

## **Summary of CHORUS workshop and NAVS concertation meeting, Versailles, March 13-14, 2007**

CHORUS is a European Coordination Action which aims at creating the conditions of mutual information and cross fertilisation between the European projects dealing with Multimedia Content Search Engines. National and international initiatives are also included in Chorus action, see <http://www.ist-chorus.org/about-chorus.php>

NAVS, Networked AudioVisual Systems. The purpose of this group is to assure coherence of the work of the set of IST R&D projects addressing the NAVS technology area. It is the vehicle for information exchange between project participants insofar the Concertation and Clustering activities is concerned. See <http://www.ist-chorus.org/navs-oct.php> and CIRCA interest group on <http://forum.europa.eu.int/Public/irc/infso/Home/main?index>

Anders Schürmann and Sigmund Akselsen represented the SAPIR project at the two events. The events gathered around 120 participants at the INRIA premises at Rocquencourt, Versailles, France. The participants were EU officials, representatives of ongoing EU IST projects and individuals with a special interest in the topic Networked Electronic Media. Some were trying to set up new project consortia for FP7, Call 1, where the deadline for submission is May 8<sup>th</sup> 2007. We were among others approached by a representative of the AGH University of Science and Technology in Krakow, Poland with a call for partners to the planned P2P-NECMI (Peer-to-Peer Network Extension with Content Based Management Indexing) project, see attachment.

### March 13: CHORUS workshop

The theme of the CHORUS Workshop was "Use Cases and New Services for Multimedia Content Search". The workshop was organized in four main sessions:

- ◆ Introduction to changes in media use and to R&D challenges with regard to audio-visual search engines (by EU officials and external expert)
- ◆ Views from content creators and content owners
- ◆ Views from content users and content service providers
- ◆ Plenum discussion on the gap between Use-cases and IT Services for Multimedia Content Search

In the breaks there were poster sessions in an adjacent room. The poster sessions included around 15 newly started projects which presented their objectives through A0 printed posters and discussions with workshop participants. We had some good discussions and received interesting comments on scalability, P2P architectures, capabilities of user peers and super peers, willingness of user peers to share scarce resources, e.g. battery and CPU capacity on mobile handsets, Google's strategy for offering increased storage space to users of Picasa, feature extraction, and so on. The images below show the SAPIR poster with some interested visitors.



The SAPIR poster seemed to work well and attracted interest by several participants. One reason might be the choice of colour theme of the SAPIR poster, i.e. orange, that also was the colour of the theme used in the EU officials' presentation slides of the Networked Electronic Media area. What did not seem to work well was the relatively long URL to SAPIR's home page in the direction to more information, i.e. <http://sysrun.haifa.il.ibm.com/sapir/index.html>. The project might want to consider registering a domain with a shorter text, e.g. <http://sapir.eu> or <http://sapir.org>

In the introduction to the workshop, SAPIR was positioned by Luis Rodriguez-Rosello (Head of D2-Unit EC, Networked Media Systems) in the new constellation of projects within the domain of "Networked Electronic Media" with a special relevance to P2P challenges.

Alex Hauptmann, Carnegie Mellon University, introduced the audience to different reasons for why AV search receives special interest at the moment. These are:

- ♦ Economic reasons (advertising, surveillance (industrial, public spaces), DVR, TV (HD), cell phones)
- ♦ Social reasons (multimedia phones with terabyte of storage, You-Tube like services)
- ♦ Political and cultural reasons (cultural activities, access to news from other countries (better informed citizens implies more stable democracies according to a recent Stanford U project), intelligence/military analysis (recognition of locations in foreign news reports), healthcare)

This classification is of relevance to SAPIR WP1 as we might want to include scenarios dealing with the different categories.

It was pointed out that image search is currently not working very well and computers will probably not become better than humans on this in the near term. The best systems produce a correct result in approximately 20 % of the cases. Better result can be archived if applied to limited professional domains. In order to achieve better results one could use contextual information and relevance feedback from the users. There is a need for good user interfaces that provide the user with clues to why the image search request produced the returned result.

David Wood, European Broadcasting Union, argued that the peoples' mode for finding interesting content is still *flow* and not *search*: you switch on your TV and watch a channel as long as it meets your expectations – after that you zip to another channel. We think that this is changing with the appearance of new electronic program guides that provide a tool for searching, and with the new generation of users that have been used to more searching for entertaining stuff, in e.g. YouTube, and sharing of pointers to interesting content in social networks. Wood also made a distinction between objective (e.g. producer, genre, ...) and

subjective (good, bad, enjoyable, ...) metadata that have a relevance to SAPIR with regard to the degree of automatic and manual indexing of content. The production of subjective metadata could be supported by user peers. Metadata could be represented by different standards like P\_meta, NewsML or TV Anywhere (TV-A) phase 1.

The workshop did not include a lot of use cases that were directly informed by end users or studies of user search needs and behaviours. This point was commented on in the panel discussion. The response from the workshop chair, Nozha Boujemaa (INRIA), was that some of the views from the broadcasters were informed by large scale polls among their viewers. This was also claimed to be the case for Yahoo. Further she argued that it is hard to ask users about technologies they have not seen and therefore have problems imagine, and that this problem is more outspoken for private (public) than for professional users. Information can also be found by analysis of forums on the net where content is discussed.

However, the need to put a stronger focus on the users' perspective was commented on by several of the participants. We share this view, as detailed use cases and scenarios in the sense and format that SAPIR WP1 has worked on were hard to find. To illustrate the kind of work that we lack and are advertising for, we have attached a paper on search behavior (A large scale study of wireless search behavior: Google mobile search) that was presented at CHI'2006.

Details of the agenda and the presentations will be available at <http://www.ist-chorus.org/rocquencourt--mar-13--14-07.php>

#### March 14, D2 Spring 2007 Concertation Meeting

Luis Rodriguez-Rosello (Head of D2-Unit EC, Networked Media Systems) opened the meeting. First some news from the EC was presented. Of relevance to SAPIR are among other:

- ◆ Information on project reporting (see slides 7-10 in EC\_News\_Arrayo.ppt in the NAVS group at CIRCA, <http://forum.europa.eu.int/Public/irc/infso/Home/main?index>)
- ◆ Next meeting: 9th Concertation Meeting planned 13-14th November 2007 in Brussels
- ◆ FP7, Call 1: deadline for submission is May 8<sup>th</sup> 2007 at 17:00

Furthermore, a call for cooperation in order to build relations within the project cluster was made. Available tools for cooperation are:

- ◆ Interchange of deliverables
- ◆ Peer discussions (cluster meetings)
- ◆ Joint workshops, conference sessions, papers, books
- ◆ Joint experiments, trials...
- ◆ Joint contribution to standards
- ◆ Two plenary Concertation meetings per year
- ◆ Protected site (CIRCA) to share documents

This is definitely something that we need to consider since there are projects addressing some of the same issues as SAPIR. Some of these are:

- ◆ [PHAROS: Platform for searchH of Audio-visual Resources across Online Spaces](#)
- ◆ [VICTORY: Audio-Visual ConTent Search and Retrieval in a Distributed Peer-to-Peer Repository](#)
- ◆ [DIVAS: Direct Video & Audio Content Search Engine](#)
- ◆ [SEMEDIA: Search Environments for Media](#)

- ♦ [TRIPOD: Automatic image caption creation](#)
- ♦ [RUSHES: Retrieval of mUltimedia Semantic units for enHanced rEuSability](#)
- ♦ [VITALAS: Video & Image Indexing and Retrieval in the Large Scale](#)
- ♦ [VIDI-VIDEO](#)
- ♦ [CONTENT](#)
- ♦ [CITIZEN MEDIA](#)
- ♦ [GAMES@LARGE](#)

In the NAVS standardization session, SAPIR was one of 11 presenters. The 11 presenters included the European Commission, IETF (Internet Engineering Task Force), EBU, MPEG (ISO/IEC) and ETSI (CENELEC). In addition, all projects in the NEM area got an invitation, 16 responded and 6 projects submitted presentations. These were ASTRALS STREP, ENTHRONE II IP, SAPIR STREP, DIVAS STREP, EMANICS NoE and MOBISERVE STREP. Sigmund gave the SAPIR presentation, see image below.



To SAPIR, the MPEG and IETF organizations seem to be of the most relevant ones. In IETF there is among other a group on p2psip (session initiation protocol without a proxy infrastructure) that might be interesting to some of the SAPIR participants.

It was pointed out that work on standardization is a long term endeavor that often will span longer than a 3-4 year project period. Therefore, one should seek to be involved with standardization early or even before the project starts (use established contacts). Projects that have waited with participation in standardization organizations until they have concrete results have not had much success with influencing the standards.

#### March 14, Afternoon: CHORUS WG meeting: Evaluation and Benchmarking of Multimedia Content Search Methods

There are a lot of benchmarking initiatives, see <http://www.ist-chorus.org/chorus-wg2.php>. At some of the major IR conferences there are competitions on search of content repositories, see e.g. the evaluation showcase at CIVR2007, <http://www.civr2007.com/>, where the NIST TRECVID 2006 test set is used for video retrieval evaluation (based on key frames).

Telenor, March 22, 2007

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