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## **ANSA Phase III**

# **World Wide Web - The Next generation**

**Andrew Herbert**

### **Abstract**

Introductory talk to ANSA Technical Committee 25/26th May 1995.

Sets out case for developing new WWW infrastructure.

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**Approved**

23rd May 1995

Project Management (confidential to ANSA consortium for 2 years)

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**Distribution:**

**Supersedes:**

**Superseded by:**





# WWW - The Next Generation

**Andrew Herbert**

**ANSA Chief Architect**

**25th May 1995**

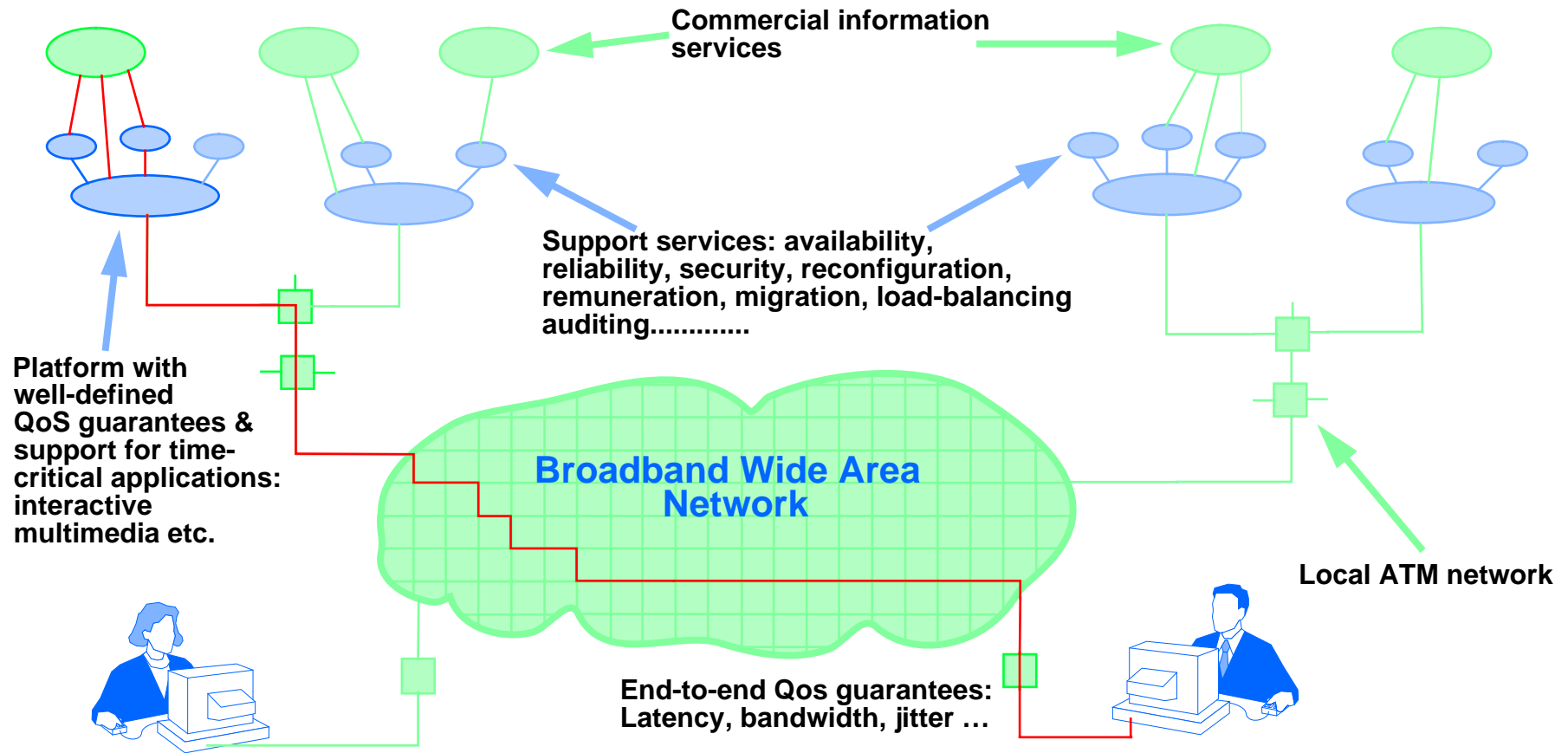


## Purpose of this TC / Workshop

- to launch a focussed activity to develop WWW technology
- to receive your reality check on the approach being followed
- to identify other alternatives
- to find contributors and testers for the resulting code



# The ANSA Electronic Commerce Vision





## Where does the Web fall down (1)

- **Engineering**
  - everything is programmed at the sockets level
  - the network is used inefficiently
- **Transactions**
  - there is no concept of transaction or session
- **Interoperability**
  - everything is assumed to be a file or a process with a limited interface



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## Where does the Web fall down (2)

- **Management**
  - no tools for managing servers
  - no tools for managing sets of resources
- **Discovery**
  - relies on physical naming
  - single structure, imposed by author
  - no link back to Management Architecture



## How can ANSA help (1)

- **Engineering**
  - multi-protocol infrastructure
  - optimized multiplexing
  - (upcoming) streams and QoS
- **Transactions**
  - make every resource an object with *state* and *function*
- **Interoperability**
  - provide for IDL-based invocation
  - provide for IDL-based wrapping
  - CORBA interoperability protocol as basic transport





## How ANSA Can Help (2)

- **Management**
  - **scripting technology for directing and administration**
- **Discovery**
  - **use of trader concept to support logical URC to physical URL mapping**
  - **separation of meta data from content to allow for meta data management**
  - **separation of meta data from content to allow for user imposed views**



## Why Bother?

- all the experts agree the Web needs objects, but no one is doing it (yet)
- most focus to date has been on Browser technology
- some database vendors have investigated database based servers
- market opportunity and anticipated need
- pull through on interactive multi-media architecture
- some interesting design issues....
  - which should add to ANSA



## Today

- **Re-engineering the WWW Infrastructure (Owen Rees)**
- **Future Prospects for the WWW (Jean-Bernard Stefani, CNET)**
- **Programming the Internet (Ashley McClenaghan)**
- **Web Objects (David Ingham, Newcastle Univ.)**
- **Future WWW Resource Discovery by Metadata Agents (Mark Madsen)**
- **The Microcosm Link Service (Wendy Hall, Southampton Univ.)**



## Tomorrow

- **ANSA TC Business (0930-1130)**
  - Overall Report (Rob van der Linden)
  - Federation and Interception (Yigal Hoffner)
  - Gateway design (Ben Crawford)
  - DIMMA Engineering Update (Youcef Laribi)
  - OMG status (Andrew Soley-Watson)
- **Integrating Services in the Internet (Nigel Edwards)**
- **Discussion**



# Schedule

