



DELIVERABLE  
IST-2000-28298  
ICE-CREAM

Deliverable D1  
ICE-CREAM-phr-0201-002/Janse  
February 2002

## Project Summary



<b>Project Number</b>	:	IST-2000-28298
<b>Project Title</b>	:	ICE-CREAM
<b>Deliverable Type</b>	:	public

<b>Deliverable Number</b>	:	D1
<b>Internal Project Number</b>	:	ICE-CREAM- <i>phr-0202-d1-2/Janse</i>
<b>Contractual Delivery Date</b>	:	February 2002
<b>Actual Date of Delivery</b>	:	February 2002
<b>Title of Deliverable</b>	:	Project Summary
<b>Contributing workpackage</b>	:	WP0
<b>Nature of Deliverable</b>	:	Report
<b>Author(s)</b>	:	Maddy D. Janse

**Abstract:** This public report describes the ICE-CREAM project

**Keywords:** MPEG-4 , broadcast, end-user centred.

## **IST-2000-28298 ICE-CREAM**

# **Interactive Consumption of Entertainment in Consumer Responsive, Engaging & Active Media**

**Technical:** MPEG4, broadcast, end-user centred

### **Objectives:**

The objectives of the ICE-CREAM project are: To investigate the potential of new technologies, e.g., MPEG-4 and Internet, for designing new concepts for interactive and enhanced broadcast, to create programmes and environments in which users can interact with the content of the programmes and compose personal programmes to create, with simple tools, personal flavor and emotion, i.e. to create their personal immersive experience.

To develop and implement these concepts in applications in an end-to-end delivery platform, to evaluate with end-users in the home environment, and to investigate the impact of personalisation and the role of stakeholders on the evolution of business models

### **Description of work:**

The ICE-CREAM project will develop an application for an end-to-end system prototype that enables end-users to intervene with the programme content. This application prototype will be empirically tested in a pilot with real end-users in the home environment. The project is governed by user-centred development methods. This work approach is organised in four phases, which encompass a stepwise development process with early feedback from users, i.e. at a laboratory, pilot and implementation scale, followed by an overall assessment.

The project takes a process view starting from the end-user' end and going upstream. First of all, we have the application actually seen in the home that includes video, audio, graphics and interaction rules. Just under this application we have the local MPEG-4 (and possible MPEG-7) codec/player that has implemented a set of features of the standard(s). Other components are the home station or set-top box itself with its software and hardware resources, the delivery mechanism that doesn't affect the content itself (for example over MPEG-2 transport stream, over IP, etc.), and the system for encoding of audio, video and metadata in accordance with the features implemented in the codec/player. In addition we have the authoring and production tools that will enable the creation of the end-user application in accordance with the expected results for the end-user. Second, the ICE-CREAM project is end-user and business-model driven. Tests with users of the application and interaction are an inherent component in the process. These tests are conducted at intervals and with an increase in scale and complexity, i.e. laboratory test, pilot application test and final implementation of the application. The results of these tests provide feedback and input to the development of application, user interaction, set-top box, the delivery system and the business models.

### **Expected results:**

Interactive TV application running on a demonstrator platform, with end-to-end MPEG-4 authoring, streaming and playing system, implementing advanced concepts for interaction and personalisation, tested with end-users in a consumer environment for usability, attractiveness and feasibility, and assessed for appropriate business models.

**Contact Point:**

Dr. Ir. Maddy D. Janse  
Philips Electronics Nederland BV  
Prof. Holstlaan 4 (WY2.58)  
5656 AA Eindhoven  
The Netherlands

tel: +31-40-2742863  
fax: +31-40-2744918  
e-mail: maddy.janse@philips.com

Ir. G.J. (Gert-Jan) Meijer  
Philips Research  
Prof. Holstlaan 4 (WB43)  
NL-5656 AA Eindhoven  
The Netherlands

tel: +31-40-2743542  
fax: +31-40-2744797  
e-mail: gert-jan.meijer@Philips.com

<u>Participants</u>	<u>Country</u>	<u>Role</u>
Philips Electronics Nederland BV	Netherlands	C
De Pinxi	Belgium	A
Nederlands Omroepproductie Bedrijf	Netherlands	P
The Imperial College of Science, Technology and Medicine	United Kingdom	P
Philips France S.A.S.	France	P
Tomorrow Internet AG	Germany	P
FhG - Forschungszentrum Informationstechnik GmbH	Germany	P
Blaxxun Interactive A.G.	Germany	P
Symah Vision	France	P
Euskaltel S.A.	Spain	P

**Start date**

15 January 2002

**Duration**

24 months

more information on the ICE-CREAM project can be found on its public web site

**<http://www.extra.research.philips.com/euprojects/icecream>**