

# ePerSpace

## ePerSpace

Towards the era of personal services  
at home and everywhere





## Our motivation

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European citizens own a large number of devices with different capabilities ranging from TV sets to smart phones, PCs, and set-top boxes. The ability to exchange data and access external services from these devices is limited, which severely hampers the effectiveness of personalisation. This in turn affects the usability and thus mass-market adoption of advanced audiovisual networked services.

The IST project ePerSpace addresses the major challenge of “making it happen”.

ePerSpace aims at significantly increasing the user acceptance of networked audiovisual systems and applications at home and virtually anywhere by developing value-added personalised services.

In the context of the integration of global telecoms networks and home networks, ePerSpace will solve interoperability problems in personalisation data exchange, services, context adaptation and management of service platforms.

## The ePerSpace vision

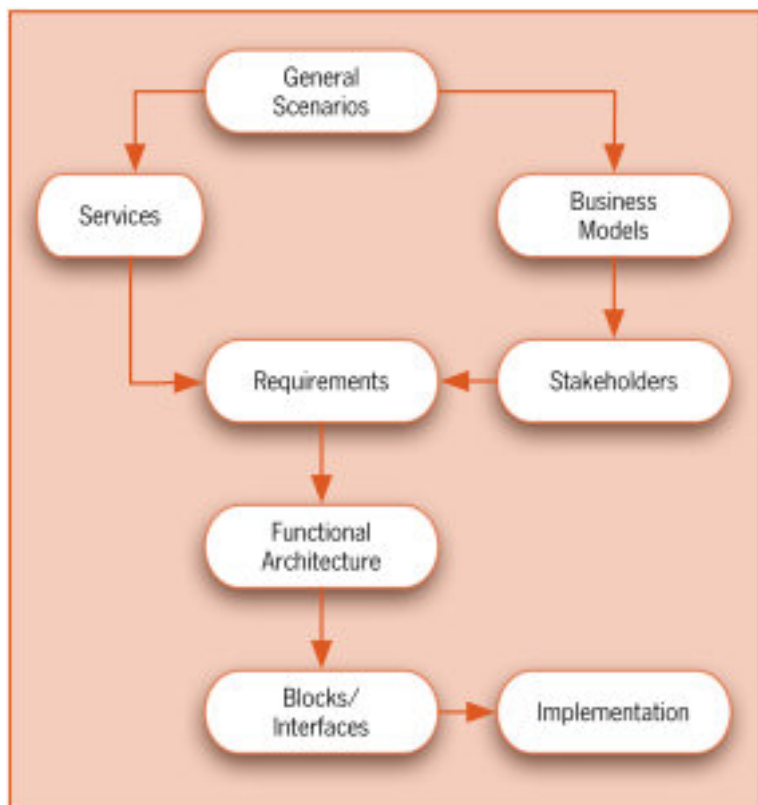
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- Make available an open access network (OAN) so that a user on the move is able to access personalised services anywhere, using a SIM card based seamless authentication.
- Integrate the home platform and home audiovisual equipment with a variety of user devices, to enable intuitive access to multimedia and in particular audiovisual services.
- Use the personalisation profiles as a means of adapting contents to the needs of a specific user (such as a teenager or an elderly person), user requirements and communication devices.
- Provide the infrastructure for a mass market, while addressing the budget limitations of various user groups in society, by simplifying both the infrastructure and the intuitive access to services, and hence improving the user-friendliness of the system.

## The philosophy of the project

ePerSpace is following an end-to-end process:

- Start from use cases and scenarios.
- Design a reference architecture.
- Split the specification and development between several entities with the relevant expertise
- Realise test-beds to show possible implementation
- Check the user acceptance and business model.



## The objectives

Our objectives cover:

### Social and business aspects

- Develop and enhance the business aspects of the ePerSpace services, analysing issues of major importance to the mass-market.

### Technical issues

- Develop an open, trusted and interoperable integration framework to show how various network enabled audiovisual systems and home platform products can seamlessly work together.
- Solve existing interoperability problems in the exchange of personalisation data, service and context adaptation, and management of service platforms.



## The technical approach

ePerSpace objectives will be realised through four major work areas:

1. The Home Platform, providing the means to exchange audiovisual content between user terminals and home equipment.
2. Global Network Integration & Interoperability, offering innovative seamless access by sharing user profiles in a secure manner.
3. Home and Personal Devices building unified personal environments.
4. Rich Media Object Management, supplying the tools for content creators to make optimal use of the infrastructure.

### Home Platform (H):

- Home platform allowing delivery of multimedia services
- Management server for services administration
- Integration of protocols

### Home and Personal Devices (D):

- Devices discovery in the home
- Service discovery/continuity in the home
- Elsewhere access
- Device community

### Global Interoperability (I):

- Seamless login
- Personalisation Broker for user profile distribution
- Integration of mobility
- Integration of broadcast services

### Rich Media Object (O):

- Personalised Multimedia Content Distribution
- Content Adaptation for several devices
- Intelligent Navigation from Content analysis



## Scenarios

A scenario resembles a short story told with simple words, describing the situation of use and the service itself from the user's point of view.

Five scenarios have been described for a typical family. One describes a home situation, while the four others deal with situations outside the home: in a car, at work, at a hospital and at a friend's place.

The ePerSpace scenarios adopt a pedagogical concept: the bubble, which comprises a person's context and personal preferences. The "home bubble" carries the most important and least variable information, the basic configuration, supplemented by preferences

linked to the fact that the user is at home. The "elsewhere bubbles" are more variable and adapt to all the situations when the individual is not at home.

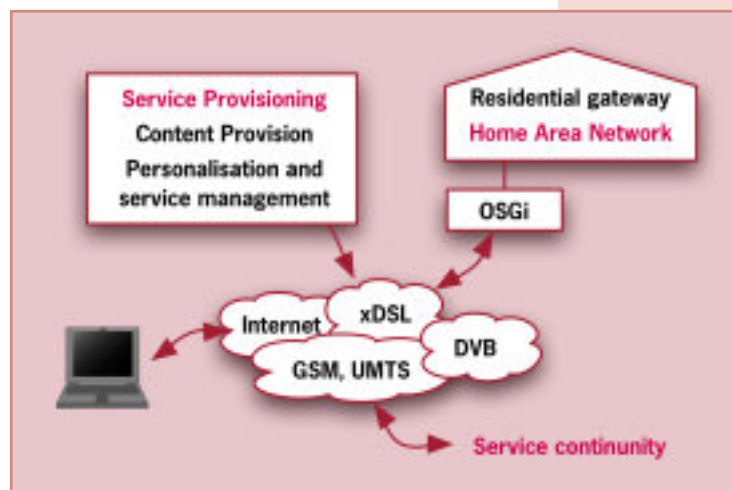


## The trials

The ePerSpace trials will consist of the following:

- Integration of multiple services in the Home Platform (A/V, automation, security). Provision of a management platform to administer the services.
- Seamless login at home and elsewhere, based on context, allowing secure access to the information at Home. Provision of Profile management tools.
- Middleware for the devices in the Home Platform to establish device communities, continuity of services, service discovery and personalisation.
- Content Management Platform, content adaptation depending on user preferences and automatic summarisation.

- Delivery of broadcasting services (DVB) to the home and to the mobile user (UMTS)



## Contact

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## About ePerSpace

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ePerSpace is an Integrated Project under the EU 6th Framework Programme dedicated to the development of integrated, personalised communication services in the home area. The acronym stands for 'Towards the era of personal services at

home and everywhere'. 19 partners from industry and academia are involved in the project. ePerSpace started in February 2004 and has a duration of two years.

[www.ist-eperspace.org](http://www.ist-eperspace.org)

## Consortium Partners

France Télécom  
Telenor ASA  
Motorola Toulouse SAS  
British Telecommunications Plc  
Telefonica Investigacion y Desarrollo  
Siemens Mobile Communications  
University of Westminster  
NRK – Norsk Rikskringkasting  
University of Bristol  
Eurescom  
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RAI – Radiotelevisione Italiana  
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InAccess Networks  
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