

## **Beyond the Graphical User Interface** (BEYOND, ITEA 99002)

### *Goal*

To explore natural forms of interaction between people and the products and services they use. BEYOND supports European industry with modern concepts and tools with which to create ergonomic user interfaces. These will enable natural access to the increasingly complex computer applications.

### *Overview*

A lot of work has to be done to overcome the apparent gap between complex computer technology and the need for easy and ergonomic use. Human machine interaction must be made more natural in order to build better products and enable a larger number of people to use them with ease.

### *Details*

BEYOND will improve the capability of European IT industry in user centred design methods, tools, and techniques. The main focus of this project lies on multi-modality – supporting a variety of ways of inputting and outputting information – and adaptivity of user interfaces – the ability to adapt an interface to an individual user.

BEYOND will investigate different forms of multi-modal user-interfaces that support a richer set of sensors and emitters for interaction. Another goal is to enable a system to know about its context and current user, in order to enable efficient and effective user interaction (i.e. the system adapts to the user and not vice-versa).

In order to enable European industry to use the new concepts, simulation and prototyping methods are being developed.

In summary, topics and tasks within the BEYOND project will be:

- UI simulation environments for product design
- UI development platforms and usability engineering guidelines
- Evaluation of next-generation UI hardware and new UI concepts
- Components that support the development of adaptable and multi-modal UIs

The results will be disseminated in public workshops (see contact below) and via the BEYOND public web-site

### **Status**

Project start: 09/1999

Project end: 09/2001

## **Partners**

- BARCO (B)
- Philips (NL, B, A)
- CCC/Cybelius (FIN)
- Eyetronics (B)
- APC interactive (formerly LB Data) (A)
- Delft University of Technology (NL)
- Catholic University of Leuven (KUL) (B)
- Limburg University Centre (LUC) (B)
- VTT Electronics (FIN)

## **Contact**

Project Manager: Drs. Désirée de Lang

Email: [Desiree.de.Lang@philips.com](mailto:Desiree.de.Lang@philips.com)

Web site <http://www.extra.research.philips.com/euprojects/beyond>

## **Results**

- Key factors in UI and context of use (internal document)
- Requirements and Usability Methodology (internal document)
- A Common reference model for adaptive user interfaces (internal document)
- Improvement of mono-modal enabling technologies (internal document)
- Guidelines for 3D representations (internal document)
- CHI 2000 – Human factors in computing systems (conference)
- Many publications in Journals & papers at Conferences from documents above