

Report E3 IST Concertation Meeting

Interfaces and Enhanced Services, Signal Processing and Mixed Reality

March 13-14, 2003

Brussels

1. Plenary Session

General announcements:

Important documents: 'CENELEC study on standardization for DITV' and 'Interactive Broadcasting: Explorations of the IST Projects on Networked Audio Visual Systems and Applications, 2000-2005'. Both papers are available on the Cordis website. The latter paper contains an overview of all our projects and how they are related to each other and to the emerging field. This was already circulated at the previous concertation meetings.

Proposed dates for the next Concertation Meetings:

- June 25-26, 2003
- October 14-15, 2003 (maybe this mtg will be moved backward and held in conjunction with the IST2003 in Milano).

Joint exhibitions

- IFA 2003, Berlin, Aug 29 – Sept. 3. The Commission has reserved floor space for IST projects in the TWF (Technische Wissenschaftliche F?). The floor space is for free and is 8 * 6 meters. Some walls are included. Several projects have expressed their interest to participate. The Share-it project will be in the FhG stand. The other projects for the Commission stand are: ICE-CREAM, SPATION, Webkit, PISTE, TPMS, Origami. Not all of these projects will have real demo's (i.e., more academic, posters). In any case, it looks as if there is a lot of space available for our ICE-CREAM project. A separate discussion on this was held in a parallel session on the next day. However, for ease-of-reading, I am including the info here. The Webkit project will coordinate this event. Nothing has been decided re. design of stand, extra's, finance. (I am wondering whether it is wise to go for a 'basic' type of stand to the IFA).
- IBC2003, Amsterdam, Sept. 12 – 16. The Commission would like to have a joint stand, like there was at IBC2001. At the meeting an inventory was made of projects that might be interested in this. Parallel and before the meeting, the Commission had asked me to investigate whether Philips (and hence the ICE-CREAM project) could take the lead, with the same formula as the previous time. Currently this is being organized and the info will be forwarded in a separate mail. The IBC was discussed in more detail in a parallel session. The status is:
 - a) I go ahead with the organization, reserve a space, set-up a team and prepare a proposal for additional funding from the Commission.
 - b) Costs will be divided over participating projects.
 - c) Participating projects divide costs over partners.
 - d) The coordinating partner handles the finances for the project and provides a

prepayment to Philips. This is all going to be worked out in more detail in the coming weeks.

e) The interested projects are: ICE-CREAM, SHARE-it, SPATION, MOSES, CISMUNDIS, MUFFINS, FUTURE HOME.

- IST2003, Oct. 2-4, Milano. This is in collaboration with the SMAU. Most projects thought it was too much to have demo's at IST after IFA and IBC. The proposal is to have a special workshop at the IST (like we had in Copenhagen) and combine this with the Concertation Meeting that was planned for the week after.

AUDIT

The audit for all projects will be in week 49 or 50 in 2003. After some discussion it was proposed and agreed to go for demonstrations at the audit in an integrated fashion as was done some years ago. I.e., the Commission will reserve a complete floor in the building with enough space for all projects to demo.

2. Special FP6 session: Getting real in FP6

A presentation was given by Augusto de Albuquerque, Head of Unit INFSO-D2 on: "Networked Audiovisual Systems and Home Platforms" strategic objective: overview and key recommendations.

The major points of this presentation re. proposal preparation are:

Midterm to longterm research, a system engineering approach

Policy drivers are: innovation in research; decreasing uncertainty; supporting european standards for interoperability; Internet services – must be accessible through TV and mobile; 3G and DTV are key components.

Elements for convergence: rich media, services, market, innovative terminals.

DRM for Broadband – trusted free choice for the user

Rich media: MPEG-4 – MPEG-21

Storage to facilitate the uptake of broadband – optimisation re rates and load

Advise:

Clear technical description

Clear deliverables

Plan for 18 + 6 months (detail 18 months in TA and after the evaluation add the remaining 6 months). State for 24 months as this will save a lot of time later.

Budget is for 2 years. No politician will finance for more than 2 years.

Most projects will be funded for 2 years

A call for continuation is expected within 1.5 years

Evaluation criteria have equal weight.

Minimum overall score is 24 for IP

The scores are 1 – 5. There are 6 criteria. Hence average score should be 4. This is tough.

3. Parallel Sessions

This is the agenda and the description. Pierre Plevin was in workshop 3. I was in workshop 2. Our slides will be on the website.

1/ SAVANT Workshop - Part I : Mobile codes for AV Services (Takebumi Tagaki)

2/ Workshop on remote control for Audio-Visual systems

Several projects in our area are working on a form of remote control of interactive audio-visual applications. Overview :

- SPATION demonstrates the use of a PDA for content retrieval.
- GMF4iTV propose the use of a PDA for the interactivity with moving targets in the display.
- WEBKIT uses a web tablet for interactive applications for children.
- ICE-CREAM develops interactive applications with special devices
- ISIS develops scaling content that can also be displayed on PDAs
- MEGA on the other hand develops gesture interaction through cameras

The quality of the solution will determine to a large extent the viability of the project in the eyes of the end-user. The workshop will address issues like: advantages and disadvantages of the particular technologies, technologies for wireless transmission, Plug and Play aspects, combination of functions, collecting user requirement for prototypes, user requirements for final products, evaluation of applications using the prototypes, technologies for wireless transmission, opportunities of hardware-less control (gestures). Requirements for end2end Digital Rights Management (MUFFINS?).

3/Signal Processing & Mixed Reality

Workshop on image processing and vision for mixed reality (Oliver Grau - ORIGAMI/BBC)
The goal of this workshop is to review techniques in the field of image processing and computer vision and their application for mixed reality. A section of presentations that covers scientific aspects will be followed by a panel discussion that covers practical implementation and user issues and future directions.

Presentations (2h):

- Luc Robert, Realvis, Camera calibration and 3D reconstruction
- Reinhard Koch, Plenoptic Modelling
- Tubaro/Sarti, PdM, (ORIGAMI): Generation of close range object models
- J. Wingbermuehle, Uni Hannover, (PISTE), Model-based motion estimation of humans
- L.van Gool, KUL/ETHZ, Analysis of facial expression for face animation

2/ Panel discussion (1h):

- System aspects: reusability of software, discussion on system architecture, standard needs, ..
- Application aspects e.g. required accuracy of algorithm a,b,c for application X,Y,Z
- Future directions

Panelist:

- Didier, Stricker, Fraunhofer IGD, (ARVIKA, Archeoguide), Industrial AR+VR applications
- Graham A. Thomas, BBC R&D, Virtual production in the broadcast environment
- Paul Walland, Snell&Wilcox, (MetaVision) The 'reality' of mixed reality
- N.N., Mixed reality in communications

The second day continued with the parallel session. Since Session 2 was finished the day before, except for one presentation (Muffins project), the meeting was continued by an in--depth discussion of the possibilities for joint demonstrations/exhibitions at the IFA, IBC, IST. For the results see above.