



PROJECT RESULTS

# Interconnect your home



photo: Philips

***In an interconnected home, people will have the freedom to access their music, pictures and movies on any device they like, in every room. It will become possible to make a connection between home networks, so people can even access their content away from home. The HomeNet2Run project has demonstrated innovations proving that a smoothly operating home network has come closer to reality.***

### The interconnected home

People already have networks in their homes: the power networks, the phone network and a satellite or cable network connection for their television. These networks use different wired and wireless network technologies with different transmission speeds. None of the existing technologies can provide a total solution. However, by connecting the separate clusters, an integrated home network can be built. To make this possible two challenges have to be addressed.

The first challenge is to connect the existing network clusters physically. In HomeNet2Run, well-known

brands have developed bridges. In September 2003 in Berlin at the IFA, the largest consumer electronics fair in Europe, the project team demonstrated bridging between the worlds most popular wired networks (Ethernet and IEEE 1394) and wireless networks (IEEE 802.11 and HiperLAN2). Seamless room-to-room connectivity can now become a standard feature where consumers can connect all their devices to the home network.

The second challenge is to make consumer electronics devices (television, radio, CD player) share content with the PC. The HomeNet2Run consortium has also demonstrated bridges that connect a standard for home stereo equipment (Home Audio/Video interoperability, HAVi) with a standard for the PC (Universal Plug & Play, UPnP). Also, solutions to connect internet protocol enabled home consumer devices to the internet have been developed. This enables, for example, people to watch internet video streams on their TV. HomeNet2Run results enable seamless access to services from broadcast, internet and telecommunications world.



In summary, the work in HomeNet2Run resulted in solutions for the consumer electronics and information technologies industries enabling room-to-room and home-to-home connectivity of consumer electronics and PC devices. This will give consumers

## HOMENET2RUN (ITEA 00002)

### Partners

- ATLINKS
- Canon
- CEFRIEL
- CiaoLab Technologies
- Deutsche Telecom
- dZine
- Fraunhofer IIS
- Grundig
- IMEC
- Jabil
- Philips
- PIMC
- Sony
- STMicroelectronics
- Thomson
- TU/e

### Countries involved

- Belgium
- France
- Germany
- Italy
- The Netherlands

### Start of the project

January 2001

### End of the project

September 2003



## PROJECT RESULTS

### Major project outcomes

#### Dissemination

- 16 papers (including conference presentations)
- five presentations/demos at events
- two articles
- one course at a university

#### Exploitation

- 20 new commercial products/services/systems
- two Open Source products
- 26 new products/services/systems for internal use

#### Standardisation

- 15 contributions to 7 standardisation bodies (BRAN, DBV, ETSI, IEEE, OSGi, TVAnyforum, UPnP)

the freedom to enjoy their content in their home any way they want. It also gives them seamless access to the services of the broadcast, internet and telecommunications worlds. By enabling access of content from someone else's home, it's possible for people to enjoy content together.

### Benefits of Collaboration

In the process of developing the interconnected home architecture, various standards and solutions have been tested and, where necessary, improved. European standards, such as HipeLAN2, Digital Video Broadcasting (DVB) and Multimedia Home Platform (MHP), made significant progress due to this project. Other standards

such as IEEE1394, HAVi and UPnP, have been extended. At the IFA, working prototypes were demonstrated, proving that the participating companies, and other parties in the industry can now apply these standards in consumer products. The demonstration also showed that a home with a network offers many opportunities for a wide range of new combinations of previously distinct services of broadcast, internet and telecommunications. This opens a significant opportunity for the European Industry to advance in information technology and consumer electronics.

Collaborating in the context of HomeNet2Run has stimulated strategic partnering between manufacturers of electronic equipment, network operators and service providers, in order for this opportunity to be exploited.

The HomeNet2Run partners, all representatives of the European consumer electronics industry, telecom equipment manufacturers and information technology companies, are convinced that providing architectures for the interconnected home jointly is a major step forward. Being equipped with competitive technology will put European Industry in a good position in this digital age. The evolution towards interconnected homes will strengthen the European consumer electronics industry as well as related industries that produce and distribute digital services and content.

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ITEA-labelled projects build crucial middleware and prepare standards, laying the foundations for the next generation of products, systems, appliances and services. Our projects are industry-driven initiatives, involving complementary R&D from at least two companies in two countries. Our programme is open to partners from large industrial companies, small and medium-sized enterprises (SMEs) as well as public research institutes and universities.



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