



# BETTER MEETINGS with AMI



## AMI Consortium and the AMIDA Project at IST 2006

Helsinki Finland  
November 21, 22 and 23 2006

## WHAT IS AMI?

Augmented Multi-party Interaction (AMI) uses advanced audio and video signal processing, machine learning, knowledge management, social interaction theory and the latest human factors research to enhance people's experiences in meetings, particularly during business meetings between co-located and remote (virtual) participants.

The AMI Consortium is a 13-member multi-disciplinary European Commission-funded consortium dedicated to the research and development of AMI technologies. The second project of the consortium, AMIDA (IST FP6-033812), began in October 2006. It immediately follows the conclusion of the AMI Project (IST FP6-506811).

## HOW WILL PEOPLE BENEFIT FROM AMI?

AMI is at the convergence of two fundamental business trends emerging as a result of improvements in computers and communications:

- changes in behavior for human-to-human communications (new meeting paradigms such as collaboration in virtual spaces) and
- increased access to and ability to leverage corporate intellectual properties and assets (knowledge management)



As a result of these trends, business meetings in the future will be more efficient; they will take less time, only involve people when they are needed.

AMI will permit people in and outside of meetings to:

- understand the context of participants and background for decisions,
- focus on agenda items known to be relevant to the business or project, and
- produce rich, searchable 'knowledge archives' based on meetings.



Actions, words, gestures and related content introduced during a meeting can be:

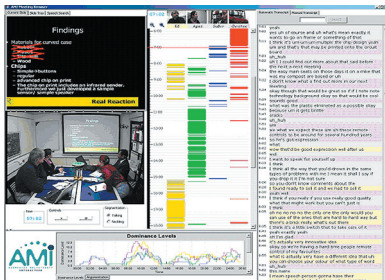
- synthesized,
- compressed,
- browsed, searched/found or
- traced to individuals or groups.

When added to future meeting systems/solutions and processes, computer supported/enhanced meetings with AMI technology will be measurably "better than being there."



# DEMONSTRATIONS

**Demonstrations** in the AMI stand show how meetings could be better.

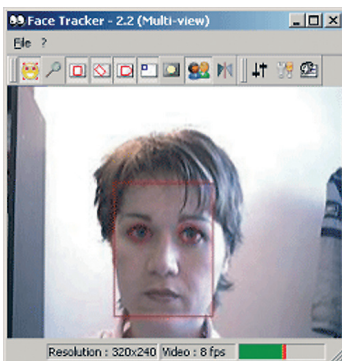


Finding elements of interest within a recorded meeting is time-consuming. The **JFerret Meeting Browser** (left) presents the multimedia meeting recordings of the AMI project. It displays many types of data and recognition results, including speaker segmentations, speech transcripts, slides, meeting actions and other annotations.

In the future, people might choose to meet in **Virtual Meeting Rooms** (below) with augmented verbal and non-verbal communications.

The **Spiderphone RMA** shows a telephone conference in progress, with slides and speaker indication. However, it can also be adapted to play back an earlier part of a meeting in progress, at high speed, to allow a participant to efficiently catch up with the meeting.

The **NITE XML Toolkit** (NXT) is open source software for working with multimodal, spoken, or text language corpora. It is specifically designed to support the tasks of human annotators and analysts of heavily cross-annotated data sets.



**Dynamic Summarization** can display textual documents and then allow users to specify and alter levels of summarization in real time.

Similarly, **Speech Compression** reduces the length of a speech recording but retains the important content. We use a variety of techniques from plain audio speed-up to removing unimportant words or sentences.

**Face Tracking** technology (left) can detect and recognize faces in real-time from a web-cam, or from any video recordings. Focus of Attention technology can also identify to whom, or upon what, people are focusing their attention.

## LINKS

For more information, visit the AMI Consortium web site:

[www.ami-consortium.org](http://www.ami-consortium.org)

For a white paper describing the many applications for AMI, download and read:

[www.amiproject.org/pdf/Applications-for-AMI-Technologies.pdf](http://www.amiproject.org/pdf/Applications-for-AMI-Technologies.pdf)

For an overview of the future research directions, download and read:

[www.amiproject.org/pdf/AMI-overview-prospects-for-future-research-Jan2006.pdf](http://www.amiproject.org/pdf/AMI-overview-prospects-for-future-research-Jan2006.pdf)

For technical backgrounders about AMIDA research areas, download and read:

[www.amiproject.org/pdf/SOTA-Annotation-and-Query-Jan2006.pdf](http://www.amiproject.org/pdf/SOTA-Annotation-and-Query-Jan2006.pdf)

[www.amiproject.org/pdf/SOTA-Conversational-multiparty-ASR-using-remote-mics.pdf](http://www.amiproject.org/pdf/SOTA-Conversational-multiparty-ASR-using-remote-mics.pdf)

[www.amiproject.org/pdf/SOTA-Focus-of-Attention-Jan2006.pdf](http://www.amiproject.org/pdf/SOTA-Focus-of-Attention-Jan2006.pdf)

[www.amiproject.org/pdf/SOTA-Localization-and-Tracking-Jan2006.pdf](http://www.amiproject.org/pdf/SOTA-Localization-and-Tracking-Jan2006.pdf)



AMI c/o IDIAP Research Institute  
P.O. Box 592  
Rue du Simplon 4  
1920 Martigny - Switzerland  
[info@ami-consortium.org](mailto:info@ami-consortium.org)  
[www.ami-consortium.org](http://www.ami-consortium.org)

Tel +41 27 721 77 11  
Fax +41 27 721 77 12

### Project directors

Dr. Hervé Bourlard  
IDIAP Research Institute  
[herve.bourlard@idiap.ch](mailto:herve.bourlard@idiap.ch)

Dr. Steve Renals  
University of Edinburgh  
[s.renals@ed.ac.uk](mailto:s.renals@ed.ac.uk)

### Technology transfer

Christine Perey  
c/o IDIAP Research Institute  
[cperey@ami-consortium.org](mailto:cperey@ami-consortium.org)