

LONG: Laboratories Over Next Generation Networks.

Participants : PTIN, TED, TID, UC3M, UEV, UPC, UPM.

General Information

- LONG: Laboratories Over Next Generation Networks.
 - IST Program of EU (European Union): IST-1999-20393.
 - Participants: PTIN, TED, TID, UC3M, UEV, UPC, UPM.
 - Start Date: 1/12/2000, Duration: 24 Months.

- Previous Experiences and Knowledge:
 - Standards Related to IPv6 protocol.
 - Experiences and practical tests with IPv6 in test-beds.
 - IPv4-IPv6 transition mechanisms.
 - New technologies in Broadband Access Networks.
 - Transport Network Technologies.
 - Collaborative Work Environment (CSCW Applications).

General Information(II)

- Aim of the Project:
 - IPv6 offers new solutions to solve actual problems such as:
 - Scarcity of IP addresses.
 - Stability of Internet routing protocols.
 - Security at IP packet level.
 - Besides IPv6 allows some mechanisms to be improved:
 - Mobility.
 - Quality of Service.
 - Multicast.
- IPv6 launching will occur when applications and services use the new features provided by this protocol. Main points:
- Development of a Next Generation Network Platform.
 - Adaptation of current IPv4 based applications to IPv6.
 - Design of New IPv6 Applications which use the new features.

Objectives

- Main Objectives:
 - Develop a “next generation” network platform including interaction between the following technologies:
 - Protocol IPv6.
 - Advanced Network Mechanisms: Autoconfiguration, Security, Multicast, Mobility.
 - IPv6-IPv4 Transition and Integration Mechanisms.
 - New Broadband Access Technologies: ADSL.
 - Transport Technologies: ATM.
 - Adapt and validate a representative set of applications/services in “next generation” network scenarios.
 - Make tests and Experiences with such applications and platform.
 - Make available documentation and recommendations about migration to next generation networks.

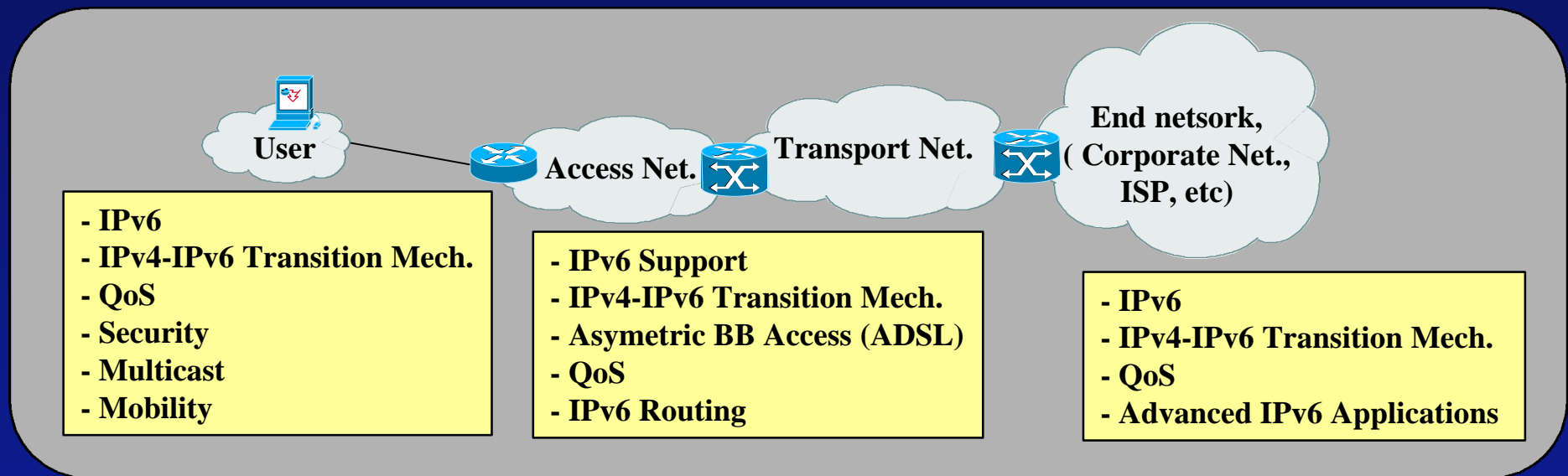
Work Distribution

- Management, Coordination and Dissemination Work Packages:
 - WP 1: Management and Coordination of the whole work.
 - WP 5: Dissemination of the Results.

- Technical Work Packages :
 - WP 2: Network Design and Deployment.
 - WP 3: Collaborative Work Environment.
 - WP 4: System Trials and Evaluation.

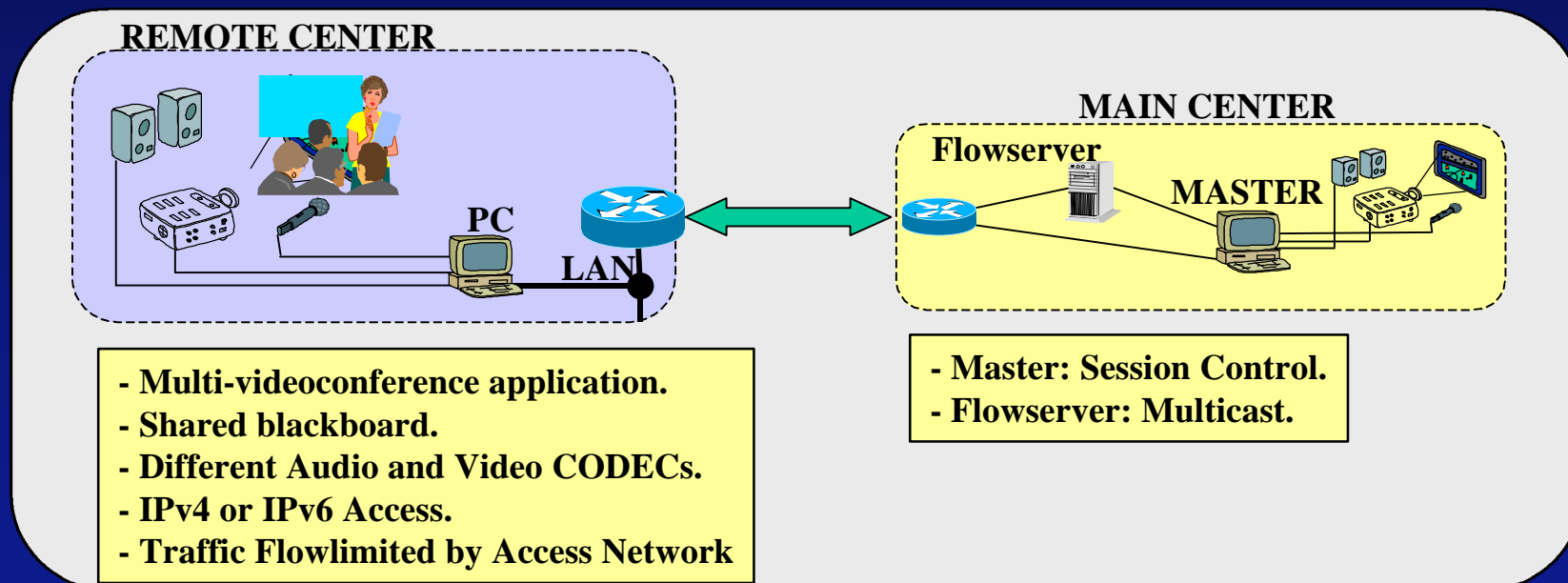
WP 2: Network Platform

- Main Activities:
 - Interoperability IPv4-IPv6 scenarios definition and transition strategies.
 - Evaluate several access and transport technologies as well as their IPv6 interaction.
 - Deployment of a IPv6 access platform and participants interconnection.
 - Evaluate new services in next generation networks: QoS, Multicast, Mobility and Security.



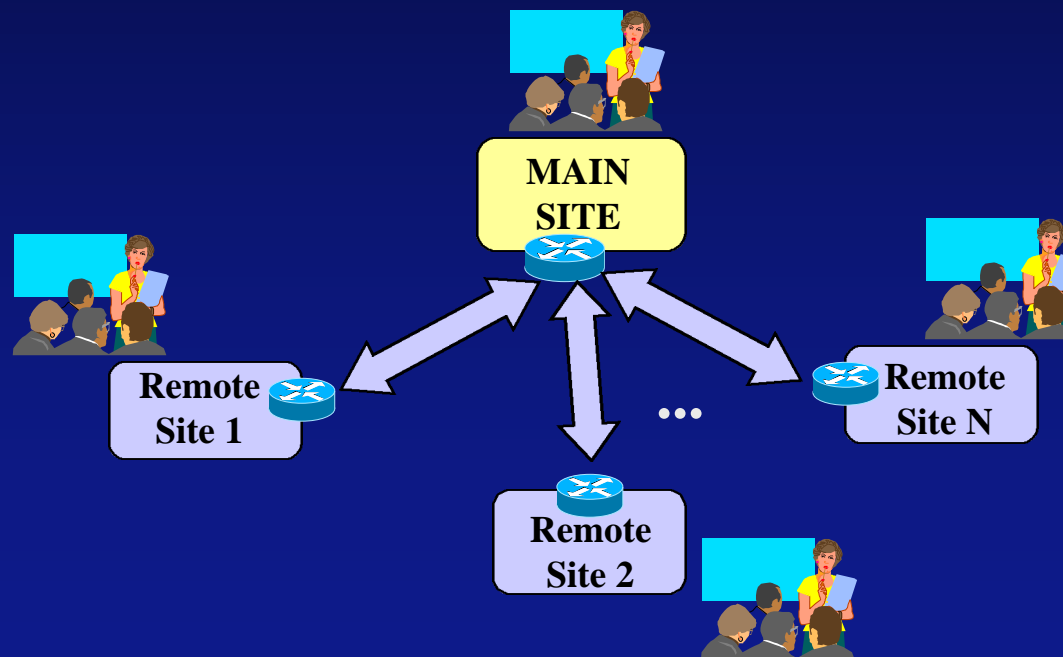
WP 3: Collaborative Environment

- Main Activities:
 - Define the main features of Collaborative Work Advanced Applications.
 - Adapt an application set from IPv4 to IPv6.
 - Develop documentation about IPv6 application migration and the use of the new features.
 - Evaluate the impact of asymmetric access technologies on the network capabilities using collaborative work applications.



WP 4: Experiences and Tests

- Main Activities:
 - Carry out tests: configuration, stability and capabilities of network components and network mechanisms.
 - Fulfill tele-meeting experiences and/or tele-conference to evaluate in an accurate way the defined platforms and perform real traffic measurements.



External Collaborations

- Possible Synergies and Collaboration with:
 - “Next generation networks” development teams.
 - Advanced IPv6 Applications development groups.
 - Collaborative Work Applications development groups.

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