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Responsible:	Organization:	Contributing WP:
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Abstract:

This document is a summary of the project more relevant information, including the objectives, technical approach, key issues, and expected impact.

Includes also the list of participants.

Keywords:

Objectives, Technical Approach, Key Issues, Expected Impact

Revision History

The following table describes the main changes done in the document since its creation.

Revision	Date	Description	Author (Organization)
v1.0	01/01/2002	Document creation	Jordi Palet (Consulintel)
v2.0	21/06/2002	Document updated to match Project Deliverable Template	Jordi Palet (Consulintel)
v2.1	22/09/2002	Minor updates	Jordi Palet (Consulintel)

Executive Summary

This document is a summary of the Euro6IX project more relevant information, including the objectives, technical approach, key issues, and expected impact.

Includes also the list of participants.

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1. RELEVANT DATA

Project acronym:	Euro6IX
Project name:	European IPv6 Internet Exchanges Backbone
Contract no.:	IST-2001-32161
Project duration:	36 months
IST Action Lines:	VII.1.2, II.1.3, II.4.2, IV.2.2
Clusters:	IPv6, Wireless IP, Mobile Services and App.
Total Cost:	15.527.711 €
Total Cost:	7.697.308 €

Figure 1-1: Relevant Project Data

2. MAIN OBJECTIVES

The **first objective** of the Euro6IX project is to research an appropriate architecture to design and deploy the first Pan-European non-commercial IPv6 Internet Exchange (IX) Network. It will connect several regional neutral IPv6 Internet Exchange points across Europe, and achieve the same level of robustness and service quality as currently offered by IPv4 Internet Exchange Networks.

The **second objective** is to use the deployed IPv6 IX infrastructure to research, test and validate IPv6-based applications and services.

As a **third objective**, the network built within the Euro6IX project will be open to specific user groups (existing and to be created), who will be connecting to the Euro6IX network by means of a variety of access technologies – mobile, xDSL, cable – and internetworking with legacy IPv4 networks and services, to test the performance of future IPv6 networks, and non-commercial native IPv6 advanced services and applications.

The **fourth objective** of the project will be dissemination, liaison and coordination with clusters, fora, standards organizations (e.g. the IETF and RIPE) and third parties, with particular consideration for interworking and coordination with peer projects, such as GÉANT, 6WINIT, LONG, MIND, 6NET and any other projects related to our work, that might be available during the Euro6IX project lifetime.

3. TECHNICAL APPROACH

The project will research, design and deploy a native Pan-European IPv6 network, called the Euro6IX test bed. It will include the most advanced services obtainable from present technology and will follow the architecture of the current Internet (based on IPv4). It will consider all the levels needed for the worldwide deployment of the next generation Internet. The infrastructure of Euro6IX will consist of the following different network levels:

- **IX-level:** Regional native IPv6 exchanges.
- **Backbone-level:** Pan-European core network that interconnects the regional exchanges and creates the highest level in the network hierarchy.
- **Node-level:** Service providers, ISPs and other providers accessing the core network to provide IPv6 services and end user access. The users will be connected by means of a variety of access technologies, including legacy IPv4 networks and services whenever no IPv6 native links are available or feasible. This level includes a set of academic, research and non-commercial trial users who will use native IPv6 services and generate IPv6 native traffic.

Euro6IX will offer advanced network services, and a repository of IPv6 enabled applications, which have been ported, adapted or enhanced, and made available for trials both within Euro6IX and to third parties.

The native IPv6 traffic will be the result of both, specific and generic applications tuned for IPv6 (e.g., IPv6 enabled Web browsers).

The validation will be performed in a realistic context where the different actors and roles, which exist in the present Internet, are extrapolated to the IPv6 based next generation Internet. This validation will be made through the involvement of existing and new user groups created by the project with the daily use of the network by project partners and through both, internal and public trials and other events.

4. KEY ISSUES

The success of the Euro6IX project will be measured against the achievement of:

- Provision of efficient interconnectivity and advanced network services, for the complete IPv6 European level Internet.
- Involvement of research entities and non-commercial trial users (user groups) in order to validate the network, advanced services and applications.
- Promotion of the IPv6 interests by ISPs and users, standardization bodies and other related projects.

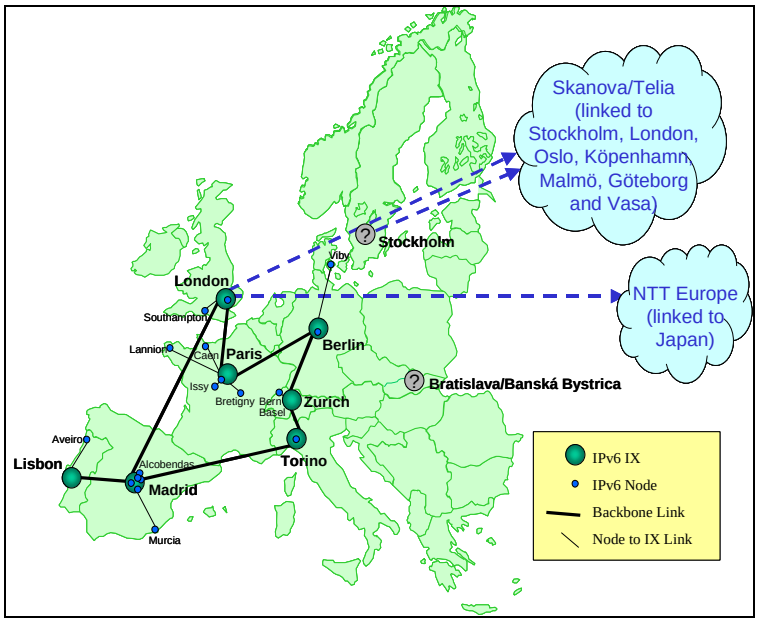

Figure 4-1: Overview of Euro6IX Network

5. EXPECTED IMPACT

The goal of the Euro6IX project is to support the rapid introduction of IPv6 in Europe. Indeed we expect to foster a major adoption from all the European Telcos and ISPs.

6. LIST OF PROJECT PARTICIPANTS

List of Participants		Coordinators Contact Details
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University of Murcia	E	

Figure 6-1: List of Project Participants

7. SUMMARY AND CONCLUSIONS

Euro6IX project is a major European IST Research and Development project, aimed to foster the introduction of IPv6 in Europe.