

***Third Six-Monthly Meeting & Mid-Term Review***

***WELCOME!***

***Frankfurt Airport Conference Centre  
Friday 19<sup>th</sup> September 2003***

- 10:00 Overview of the ECVision Network (DV)  
Goal of the Network  
Highlights from the past 18 months  
2<sup>nd</sup> Six-Monthly Periodic Management Report (Consolidated)  
Status of cost statements  
Questions and answers
- 10:45 Research Planning (JC)  
Overview of activities / Status of deliverables / Required actions
- 11:30 Coffee Break
- 11:45 Education and Training (BF/WF)  
Overview of activities / Status of deliverables / Required actions  
Status Report on Specific Actions  
    Specific Action 2-1: Summer school (WF)  
    Specific Action 6-1: Cognitive Vision Education Survey (BF)  
    Specific Action 6-2: Restructuring of CVonline (BF)  
    Specific Action 6-3: Encyclopedia of Cognitive Computer Vision (BF)  
    Specific Action 16-1: Student Exchange (DV)  
    Specific Action 21-1: Encyclopedia of Cognitive Computer Vision (Isabelle Bloch)

- 12:30      **Information Dissemination** (DV)  
Overview of activities / Status of deliverables / Required actions  
Status Report on Specific Actions  
    Specific Action 1-1: Best paper prize  
    Specific Action 8-1: Keyword Indexed Bibliography with Abstracts of Papers  
    Specific Action 13-1: ICVS 2003 (Markus Vincze)  
    Specific Action 37-1: WAPCV 2003 (Lucas Paletta)
- 1:45      **Lunch**
- 14:30      **Industrial Liaison** (MT/PC)  
Overview of activities / Status of deliverables / Required actions  
Status Report on Specific Actions  
    Specific Action 7-1: White Paper on Applications of Cognitive Vision Systems (PC)  
    Specific Action 7-2: Prize for Best Application Development PC)
- 15:15      **Information Infrastructure** (DV)  
Overview of activities / Status of deliverables / Required actions

- 15:30    Open Forum:
  - Date of next meeting
  - Any other business
  - Comments
  - Questions / Answers
- 16:00    Review Team in Closed Session
- 16:30    Initial Review Feedback
- 17:00    Close of Review and Meeting



# ***European Research Network for Cognitive Computer Vision Systems***

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# Overview

- Goals of ECVision
- Selected Highlights
- 3rd Six Monthly Report (Consolidated)
- Status of cost statements
- Questions and Answers

# GOALS



# European Research Network for Cognitive Computer Vision Systems

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## Quote-Unquote

"All important fields of human endeavour start with a personal commitment based on faith rather than on results."

David Marr  
AI - A Personal View, 1977.

## Enquiries

Name

Email

Text of Enquiry

## Announcements

### Specific Action 39-1 - Cognitive Computer Vision Colloquium

The Czech Technical University in Prague are organizing a colloquium on January 12 and 13, 2004.  
[11 September 2003]

[▶ MORE DETAILS](#)

### Summer School 2003

Lecture notes are now available on-line  
[10 September 2003]

[▶ MORE DETAILS](#)

### New Member

Rainer Malaka, European Media Laboratory GmbH, has been admitted as a member of ECVision.  
[23 August 2003]

[▶ MORE DETAILS](#)

### Mid-Term Review and Third Six-Monthly Meeting

The Mid-Term Review and the third ECVision six-monthly meeting will be held on the 19th September  
[10 August 2003]

[▶ MORE DETAILS](#)

### SA 16-1 - Student Exchange

A student exchange between the University of Bielefeld and the University of Surrey has

## ECVision Network

ECVision is a research network which was formed to promote research, education, and application systems engineering in cognitive AI-enabled computer vision. ECVision is funded by the European Commission under the [IST Programme](#) (Project 35454).

ECVision has four main activities:

- Research Planning
- Education and Training
- Information Dissemination
- Industrial Liaison

## Cognitive Vision

Cognitive computer vision is concerned with integration and control of vision systems using explicit but not necessarily symbolic models of context, situation and goal-directed behaviour. Cognitive vision implies functionalities for knowledge representation, learning, reasoning about events & structures, recognition and categorization, and goal specification, all of which are concerned with the semantics of the relationship between the visual agent and its environment.



# The definition and establishment of the discipline of cognitive vision

Education and Training Industrial Liaison Monitoring

Events

Computer

Image

May 1998

News

Related

Workshop

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integration

control

explicit not necessarily symbolic

models context

goal-directed behaviour

knowledge representation learning

reasoning events structures

recognition categorization

goal specification

semantics

relationship

visual

agent

environment

categories of

- Education and Training
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University of Surrey has

# HIGHLIGHTS

# Highlights

- May 2002
  - Cognitive Vision Education Survey SA
  - Restructuring of CVOnline SA



# May 2002

## CVonline: The Evolving, Distributed, Non-Proprietary, On-Line Compendium of Computer Vision



Editor: Robert B. Fisher  
School of Informatics  
University of Edinburgh  
CVonline URL: <http://www.dai.ed.ac.uk/CVonline/>

### Background information

- [An overview of CVonline.](#)
- [Advice on how to cite topics.](#)

### Compendium Contents

The [unfolded list of topics](#).

**NEW** We have restored a search mechanism for CVonline. See below.

The folded subject hierarchy:

1. [Applications](#)
2. [Databases and Indexing](#)
3. [Famous Vision Systems](#)
4. [Generic Vision Methods](#)
5. [Geometric Feature Extraction Methods](#)
6. [Geometry and Mathematics](#)
7. [Image Physics](#)
8. [Image Transformations and Filters](#)
9. [Motion, Tracking and Time Sequence Analysis](#)
10. [Hardware, DSP, Parallel and Other Non-Standard Processing Platforms](#)
11. [Object, World and Scene Representations](#)

# Highlights

- June 2002
  - Best Paper Prize at ECCV 2002
  - White paper on applications of cognitive vision systems SA



# June 2002



## **European Research Network for Cognitive Computer Vision Systems**

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Current page: **Industrial Liaison -> Application Prize**

### **ECVision Prize for Best Application Development in Cognitive Vision Systems**

#### **Introduction**

For the first time, ECVision (the European Network of Excellence on Cognitive Vision Systems) and Image Processing Europe magazine are inviting developers to submit applications for the best cognitive vision system. This is to recognise and promote advances in combining vision and cognitive technologies to provide higher levels of functionality and robustness to end users.

A panel of leading experts will review the applications and the award will be announced early in 2003.

#### **What is the prize for?**

The winning system will be expected to:

- exhibit the characteristics of cognitive vision (e.g. adaptive reasoning and/or learning)
- be of significant social or economic impact
- have been developed or deployed in within the European Union
- be a complete system and not be an isolated module
- not be based solely on signal processing, feature extraction and matching
- not address application where a large part of the task uncertainty has been removed

#### **Competition Rules**

1. the competition is open to all developers of vision systems.
2. cognitive vision systems are those that exhibit learning, recognition and categorisation, reasoning about events and structures, and goal specification. Further details are available on the ECVision website ([www.ECVision.info](http://www.ECVision.info))
3. the system must have been operating since before October 2002
4. commercial products and prototype installations are eligible. However a real end-user must have benefited from the system's operation
5. applications must be received by 31 July 2003
6. incomplete or late applications may be disqualified
7. organisations may enter applications for more than one system but only one award per company division will be allowed. If entering more than one application you must fill a form for each one.
8. Image Processing Europe reserves the right to make the first announcement of the winning entry.
9. application forms will not be returned
10. The winner will be announced at Photomex 03 (8th and 9th October 2003) at Stoneleigh Park, UK

# Highlights

- August 2002
  - Annotated bibliography SA
- September 2002
  - Cognitive Vision Workshop, Zurich
  - Dagstuhl 2003 announced

# October 2003

## Cognitive Computer Vision Ontology

This is an evolving topic categorization for Cognitive Computer Vision, supported by the [ECVision: European Research Network for Cognitive Computer Vision Systems](#). Perhaps 'ontology' is not the right word to describe it, as it isn't a hierarchical subtype tree. But it's not a glossary nor syllabus either. Perhaps it's a topic catalog? Please suggest a good descriptive noun.

People directly involved in its development are: Bob Fisher, Wolfgang Förstner, Annett Faber and Hanns-Florian Schuster.

### 1. Model Learning ([Survey Result](#))

1. Specific approaches to learning these different types of content (See also [Knowledge Representation->Content](#) for "what" things that are learned and [Recognition, Categorization and Estimation->Specific Approaches](#) for "how" things might be recognized.)

1. [Activity/Behaviors/Processes/Dynamics](#)
2. [Classification/Category](#)
3. [Context/Scenes/Situations](#)
4. [Function](#)
5. [Objects/Parts](#)
6. Parameters
7. [Task Control](#)

### 2. Issues

1. [Learning Control](#)
2. [Validation](#)

### 3. Types of Learning

1. Case-based
2. Reinforcement
3. [Supervised](#)
4. [Unsupervised](#)

### 2. Knowledge Representation ([Survey Result](#))

1. Content (See also [Model Learning->Specific Approaches](#) for learning different types of content and [Recognition, Categorization and Estimation->Specific Approaches](#) for "how" things might be recognized.)

1. Activity/Behavior/Processes/Dynamics
2. [Classification/Category](#)
3. [Context/Scene/Situations](#)
4. Function
5. [Objects/Parts](#)
6. Ontologies
7. [Parameters](#)
8. [Task Control](#)

### 2. Issues

# December 2003



## **European Research Network for Cognitive Computer Vision Systems**

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Current page: **Education and Training** -> **SA 21-1 Imprecise Spatial Information**

### **Specific Action 2-1: Dealing with Imprecise Spatial Information in Cognitive Vision**

This specific action, a contribution to the [CCV Ontology](#), was undertaken by Isabelle Bloch, Ecole Nationale Supérieure des Telecommunications, Paris, France.

This specific action aims at extending the CCV Ontology with aspects related to imprecise knowledge representations in cognitive vision, to tools and methods for dealing with imprecise spatial information, and to information fusion issues and methods.

This material has not yet been integrated into the CCV Ontology but an advance copy is now available as a complete PDF document.

The full 125 page document can be downloaded by clicking [here](#):  (125 pages; 3.8Mb)

Site generated on Sunday, 14 September 2003  
Best viewed with Internet Explorer 4+



# February 2003

## ECVision: Cognitive Vision Model Syllabus

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### Introduction

This is a syllabus resource for Cognitive Computer Vision, such as might be taught in a comprehensive course on Cognitive Computer Vision. Recognising that what might actually be taught is a subset of this material, we have tried to structure this as a resource, meaning that the given topics are recommended, but the choice of topics for any particular course is up to the lecturer. This is a different resource from the [Cognitive Computer Vision Ontology](#) which tries to lay out a view of the structure of Cognitive Computer Vision.

There are many technologies that could have been included, but we are proposing those that we thought had the greatest value for Cognitive Vision systems, and are likely to be the foundation for the summer school course and textbook. This is not a hierarchy, nor are the topics mutually exclusive.

We have tried to identify the central topics here and aimed at a typical full-year course with 54 lecture hours. We think that at a minimum, coverage of each of the five Cognitive Computer Vision subject areas should have an overview, one or more techniques and an example application.

We have tried to be mildly prescriptive about the order of topics, starting with the most important (in our estimation), but are not specifying the method of presentation, nor the depth, all of which will depend on the presenter's preferences and the amount of available time.

Some good general references are:

1. Forsyth and Ponce. Computer Vision: a modern approach. Prentice-hall, 2002.
2. Duda, Hart and Stork. Pattern Classification (2nd Edition). Wiley Interscience, 2000.

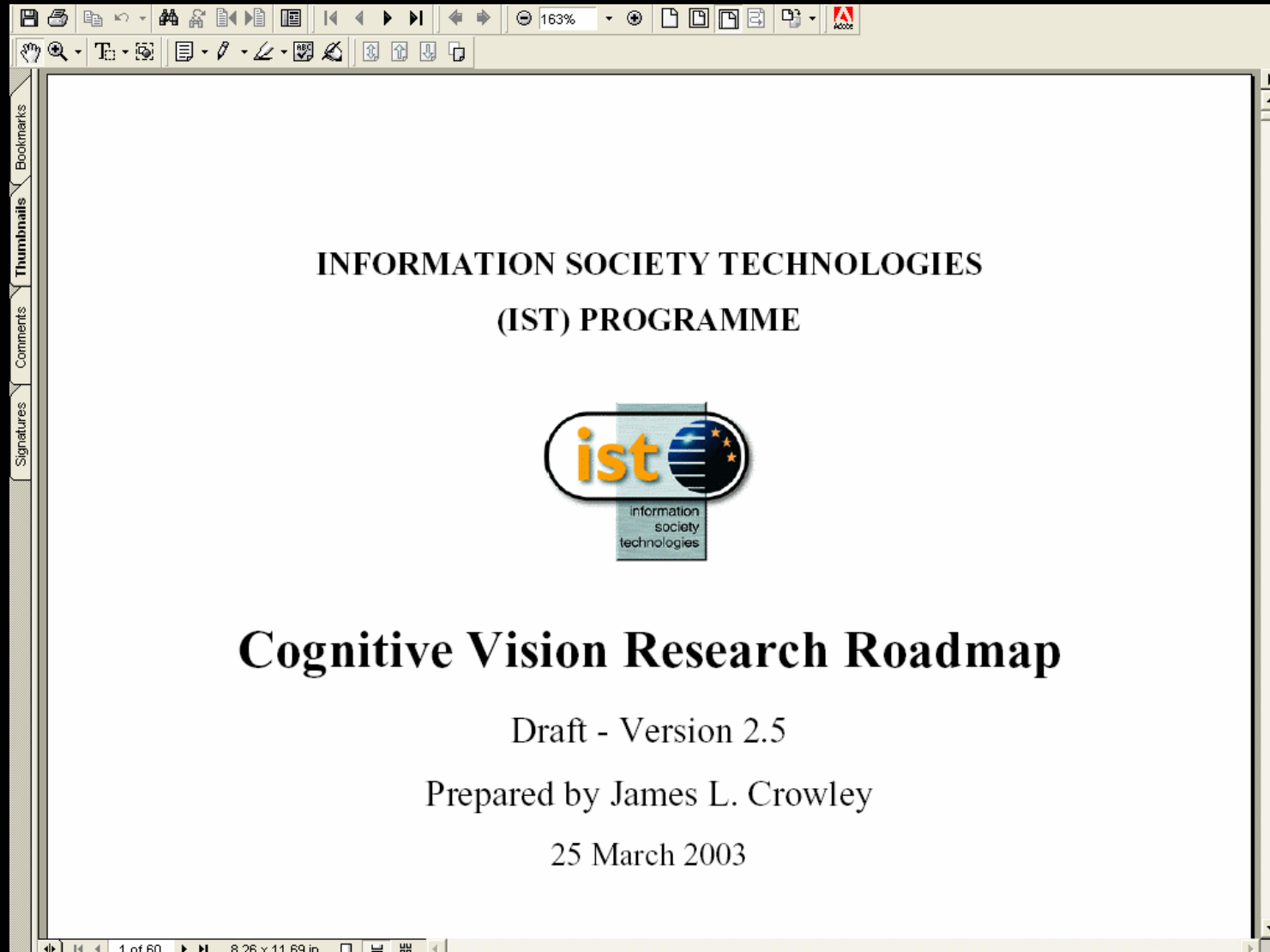
With ECVision funding, we are still working at: (1) identifying a key citation and (2) collecting online resources for each topic.

Basic prerequisite background knowledge:

- pixels and image structure
- image capture process
- basic color and texture
- basic imaging and optical projection
- basic feature detection: points, edges, lines, regions
- basic image processing: histograms, thresholding, mathematical morphology
- basic geometric shapes, their properties and their fitting/parameter estimation from image data
- basic probability and statistics, including estimation and hypothesis testing


Intermediate prerequisite background knowledge:

February 2003



The image is a screenshot of a presentation slide displayed within a software window. The window has a standard toolbar at the top with icons for file operations, navigation, and zooming. On the left side, there is a vertical sidebar with tabs labeled 'Signatures', 'Comments', 'Thumbnails', and 'Bookmarks'. The slide content is centered and includes the following text and graphics:

**INFORMATION SOCIETY TECHNOLOGIES**  
**(IST) PROGRAMME**



The logo consists of the lowercase letters 'ist' in orange, followed by a blue circle containing white stars, and a grey rectangle below with the text 'information society technologies' in white.

**Cognitive Vision Research Roadmap**

Draft - Version 2.5

Prepared by James L. Crowley

25 March 2003

At the bottom of the window, a status bar shows navigation controls and the text '1 of 60' and '8.26 x 11.69 in'.

# Highlights

- April 2003
  - 3<sup>rd</sup> International Conference on Computer Vision ICVS '03
  - Best paper prize
  - Workshop on Attention and Performance in Computer Vision WAPCV '03

# April 2003



## European Research Network for Cognitive Computer Vision Systems

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Current page: [Research Planning](#) -> [EU Computer Vision Groups](#)

### Computer Vision in Europe

Danica Kragic & Henrik I Christensen (eds.)  
Computational Vision and Active Perception  
Numerical Analysis and Computer Science  
Royal Institute of Technology  
SE-100 44 Stockholm, Sweden  
[danik@nada.kth.se](mailto:danik@nada.kth.se), [hic@nada.kth.se](mailto:hic@nada.kth.se)

Apr 28, 2003

### Contents

#### [1 AUSTRIA](#)

- [1.1 Graz](#)
- [1.2 Graz](#)
- [1.3 Vienna](#)
- [1.4 Vienna](#)

#### [2 BELGIUM](#)

- [2.1 Brussels](#)
- [2.2 Leuven](#)
- [2.3 Leuven](#)

#### [3 DENMARK](#)

- [3.1 Aalborg](#)
- [3.2 Copenhagen](#)
- [3.3 Lyngby](#)
- [3.4 Odense](#)

#### [4 CZECH REPUBLIC](#)

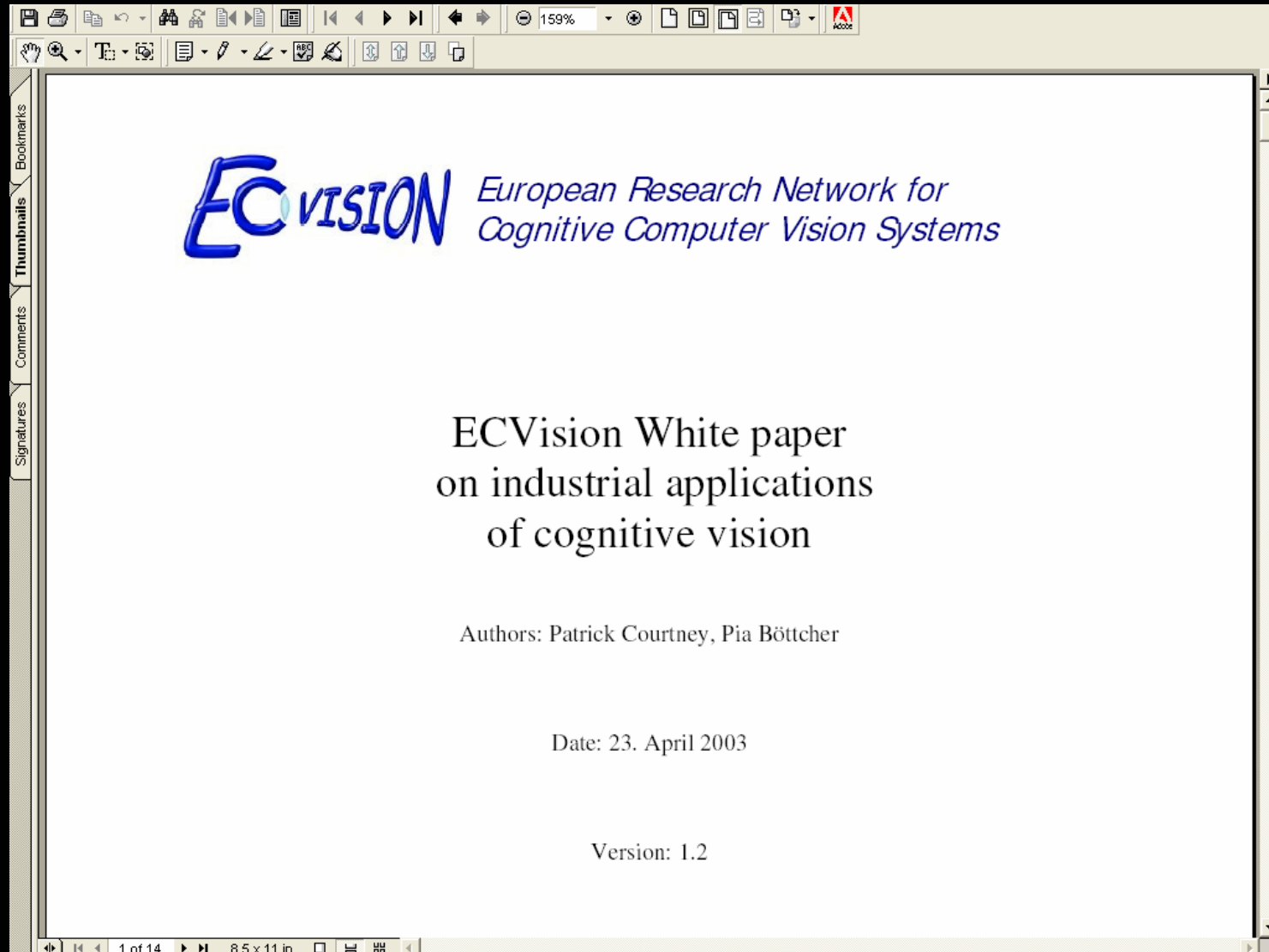
- [4.1 Prague](#)

#### [5 FINLAND](#)

- [5.1 Helsinki](#)
- [5.2 Oulu](#)
- [5.3 Tampere](#)



May 2003



# May 2003



## European Research Network for Cognitive Computer Vision Systems

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Current page: [Industrial Liaison](#) -> [Database of Vision Vendors](#)

Name	Application	Product type	Industrial sector	Cognitive vision aspect	Further Information
inX Systems	machine vision and learning software to improve the efficiency of sawmills	inspection system	sawmill industry	self-training	<a href="#">more ...</a>
Parsytec AG	paper web inspection system	inspection system	paper machines	self-training	<a href="#">more ...</a>
CyberOptics	inspection system for printed circuit boards	inspection system	printed circuit boards	self-training	<a href="#">more ...</a>
LTU Technologies	automatic analysing the content of images and video streams	software		Recognition and categorisation	<a href="#">more ...</a>
Stemmer Imaging GmbH	vision toolbox	software library		learning, categorisation	<a href="#">more ...</a>
Visual Tools S.A.	Retail data collection	People Counter (VS-Peco)	surveillance and monitoring	Learning, Recognition and categorisation	<a href="#">more ...</a>
BAE Systems Ltd	Safer Landing and Taxing	(none at present)	Aerospace		<a href="#">more ...</a>
Massen machine vision systems GmbH	surface inspection, optical sorting, inline non-contact measurement	inspection systems	Ceramic tiles, laminates, floor and wall covering, automotive	Learning, categorisation	<a href="#">more ...</a>
HS-ART	Digital film restoration, Media observation	software	Film, TV, Entertainment	Reasoning about events and structures, categorisation	<a href="#">more ...</a>
Roke Manor Research	Video Motion Anomaly Detector (VMAD)	Hawk-Eye Tennis		Knowledge representation, reasoning and recognition & categorisation	<a href="#">more ...</a>

# June 2003



## European Research Network for Cognitive Computer Vision Systems

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Current page: [Information](#) -> [Indexed and Annotated Bibliography](#)

### ECVision indexed and annotated bibliography of cognitive computer vision publications

This bibliography was created by [Hilary Buxton](#) as part of ECVision Specific Action [8-1](#)

The complete text version of this BibTeX file is available here: [ECVision\\_bibliography.bib](#)

### ALTERNATIVE INDEX

#### Case Studies

[Bakstein2001](#) [Bishop00a](#) [Koffka35a](#) [Nakayama90a](#) [riesenhuber00](#)  
[Hjelmas01](#) [Gerstner:95](#) [Maes:96](#) [Granlund99](#)

#### Emerging Topics

##### Vision and Language Fusion

[Rov1999](#) [Nagel2001](#) [Duvvulu02](#) [Gerber-Nagel:96](#) [Turk:96](#)  
[Wachsmuth2002-BNE](#)

#### Knowledge Representation

##### Content

##### Activity/Behaviors/Processes/Dynamics

[Arens2002a](#) [Bobick-Wilson:95](#)

##### Context/Scenes/Situations

[Chun98a](#)

##### Objects/Parts

[buelthoff5](#) [Kruppa2001a](#)

##### Parameters

[Finlayson1998](#)

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##### Generative

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##### Geometric

[Solina98](#) [Leonardis97](#) [Haasdonk02](#)

##### Logical

[Kohler02](#)

##### Ontological

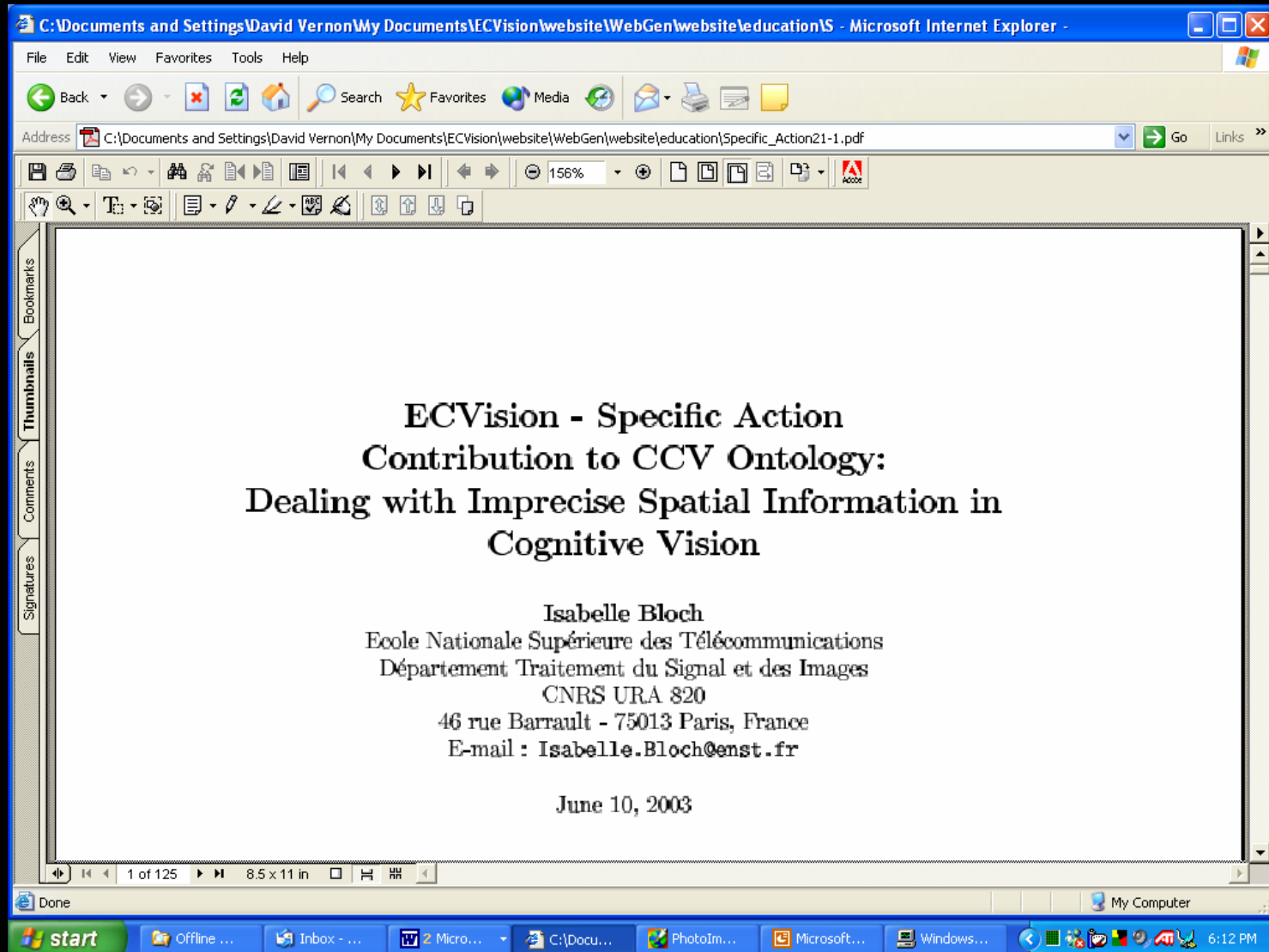
[Spengler2003](#)

##### Probabilistic

[Spengler2002](#)

#### Model Learning

# June 2003



# July 2003

## ECVision: Cognitive Computer Vision Jobs

This page lists possible projects area of Cognitive Computer Vision.

If you have an idea about a possible project, at either the Masters or PhD level, and are hoping to find someone who might want to work on it (either at your site or elsewhere), then email information about it to: [Bob Fisher, rbf\\*AT\\*inf.ed.ac.uk](mailto:Bob.Fisher,rbf*AT*inf.ed.ac.uk).

If you are interested in one of these projects, then please contact the proposer directly.

This list is not just for people involved in [ECVision: European Research Network for Cognitive Computer Vision Systems](#).

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### PROJECT IDEAS

LEVEL (MS/PHD)	1 SENTENCE SUMMARY OF PROJECT	CONTACT NAME AND EMAIL	LINK TO DETAILS	DATE ENTERED
***	***	***	***	***

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Date of last update: 07/18/2003 17:53:46



# July 2003

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# August 2003



**European Research Network for  
Cognitive Computer Vision Systems**

*Institute for Photogrammetry  
Bonn University*



RHEINISCHE FRIEDRICH-WILHELMS-UNIVERSITÄT



## **Summerschool Cognitive Vision**

### **Chair:**

Prof. Dr.-Ing. W. Förstner, Bonn  
wf@ipb.uni-bonn.de

Bonn, Germany

Monday 25. - Friday 29. August 2003

**NEW General Information NEW**

### **The Topic**

Cognitive Vision

### **The intention:**

The goal of the proposed summer school is to provide an intensive and challenging introduction to the area of cognitive computer vision. The summer school modules will be given by acknowledged experts in each key area.

The objective is to provide post-graduate students with a comprehensive introduction to all of the constituent areas of cognitive vision. This will help create a new generation of researchers in the area and will help maximize the impact of the ECVision network in the long run. In addition, it will provide practising researchers with an opportunity to learn about areas outside their main speciality and, hence, foster the cross-fertilization of ideas that is essential for real progress in the area.

# **3<sup>rd</sup> Six-Monthly Periodic Management Report**

**(Consolidated Report for the period 1/3/02 – 31/8/03)**



## **3<sup>rd</sup> Periodic Report**

- Introduction
- New Members
- Highlights
- Summary of Activities by Area
- Specific Actions
- Deliverables
- Budgetary Status
- Critical Analysis of Progress
- Conclusion and Expectations for the Coming Semester

## Specific Actions



**ECVISION** European Research Network for  
Cognitive Computer Vision Systems

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**Indexed and Annotated Bibliography**

**Specific Actions**

IST Cognitive Vision Projects

Links

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Meetings

Administrative Documents

Reimbursement of Costs

**Enquiries**

Name

Email

Text of Enquiry

**Specific Action Status**

**Funding for Specific Actions**

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[11 September 2003]  
[MORE DETAILS](#)

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- Industrial Liaison

**Cognitive Vision**

Cognitive computer vision is concerned with integration and control of vision systems using explicit but not necessarily symbolic models of context, situation and goal-directed behaviour. Cognitive vision implies functionalities for knowledge representation, learning, reasoning about events & structures, recognition and categorization, and goal specification, all of which are concerned with the semantics of the relationship between the visual agent and its environment.

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# Deliverables

## List of Deliverables

## Key:

TA<sub>x,y,n</sub> Target Area *x*, deliverable number *y*, month *n*

## Target Areas:

- 1 Research Planning
- 2 Education and Training
- 3 Information Dissemination
- 4 Industrial Liaison
- 5 Information Infrastructure Management
- 6

No	Deliverable title	Date
TA1.1.n	Workshop proceeding/report; n = 6, 12, ..., 36	n
TA1.2.n	Position paper; n = 6, 12, ..., 36	n
TA1.3	Advances in computer vision	6
TA1.4	Advances in artificial intelligence	6
TA1.5.n	White paper on cognitive vision research; n = 6, 12, ..., 36	n
TA1.6	Benchmark applications	6
TA1.7.n	Research Roadmap; n = 6, 12, ..., 36	n
TA1.8.n	Database of European research; n = 6, 12, ..., 36	n

No	Deliverable title	Date
TA2.1	Survey of existing courses on cognitive computer vision	6
TA2.2	Web-based repository of existing courseware and/or course slides	6
TA2.3	Web-based repository of M.Sc. and Ph.D. project proposals	6
TA2.4	Model curriculum for cognitive computer vision	12
TA2.5	Web-based encyclopedia of cognitive computer vision	12
TA2.6	Web-based listings of available positions and people seeking positions	12
TA2.7.n	Annual Best Ph.D. prizes in Cognitive Vision Systems; n = 12, 24, 36	n
TA2.8.n	Annual summer school on Cognitive Vision Systems; n = 7, 19, 31	n
TA2.9.n	Organization of tutorials; n = 12, 24, 36	n
TA2.10.n	Identification of common development environments; n = 12, 24, 36	n
TA2.11.n	Contribution of code to the VXL and/or OpenCV; n = 12, 24, 36	n
TA2.12.n	Short-term exchange/visits of research staff; n = 12, 24, 36	n
TA2.13.n	Short-term exchange/visits of post-graduate students; n = 12, 24, 36	n
TA2.14	Textbook on cognitive computer vision	36

No	Deliverable title	Date
TA3.1.n	Electronic newsletter, published quarterly; n = 3, 6, ..., 36	n
TA3.2.n	Database of existing relevant publications; n = 6, 112, ..., 36	n
TA3.3.n	Annotated bibliography of literature, with summary of papers; n = 6, 12, ..., 36	n
TA3.4.n	Database of research results (presentations, videos, ...); n = 12, 24, ..., 36	n
TA3.5.n	Periodic distribution of web-site content on CD to all members; n = 12, 24, 36	n
TA3.6.n	Special sessions at conferences; n = 12, 24, 36	n
TA3.7.n	Sponsorship of best paper prizes in cognitive vision systems; n = 12, 24, 36	n
TA3.8.n	Thematic workshops; n = 12, 24, 36	n
TA3.9.n	Special issues in journals; n = 12, 24, 36	n
TA3.10.n	Focussed review papers in journals; n = 12, 24, 36	36

No	Deliverable title	Date
TA4.1.n	Database of research profiles and application experience, indexed by application, R&D topics, industrial sector; n = 12, 24, 36	n
TA4.2.n	Directory of vision vendors, indexed by application, product type, deployed technology, industrial sector; n = 6, 12, ..., 36	n
TA4.3.n	Database of application-motivated R&D problems and information on successful and unsuccessful approaches to solutions; n = 6, 12, ..., 36	n
TA4.4.n	List of techniques and their usefulness (or not) in certain classes of problems; n = 6, 12, ..., 36	n
TA4.5.n	Sponsorship of Best Application Development prizes in Cognitive Vision Systems; n = 12, ..., 36	n
SA1.1	CSCW infrastructure operational	3
SA1.2	Website core structure implemented	3
SA2.1.n	Periodic management report; n = 6, 12, ..., 36	n
SA2.2	Final report from ECVision	36

# **Deliverables Due**

## **Research Planning**

- TA1.1.n Workshop proceeding/report; n = 6, **12**, ..., 36
- TA1.2.n Position paper; n= 6, **12**, ... , 36
- TA1.3 Advances in computer vision (month 6)
- TA1.4 Advances in artificial intelligence (month 6)
- TA1.5.n White paper on cognitive vision research; n = 6, **12**, ... , 36
- TA1.6 Benchmark applications
- TA1.7.n Research Roadmap; n = 6, **12**, ... , 36
- TA1.8.n Database of European research; n = 6, **12**, ... , 36

# **Deliverables Due**

## **Education and Training**

- TA2.1 Survey of existing courses on cognitive computer vision
- TA2.2 Web-based respository of existing courseware and/or course slides
- TA2.3 Web repository of MSc and PhD project proposals
- TA2.4 Model curriculum for cognitive computer vision
- TA2.5 Web-based encyclopedia of cognitive computer vision
- TA2.6 Web-based listings of available positions & people seeking positions
- TA2.7.n Annual Best Ph.D. prizes in Cognitive Vision Systems; n = 12, 24, 36
- TA2.8.n Annual summer school on Cognitive Vision Systems; n = 7, 19, 31
- TA2.9.n Organization of tutorials; n = 12, 24, 36
- TA2.10.n Identification of common development environments; n = 12, 24, 36
- TA2.11.n Contribution of code to the VXL and/or OpenCV; n = 12, 24, 36
- TA2.12.n Short-term exchange/visits of research staff; n = 12, 24, 36
- TA2.13.n Short-term exchange/visits of post-graduate students; n=12, 24, 36
- TA2.14 Textbook on cognitive computer vision

# Deliverables Due

## Information Dissemination

- TA3.1.n Electronic newsletter, published quarterly; n = 3, 6, ..., 36
- TA3.2.n Database of existing relevant publications; n = 6, **12**, ..., 36
- TA3.3.n Annotated bibliography of literature; n = 6, **12**, ..., 36
- TA3.4.n Database of research results; n = **12**, 24, ..., 36
- TA3.5.n Periodic distribution of web-site content on CD; n = **12**, 24, 36
- TA3.6.n Special sessions at conferences; n = **12**, 24, 36
- TA3.7.n Sponsorship of best paper prizes in cognitive vision; n = **12**, 24, 36
- TA3.8.n Thematic workshops; n = **12**, 24, 36
- TA3.9.n Special issues in journals; n = **12**, 24, 36
- TA3.10.n Focussed review papers in journals; n = **12**, 24, 36

# **Deliverables Due**

## **Industrial Liaison**

- TA4.1.n Database of research profiles and application experience, indexed by application, R&D topics, industrial sector; n = 12, 24, 36
- TA4.2.n Directory of vision vendors, indexed by application, product type, deployed technology, industrial sector; n = 6, 12, ... , 36
- TA4.3.n Database of application-motivated R&D problems and information on successful and unsuccessful approaches to solutions; n=6, 12, ... 36
- TA4.4.n List of techniques and their usefulness in certain classes of problems; n = 6, 12, ... , 36
- TA4.5.n Sponsorship of Best Application Development prizes in Cognitive Vision Systems; n = 12, ... , 36



# **Deliverables Due**

## **Information Infrastructure**

- SA1.1 CSCW Infrastructure operations
- SA1.2 Website core structure implemented

## **Management**

- SA2.1.n Periodic management report ;  $n = 6, 12, \dots, 36$
- SA2.2 Final report on ECVision (due month 36)

# Cost Statements

## **Six-Monthly Cost Statement**

- 1<sup>st</sup> cost statement paid and disbursed to members
- 2<sup>nd</sup> cost statement submitted and cleared for payment?
- 3<sup>rd</sup> cost statement due now

## Six-Monthly Cost Statement

	Electronic	Paper
Bonn	✓	✓
INRIA	✓	
INPG	✓	
KTH	-	-
Edinburgh		
PBConsulting		
Sussex		
ENST	✓	
TUV	✓	✓

***Labour for coordination activities and for specific actions***

# Status of Budget

# **Status of Budget**

## **Still significantly under-spending**

18 Month Budget: €628,500

18 Month Cost Statements €345,293

Semester 1: €194,243

Semester 2: €150,451

Semester 3: €100,592

Under-spend (45%): €283,207



# QUESTIONS? & ANSWERS!