

# Project Information



## Full Experience Extended Living @ Home



Feel@Home aims at the mass market adoption of Digital Home advanced audiovisual networked services enabled by a breakthrough in the "Extended Home" concept.

Feel@Home will develop an open architecture and the required hardware and software components, and integrate and test the resulting system in different European countries.

### Main focus

Feel@Home will ensure the management of the digital content, the automatic Home Area Network management, and the handling of multi-user service offerings. Moreover, it will provide a new interaction paradigm enabling seamless, personalised and context-aware service delivery, to various types of user devices and to any user location, at home or elsewhere.

To link the Digital Homes through the Internet and access the different services and information from the outside in a de-

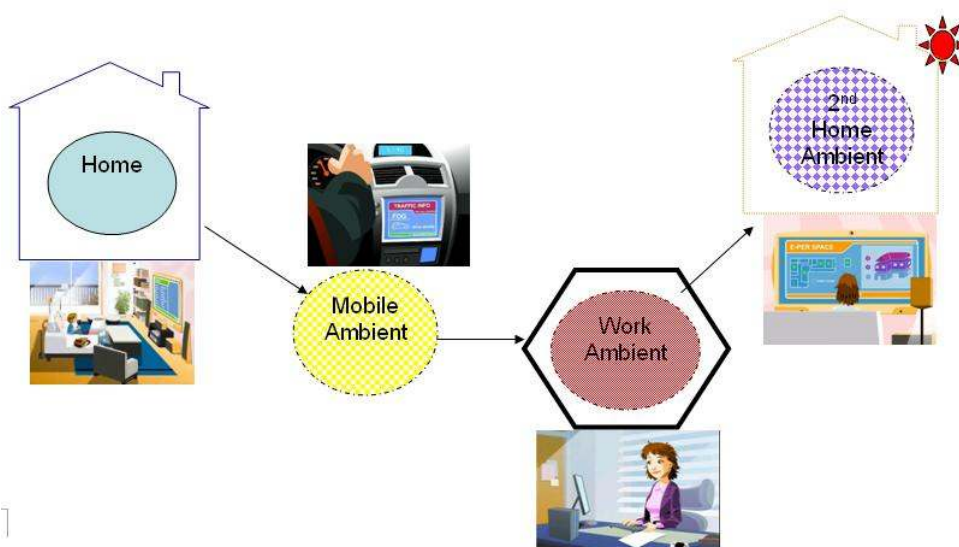
pendable manner, the project will develop a framework for end-to-end Quality of Service (QoS) and security. Feel@Home will ensure reliable and seamless user authentication and privacy and trust for both consumers and service providers of Digital Home services.

The project will study the market aspects and new business models to allow a rapid take-up of the project's innovation in commercial solutions.

### Approach

Feel@Home will implement and offer advanced services to the Extended Digital Home users that are willing to share their content, to network with other users in the web and to supersede the actual digital experience with high quality content services:

- ◆ User-centric media and experience sharing: sharing among people, and not among devices.



The extended home scenario

## Feel@Home

Project ID: CP5-008

Start Date: 1 June 2008

Closure date: 30 November 2010

### Partners:

APIF MOVILITY SA, Spain

CNRS Centre National de la Recherche Scientifique, France

Energy Sistem Soyntec, Spain

GET-INT Groupe des Ecoles et Télécommunications (Evry), France

Ikerlan, Spain

France Télécom R&D, France

InAccess Networks, Greece

Nomovok Ltd., Finland

Telefónica I+D, Spain

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### Project Website

[www.celtic-initiative.org/projects/feel@home](http://www.celtic-initiative.org/projects/feel@home)

- ◆ Advanced content services, combining content from multiple users and sources, which is adapting the content to the users needs, and not just to the requirements of the user device.

- ◆ High definition video conferencing for home.

- ◆ Disruptive mass media distribution mechanisms to the home (Datacast / P2P).

- ◆ The total home life control concept (Super controller) which help users to manage their home devices

The framework that will be developed in Feel@Home will hide the technology for the daily use of the services, integrating the shifting user environment in the Extended Digital Home concept. In this Extended Digital Home concept, the user devices and mobile services are integrated in a single environment automatically adjusted to the user context, depending on several variables:

- ◆ Profile data including the different roles, contexts, environment, locations, available time, mood, interest -and knowledge level, incorporating Ambient Intelligence technologies.

- ◆ Handling of the multi-user and multi-device characteristic of the Home environment.

- ◆ Easy access to the services using the modality that best suits the individual and the situation (voice, graphical, textual, etc.)

Multi-sensory interfaces to enhance the experience of the user and thus breaks the barriers of technology.

## Main results

The main results expected from the project are:

Friendly User Touch: Feel@Home will provide user reaction analysis concerning the three following fields:

- ◆ Quality of Service

- ◆ Security

- ◆ Ambient intelligence

Home end-user perceives these three characteristics in content sharing, what are their needs, what can be improved?

In order to be able to achieve the Quality of Service required by this analysis, Feel@Home will enhance the QoS inside the Community network, by measuring and analyzing the following issues:

- ◆ Characterization of the traffic, prioritization of the different flows and identification of the Classes of Services.

- ◆ Connection Admission Control algorithms to limit the QoS traffic inside the Home Networks and ensure that QoS is guaranteed in the Access and Core Network.

- ◆ Configuration of the available QoS mechanisms in the network elements

The integration of these QoS

mechanisms with the QoS mechanisms available in the access and core network will be studied.

## Impact

The Digital Home has long been promised and is now only just beginning to see the light of day through several standardisation efforts (e.g HGI, OSGI, DLNA, etc.) and research oriented work performed notably in Europe on the IST Framework programmes 5 and 6.

Nevertheless, there is an incredible amount of solutions in the market today which are not compatible with each other and cannot be integrated in a smooth fashion. The user has to be bound somehow to a given provider in order to have an integrated solution in the market today.

Feel@Home intends to develop the following actions to push forward Broadband penetration in Europe:

1. Increase and improve the offer of services for Basic Households (not only internet and PC based services); the true value has to reside on the fact of being connected to others. Better user interaction and service personalisation are to be enriched and provided.

2. Increase the Broadband Value by ensuring security and privacy, by introducing group services (Home-grid services), by implementing and facilitating technologies that will foster a real networking convergence and by increasing and guaranteeing the Quality of the services and communications.

3. To implement and offer advanced services to the Advanced Digital Households that are willing to share their content, to play with other users in the web, to supersede the actual digital experience with high quality contents.

## About Celtic

Celtic is a European research and development programme, designed to strengthen Europe's competitiveness in telecommunications through short and medium term collaborative R&D projects. Celtic is currently the only European R&D programme fully dedicated to end-to-end telecommunication solutions.

**Timeframe:** 8 years, from 2004 to 2011

**Clusterbudget:** in the range of 1 billion euro, shared between governments and private participants

**Participants:** small, medium and large companies from telecommunications industry, universities, research institutes, and local authorities from all 35 Eureka countries.

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