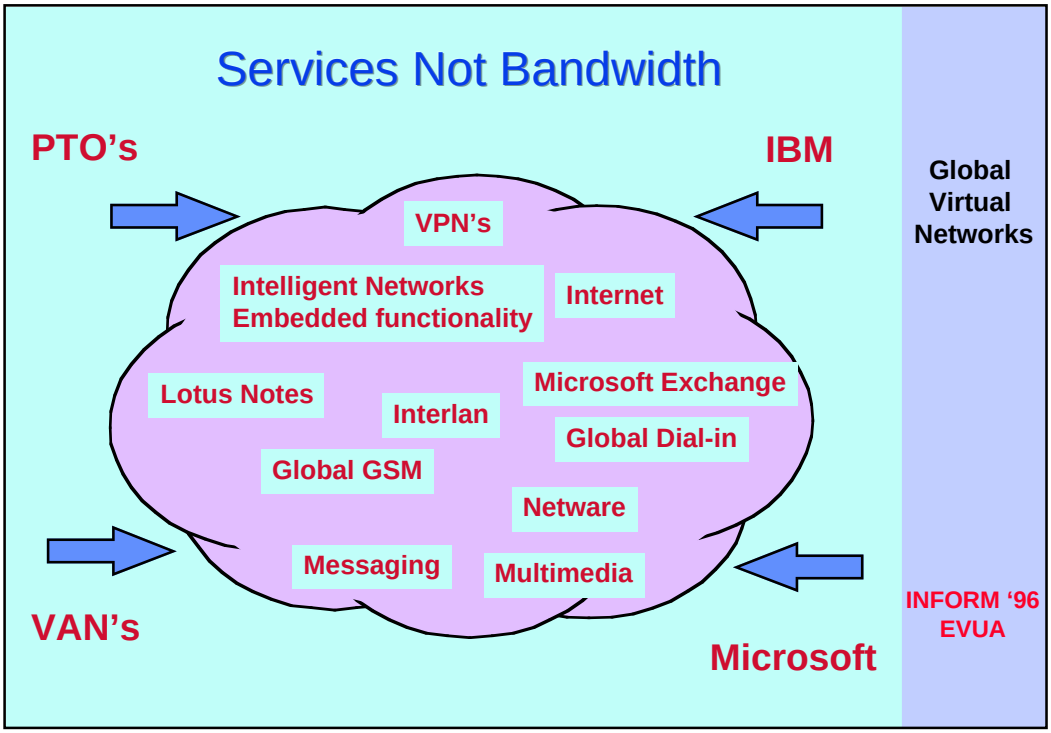

SERVICES NOT BANDWIDTH

The customers focus is increasingly toward services not merely bandwidth. This is also critical to the PTOs (National Telcos) as revenues from POTS falls. But the market is not restricted to them there are other major players in the game if they fail to change their focus.

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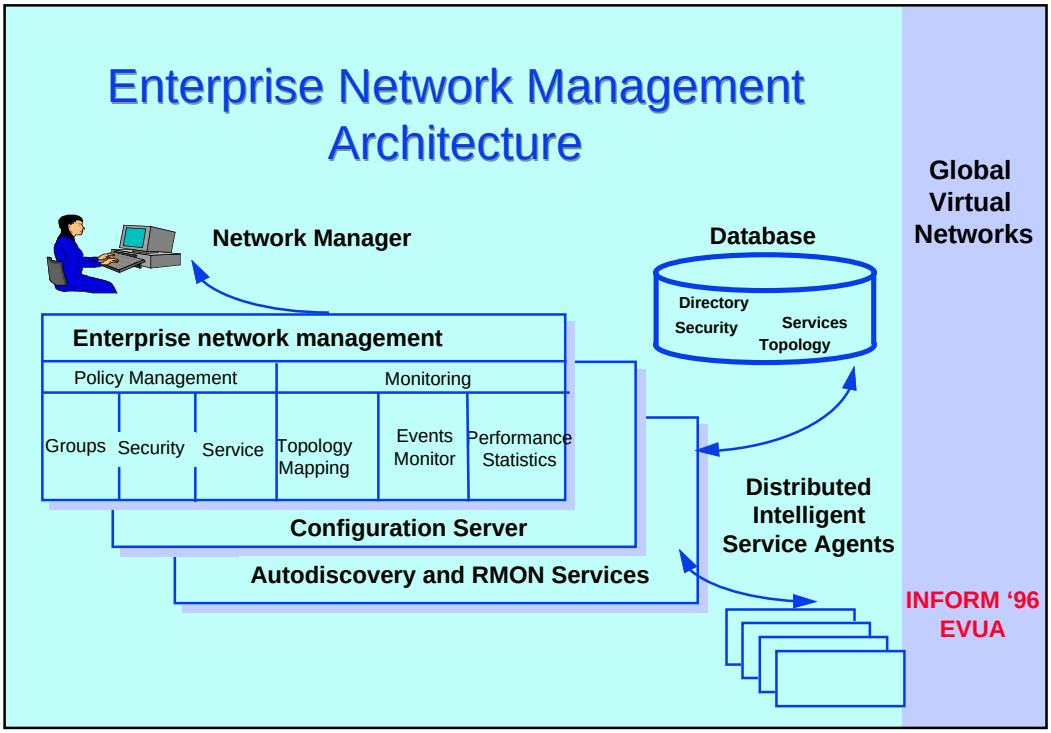

NETWORK MANAGEMENT

This is an increasingly complex area. It is also moving from being focused on lines and boxes to desk to server/desk including extending its control into the base applications.

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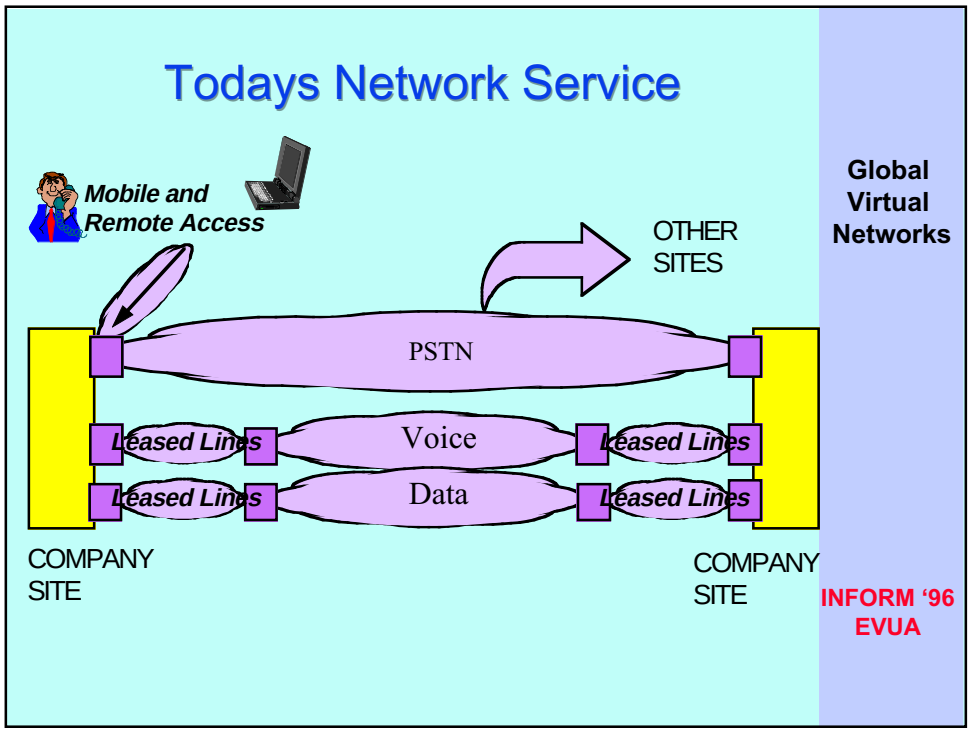

TODAYS NETWORK SERVICE

For many companies in Europe their network would look like this. Each of their services delivered on different physical and logical routes and dial-in routed back to the required location. At the desk it is the same with LAN, voice and video all separate. This is not a good start for the integrated services of the future.

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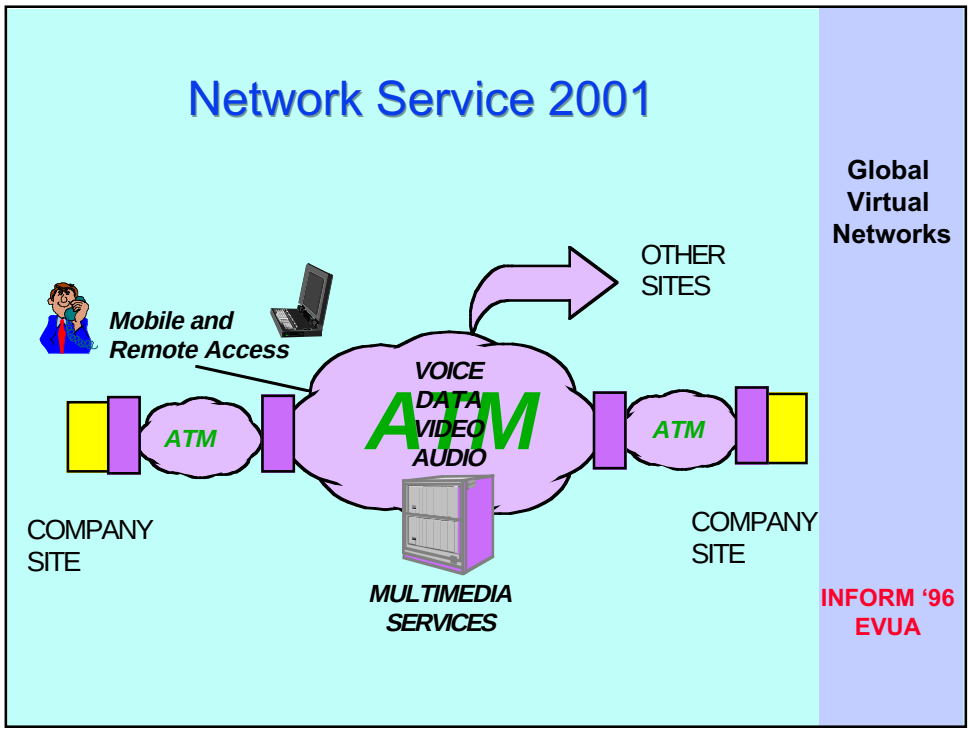

NETWORK VISION 2001

It is envisaged the route to multimedia services will be achieved based on ATM services in three steps: The basic backbone; The site access: and The site itself. Each of these have their own drivers and pace of development.

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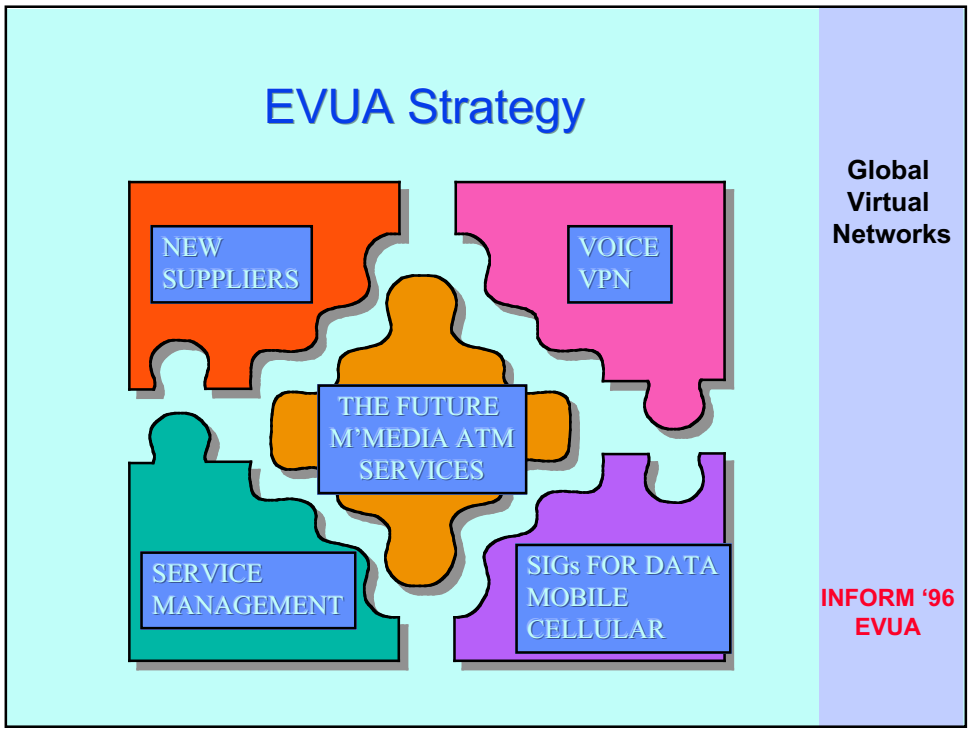

EVUA STRATEGY

Based on this background the EVUA members have developed a strategy to take them toward the vision, driving the market place forward to meet their needs in achievable steps.

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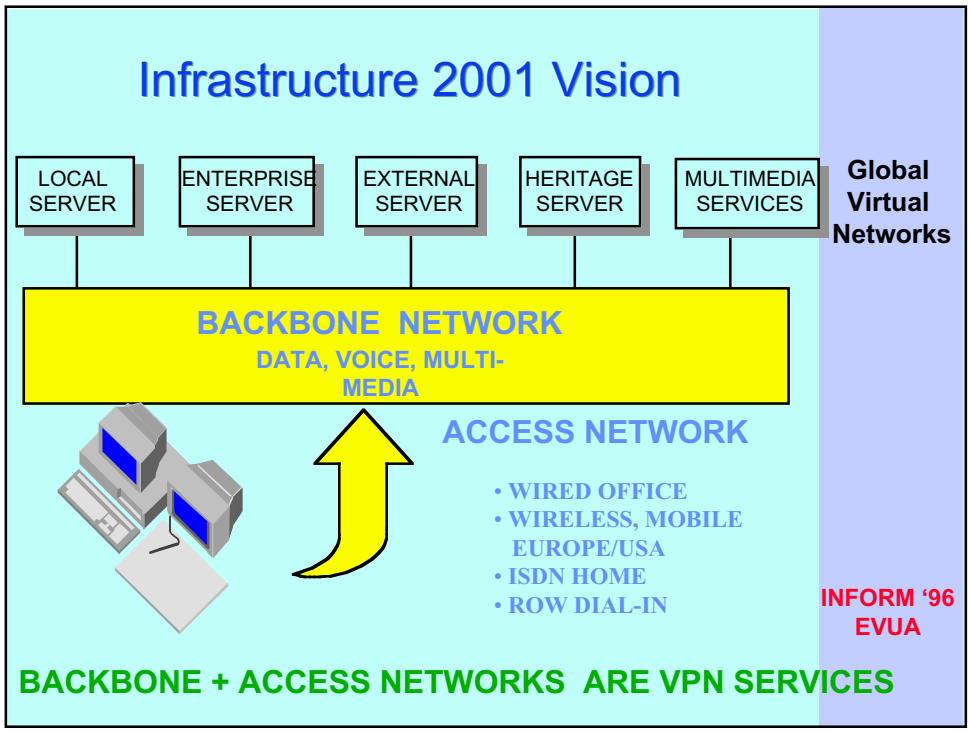

THE 2001 VISION

As a basic IT Infrastructure model the EVUA took the view that in 2001 the world would be Multimedia workstations accessing backbone networks on which existed a range of services and servers. The speed and functionality achievable by any workstation would largely be determined by its method of Access.

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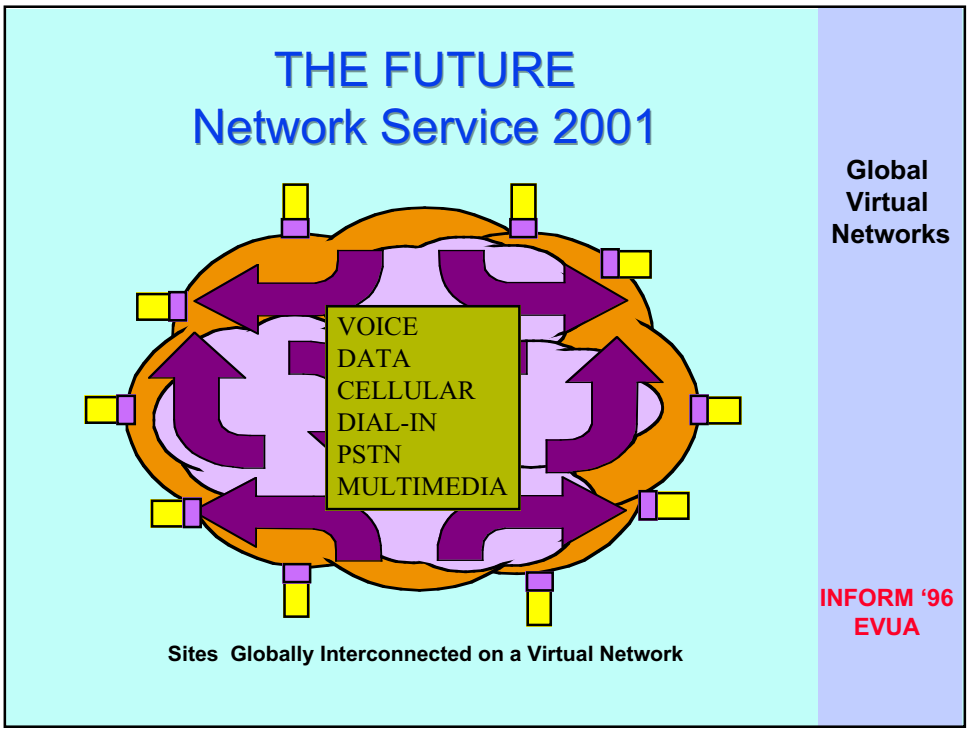

NETWORK 2001

Most importantly the network would be homogeneous and provide switched virtual connections with embedded multimedia services.

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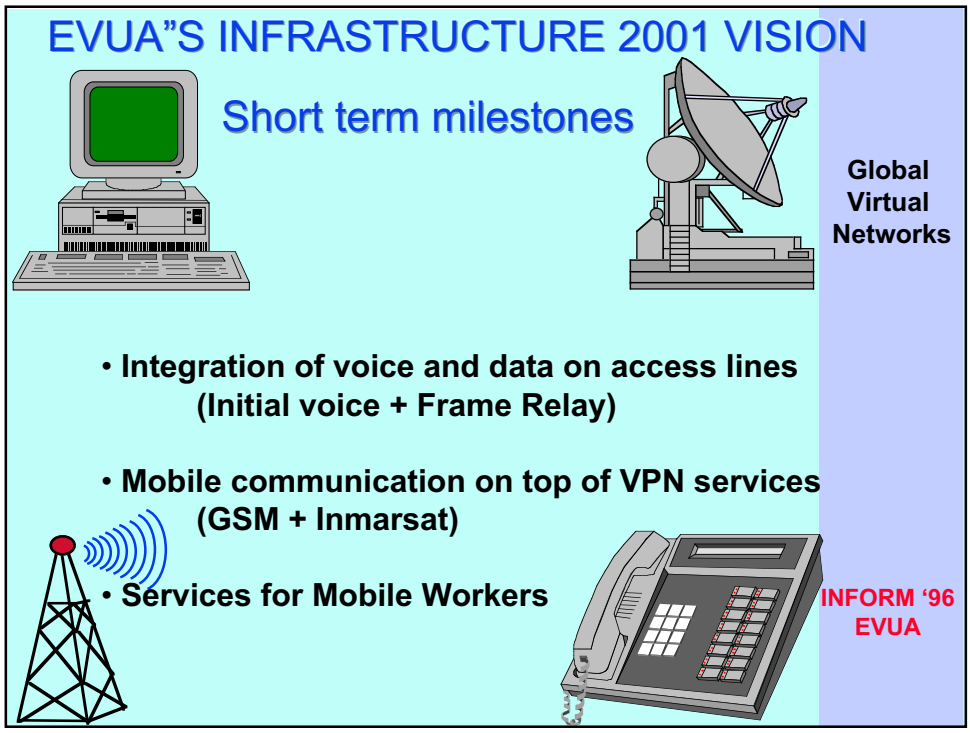

INTERIM STEPS

Today it is almost impossible to define the user requirements of the 2001 service as to a large extent they are linked to the application development. However there is some certainty on the need to integrate the services and our short term milestones aim to achieve this.

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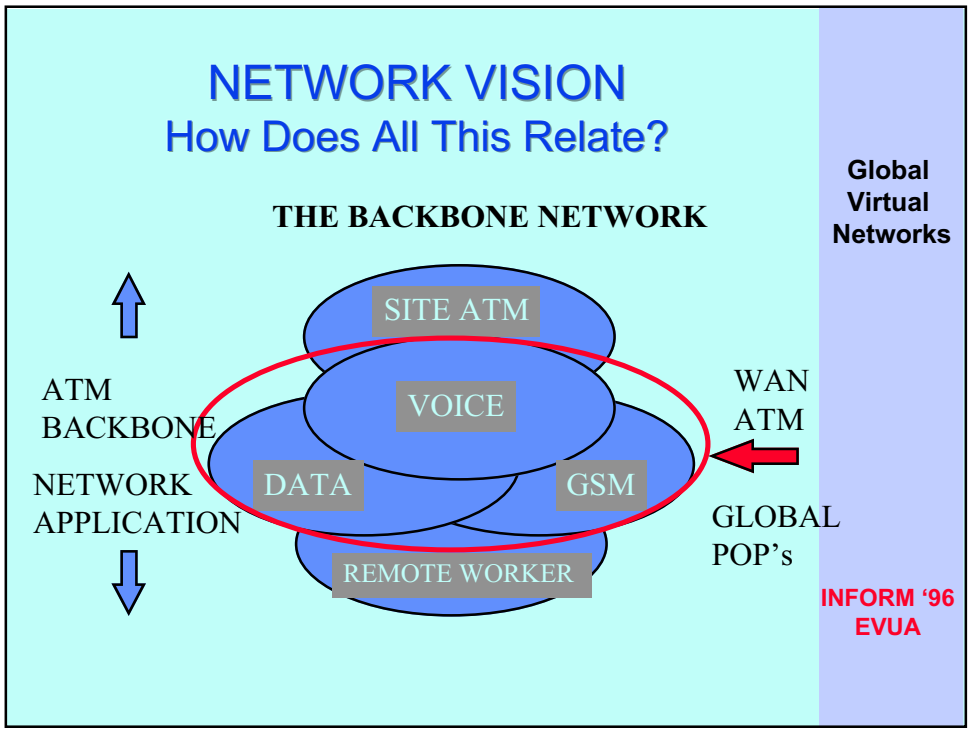

HOW DOES THIS RELATE?

The expansion of services to cover all media positions us for the deployment of ATM services. The provision of services for remote workers facilitates the development of Network embedded applications that we cannot provide ourselves.

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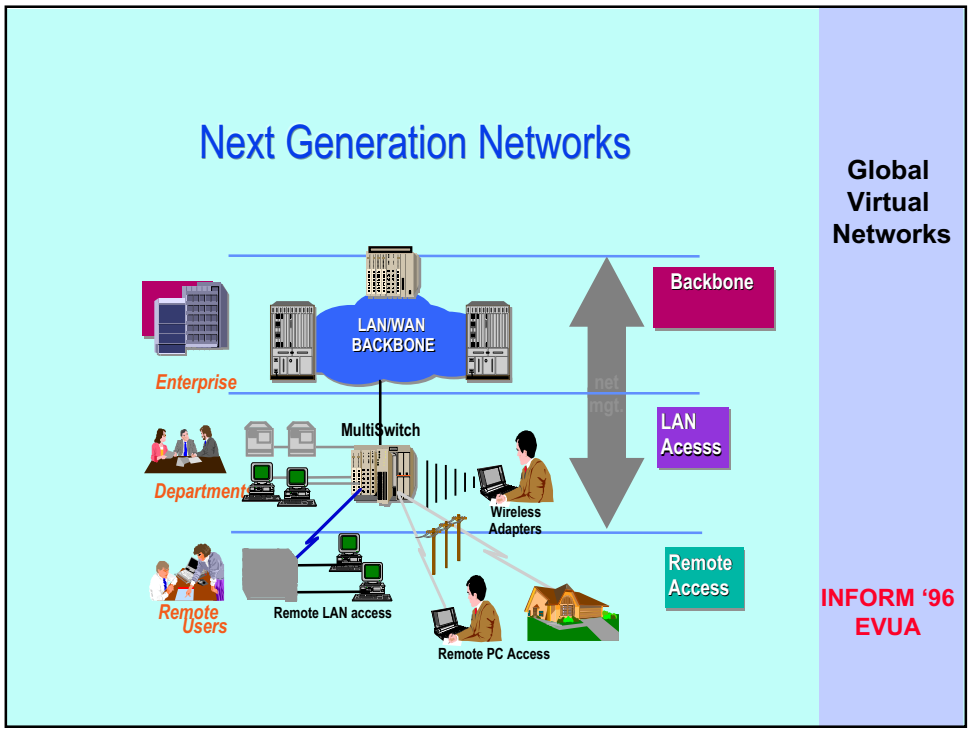

CONCLUSION (1) - THE NETWORK

The vision of the future is for a Multimedia network backbone with embedded applications. This cannot be delivered by the network providers alone but must be done in conjunction with the Applications developers. But there are some early steps that must be taken to position us.

NOTES: _____

Networks needs to support our business

- 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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CONCLUSION(2) - USER REQUIREMENTS

To be successful in 2001 the service provider has to meet the needs of the customer. Much of the detail still needs to be worked on but we know it must embrace the elements of flexibility, manageability, and reliability and support the Multimedia environment.

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