



# **PROJECT PERIODIC REPORT**

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Periodic report:	1 <sup>st</sup> □	2 <sup>nd</sup> 🗵	3 <sup>rd</sup> □		
Period covered:	from	01/03/20	09	to	28/02/2010

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## 5 Project management

### **5.1 Management activities**

Management has proceeded without any problems in the second period. Cooperation among partners is excellent. All the planned activities are in time. No deviations from the planned milestones and deliverables occurred.

In the second period, Dr.Fred Hamker, one of the key personnel of partner WWU, has acquired a professorship at the University of Chemnitz. This had no effect on the workplan since Prof. Hamker remained a member of the Eyeshots group and continued to contribute as a WP leader for WP3. The hired personal working on WP3 remained in Münster and periodically travels to Chemnitz for interaction. No PM for Prof. Hamkers work are claimed by WWU after his move. More precisely, Prof Hamker will continue to guide doctoral students for the remainder of the project and contribute to meetings and discussions. He will not charge any personal costs. His travel costs regarding project related meetings and conference presentations will be paid by WWU.

### **Coordination activities during the period**

- Project monitoring carried out by the Project Coordinator by checking the interaction between consortium members, and by checking the progress of the work on a regular period.
- Communication with and between partners to ensure on-time schedule of the project, and request of approvals for specific formal decisions occur mainly through the mailing list hosted by UG (eyeshots@unige.it).
- The website contains a repository for sharing documents, data, and software tools in the private area. Material from meetings (agenda, presentations, minutes etc) is made available to the consortium using this facility, as well.
- The EYESHOTS literature database is continuously updated providing a common basis for teaching and education of students.
- Brief notes on subgroup meetings are collected and made available on the private area of the EYESHOTS website, <u>http://www.eyeshots.it/private/minutes.php</u> to ensure a continuous monitoring of cooperative work towards the objectives.
- All the partners contributed to communicate and announce, through the mailing list and the web-site, forthcoming events, Call for Papers, News and Highlights from the scientific community on topics related to the project's research activities.
- Periodically, publications from the consortium have been collected and published in the website, together with the public deliverables due in the period.
- A quality check procedure for each deliverable before submission was introduced.

### List of project meetings and cross-visits

Regularly, plenary meetings took place with a semester period to check the progress across partners and work packages, to discuss about dissemination activities and to coordinate and plan subgroup interactions:

1<sup>st</sup> review meeting, 21-22 April 2009, Sestri Levante (Genoa).

<u>Participants:</u> Patrizia Fattori, Claudio Galletti, Rossella Breveglieri (UNIBO); Fred Hamker (WWU); Markus Lappe (WWU); Marc van Hulle, Nikolay Chumerin, Karl Pauwels (K.U.Leuven); Angel del Pobil, Eris Chinellato (UJI), Silvio Sabatini, Fabio Solari, Giorgio Cannata, Andrea Canessa, Manuela Chessa (UG).

month 18 periodic meeting, 16 September 2009, Castellon de la Plana.
 <u>Participants:</u> Patrizia Fattori, Claudio Galletti, Konstantinos Chatzidimitrakis, Giacomo Placenti (UBO); Fred Hamker, Frederik Beuth, Mark-André Voss (WWU); Markus Lappe, Katharina Havermann, Robert Volcic (WWU); Marc van Hulle, Nikolay Chumerin, Karl Pauwels (K.U.Leuven); Angel del Pobil, Eris Chinellato, Marco Antonelli (UJI), Silvio Sabatini, Giorgio Cannata, Andrea Canessa, Manuela Chessa, Agostino Gibaldi (UG).

This technical meeting took place in coincidence with the EYESHOTS IURS'09 Summer School in Benicassim (13-18 September 2009). The possibility of complementary discussions in the preceding and following days, strongly contributed to the development of ongoing and new collaborations on the research activity.

month 24 periodic meeting, 13-14 January 2010, Milan.

<u>Participants</u>: Patrizia Fattori, Rossella Breveglieri, Annalisa Bosco, Konstantinos Chatzidimitrakis (UNIBO); Fred Hamker, Frederik Beuth (WWU); Markus Lappe, Katharina Havermann, Robert Volcic (WWU); Marc van Hulle, Nikolay Chumerin, Karl Pauwels (K.U.Leuven); Angel del Pobil, Eris Chinellato, Beata Joanna Grzyb, Marco Antonelli (UJI), Silvio Sabatini, Giorgio Cannata, Andrea Canessa, Manuela Chessa, Agostino Gibaldi, Andrea Trabucco (UG).

In addition, subgroup meetings took place at the fringes of the periodic plenary councils or through specific cross-visits. Specifically, exchange of persons for a short or longer period, including transfer of software as part of this, allowed a direct transfer of the results among partners and an efficient way for integration.

### • WP1/WP2/WP3 Specific subgroup meetings

Chemnitz, Germany 02-09/01/2010

K.U.Leuven: Nikolay Chumerin

WWU: Frederik Beuth, Fred Hamker.

Discussed topics: (1) Integration of vergence with version control based on attention; (2) Details of ray-tracer usage for object recognition based attention.

Decisions: Definition of an architectural model to simulate vergence and version control in the presence of the attention signal: building blocks and expected functionalities.

Milan, Italy 13-14/01/2010

K.U.Leuven: Nikolay Chumerin, Marc Van Hulle

WWU: Frederik Beuth, Fred Hamker.

UG: Agostino Gibaldi, Andrea Trabucco, Manuela Chessa, Andrea Canessa, Giorgio Cannata, Silvio P. Sabatini

Discussed topics: (1) Further integration of vergence with version control based on attention (VVCA); (2) Integration with robotic setup(s); (3) Discussion about different renderers.

Decisions: A technical visit to Genoa was planned in order to migrate all parts of the VCCA system on one common platform (Simulink).

Genoa, Italy 14-20/03/2010 K.U.Leuven: Nikolay Chumerin WWU: Frederik Beuth. UG: Agostino Gibaldi, Andrea Trabucco, Manuela Chessa, Andrea Canessa, Giorgio Cannata, Silvio P. Sabatini Discussed topics: VCCA system - (1) Integration of all modules in Simulink; (2) The image processing pipeline (simple space-variant strategy for vergence and version).

Decisions: Interfaces among modules; I/O data format; Simulation parameter setting; Plan of vergence test and version with attention tests.

### WP4/WP5 Specific subgroup meetings

Meeting: Bologna, 20/04/2009 UNIBO: Patrizia Fattori, Rossella Breveglieri, Claudio Galletti UJI: Eris Chinellato Discussed topics: pre-review meeting; data analysis; common publications. Decisions: agree on review meeting presentation; task assignment for publications and data analysis.

Meeting: Curonian Spit, 22/05/2009

WWU: Markus Lappe UNIGE: Silvio Sabatini UJI: Eris Chinellato Discussed topics: WP4 modelling issues. Decisions: use of RBF representations; scheme of learning framework; final experimental setup.

Meeting: Chemnitz, 15-24/11/2009 WWU: Fred Hamker, Frederik Beuth, Arnold Ziesche UJI: Marco Antonelli Discussed topics: modelling goals and techniques. Decisions: decisions on modelling details; test of different computational techniques to check suitability to goals and resources of WP4.

### WP1/WP5 Specific subgroup meeting

Bologna, 13 May 2009 UG: Silvio Sabatini, Manuela Chessa UNIBO: Rossella Breveglieri Actions: The 3D laser scanner is used to acquire range data of the scene viewed by the monkey during neurophysiological recordings.

Milan, 14/01/2010 UG: Silvio Sabatini, Andrea Canessa WWU: Markus Lappe, Katharina Havermann Discussed topics: Analysis of results of specific experiments for measuring the vergence/version components in humans during scanning and reactive saccades in depth.

The following visits took place during the first reporting period:

- Marco Antonelli (UJI) visited Chemnitz's lab of prof. Hamker' (WWU) on 15-24 Nov 2009 to discuss on the model definition in Tasks 4.2 and 4.3.
- Nickolay Chumering (K.U.Leuven) visited Chemnitz's lab of prof. Hamker' (WWU) on 2-9 Jan 2010 for WP2-WP3 integration
- Nickolay Chumering (K.U.Leuven) and Fredeirk Beuth (WWU) visited UG on 14-20 Mar 2010 for WP1-WP2-WP3 integration

### 5.2 Dissemination and use of the knowledge

### **Project web-site**

The EYESHOTS web-site is continuously updated and can be viewed at <u>http://www.eyeshots.it</u> A written description of this in this report appears obsolete and is omitted here.

### **List of publications**

In the second reporting period (months 13-24) a total of 10 journal papers have been published or accepted for publication, and 21 conference contributions. Five papers are currently under revision to peer reviewed journals. As the whole, since the beginning of the EYESHOTS project, the research activities conducted by the Consortium yield to 21 journal publications and 24 conference contributions. 23% of all publications are with authors from different partners of EYESHOTS indicating that the consortium is working in a cooperative way.

Journal papers [J] (the → symbol marks joint publications)

- [J1] Canessa A., Sabatini S.P., Solari F. (2010) Visuo-motor constraints in binocular eye coordination: optimization theories revisited. Journal of Vision, submitted.
- [J2] → Chumerin, N., Gibaldi, A., Sabatini, S.P., Van Hulle, M.M. (2010) Learning eye vergence control from a distributed disparity representation. International Journal of Neural Systems, accepted with revision.
- [J3] Fattori P., Pitzalis S., Galletti C., (2009) The cortical visual area V6 in macaque and human brains. Journal of Physiology - Paris Vol.103:88-97
- [J4] → Galletti C., Breveglieri R., Lappe M., Bosco A., Ciavarro M., Fattori P. (2010) Covert shift of attention modulates the ongoing neural activity in a reaching area of the macaque dorsomedial visual stream. Submitted.
- [J5] Gibaldi A., Chessa M., Canessa A., Sabatini S.P., Solari F. (2010) A cortical model for binocular vergence control without explicit calculation of disparity. Neurocomputing Vol. 73:1065-1073
- [J6] Hamker, F.H., Zirnsak, M., Ziesche, A., Lappe, M. Computational models of spatial updating in peri-saccadic perception. Philos. Transac. Royal. Soc. Lond., submitted
- [J7] Havermann, K., Lappe, M. The influence of the consistency of post-saccadic visual error on saccadic adaptation. J. Neurophysiology, in press.
- [J8] Solari F., Chessa M., Sabatini S.P. (2010) Design strategies for direct multiscale and multiorientation visual processing in the log-polar domain. Pattern Recognition Letters, submitted.
- [J9] Vitay, J., Fix, J., Beuth, F., Schroll, H., Hamker, F.H. (2009) Biological Models of Reinforcement Learning. Künstliche Intelligenz, Vol 3:12-18.
- [J10] Vitay, J., Hamker, F.H. A computational model of the influence of basal ganglia on memory retrieval in rewarded visual memory tasks. Submitted.
- [J11] Zimmermann, E., Lappe, M. (2009) Mislocalization of flashed and stationary visual stimuli after adaptation of reactive and scanning saccades. Journal of Neuroscience 29(35):11055-11064.
- [J12] Zimmermann, E., Lappe, M. Motor Signals In Visual Localization. (2010) Journal of Vision, in press.
- [J13] Zirnsak, M, Hamker, F.H. Attention Alters Feature Space in Motion Perception. (2010) J Neuroscience, in press.
- [J14] Zirnsak, M., Lappe, M., Hamker, F.H. (2010) The spatial distribution of receptive field changes in a model of peri-saccadic perception: predictive remapping and shifts towards the saccade target. Vision Research, in press.
- [J15] Chinellato E., Antonelli, M., del Pobil, A. (2010) Visuomotor spatial awareness through concurrent reach/gaze actions. Accepted in Transactions on Autonomous Mental Development.

Worthy to mention also:

[J16] > Sabatini, S.P., Gastaldi, G., Solari, F., Pauwels, K., Van Hulle M.M., Diaz, J., Ros, E., Pugeault, N., and Krueger, N. Compact harmonic code for early vision based on anisotropic frequency channels. Computer Vision and Image Understanding, in press (2010).

a joint UG-K.U.Leuven publication, matured from a previous cooperative research activity, which reports on important grounding concept for the vision architectures developed in the EYESHOTS project.

### <u>Conference papers [C] (the $\rightarrow$ symbol marks joint publications)</u>

- [C1] Chessa M., Sabatini S.P. and Solari F. (2009) A fast joint bioinspired algorithm for optic flow and two-dimensional disparity estimation. In Proc. International Conference on Computer Vision Systems (ICVS'09), Liege, Belgium, October 2009.
- [C2] → Chumerin, N., Gibaldi, A., Sabatini, S.P., and Van Hulle, M.M. (2009) Convolutional Network for Vergence Control. 2nd International Symposium on Applied Sciences in Biomedical and

Communication Technologies (ISABEL 2009) (Bratislava, Slovak Republic, November 24-27, 2009), (published electronically doi: 10.1109/ISABEL.2009.5373674) pp. 1-6.

- [C3] Fattori P., Galletti C. (2009) Neuronal processes of action in the superior parietal lobule of primate brain. Frontiers in Neuroscience. Conference Abstract: 3rd Mediterranean Conference of Neuroscience . doi: 10.3389/conf.neuro.01.2009.15.025.
- [C4] Sabatini S.P. (2009) Early perception-action cycles in binocular robot vision. Frontiers in Neuroscience. Conference Abstract: 3rd Mediterranean Conference of Neuroscience. doi: 10.3389/conf.neuro.01.2009.16.028
- [C5] Gibaldi A., Chessa M., Canessa A., Sabatini S.P., Solari F. (2009) Reading binocular energy population codes for short-latency disparity-vergence eye movements. 13th Int. Conference on Cognitive and Neural Systems, Boston, MA, USA, May 27-30, 2009.
- [C6] Chessa M., Canessa A., Gibaldi A., Solari F., Sabatini S.P. (2009) Embedding fixation constraints into binocular energy-based models of depth perception. 13th Int. Conference on Cognitive and Neural Systems, Boston, MA, USA, May 27-30, 2009.
- [C7] → Chinellato E., Grzyb1 B. J., Fattori P., del Pobil A. P., (2009) Toward an Integrated Visuomotor Representation of the Peripersonal Space in: Bioinspired Applications in Artificial and Natural Computation, 2:314-323. Springer-Verlag, Berlin-Heidelberg.
- [C8] → Chinellato E., Grzyb B. J., Marzocchi N., Bosco A., Fattori P., del Pobil A. P., (2009) Eye-Hand Coordination for Reaching in Dorsal Stream Area V6A: Computational Lessons in: Bioinspired Applications in Artificial and Natural Computation, 2:304-313. Springer-Verlag, Berlin-Heidelberg. The paper received the "José Mira award to the best promising paper" submitted to IWINAC 2009.
- [C9] Fattori, P., Bosco, A., Breveglieri, R., Marzocchi, N., & Galletti, C. (2009). Visual and somatosensory guidance of reaching movements in the medial parieto-occipital cortex of the macaque [Abstract]. Journal of Vision, 9(8):697, 697a, http://journalofvision.org/9/8/697/, doi:10.1167/9.8.697.
- [C10] > Breveglieri R., Bosco A., Canessa A., Fattori P., Sabatini S. P. (2009) Evidence for Peak-shaped Gaze Fields in Area V6A: Implications for Sensorimotor Transformations in Reaching Tasks. in: Bioinspired Applications in Artificial and Natural Computation, 2:324-333. Springer-Verlag, Berlin-Heidelberg.
- [C11] Gibaldi A., Chessa M., Canessa A., Sabatini S.P., Solari F. (2009) A neural model for binocular vergence control without explicit calculation of disparity. 11th European Symposium on Artificial Neural Networks (ESANN'09), Bruges, Belgium, 22-24 April, 2009.
- [C12] → Bosco A., Breveglieri R., Chinellato E., Galletti., C Fattori P., (2009) Influence of visual feedback on reaching activity in parietal area V6A. Program No. 355.20/Z1. 2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2009. Online.
- [C13] > Breveglieri R., Fattori P., Bosco A., Lappe M., Galletti C., (2009) Covert spatial displacements of the spotlight of attention modulates neuronal activity in area V6A of the medial parieto-occipital cortex of the monkey. Program No. 758.16/AA15. 2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2009. Online.
- [C14] Chessa M., Sabatini S.P., Solari F. (2009) A virtual reality tool for disparity statistics in the peripersonal space. Perception 38 ECVP Abstract Supplement, p.32
- [C15] Canessa A., Sabatini S.P., Solari F. (2009). Do eyes move as a tilt-pan like system? Physical plausibility of the coplanarity of the fixation planes. Perception 38 ECVP Abstract Supplement, p.170
- [C16] Sabatini S.P., Chessa M., Solari F. (2009). How embedding prior constraints improves coding and decoding strategies in a neural distributed architecture for depth perception. Perception 38 ECVP Abstract Supplement, p.28
- [C17] → Chumerin, N., Gibaldi, A., Sabatini, S.P., and Van Hulle, M.M. (2010) Two neural models for instantaneous vergence control. 4<sup>th</sup> Int. Conf. On Cognitive Systems (CogSys 2010), Zurich, January 27-28, 2010
- [C18] Chessa M., Sabatini S.P. and Solari F. (2010) A Joint Bioinspired Architecture for Fast Optic Flow and Two-dimensional Disparity Estimation. 4<sup>th</sup> Int. Conf. On Cognitive Systems (CogSys 2010), Zurich, January 27-28, 2010

- [C19] Chessa M., Sabatini S.P. and Solari F. (2010) A Virtual Reality Tool for Benchmarking Active Stereo Vision Systems in the Peripersonal Space. 4<sup>th</sup> Int. Conf. On Cognitive Systems (CogSys 2010), Zurich, January 27-28, 2010.
- [C20] Antonelli M., Chinellato E., del Pobil, A.P. (2010) Visuomotor spatial awareness through concurrent reach/gaze actions. 4<sup>th</sup> Int. Conf. On Cognitive Systems (CogSys 2010), Zurich, January 27-28, 2010.
- [C21] Gibaldi A., Canessa A., Chessa M., Sabatini S.P., Solari F. Read-out rules for short-latency disparity-vergence responses from populations of binocular energy units: the effect of vertical disparities. Submitted to 33th European Conference on Visual Perception (ECVP'10), Lausanne, 22-26 August, 2010.
- [C22] Volcic, R., Lappe, M. Sudden hand movements enhance gaze cueing, VSS Meeting 2010.

### In preparation:

- Bosco A., Breveglieri R., Chinellato E., Galletti., C Fattori P. Complex modulation of reaching activity by visual feedback in parietal area V6A
- Chessa M., Sabatini S.P. and Solari F. *Neuronal paradigms for flexible and robust phase-based vision algorithms: applications to stereo and motion robot perception*
- Schnier, F., Zimmermann, E., Lappe, M. Adaptation and mislocalization fields for saccadic outward adaptation in humans.

### **Other dissemination activities**

- Presentation of the project at FP6-Project DRIVSCO Workshop. The workshop took place on May 20-24, 2009 at the Hotel "Azuolynas", Juodkrante, Lithuania. Title of the workshop was "European Workshop in Advanced Predictive Sensor-Motor Control".
- Dr. Michela Gamberini and Dr. Annalisa Bosco as Speakers at 2nd annual meeting Primate Neurobiology, March, 23-25, 2009, Gottingen -Tubingen, Germany
   - Gamberini Michela, Passarelli Lauretta, Fattori Patrizia, Bakola Sophia, Galletti Claudio: "Cortical
  - Gamberini Michela, Passarelli Lauretta, Fattori Patrizia, Bakola Sophia, Galletti Claudio: "Cortical circuits involving the macaque medial parietooccipital cortex", 24/03/2009

- Bosco Annalisa, Breveglieri Rossella, Marzocchi Nicoletta, Galletti Claudio, Fattori Patrizia: "Visual influence on reaching activity in medial parietooccipital cortex", 24/03/2009

### Events organized by the project or planned for the next period

The Summer School took place, as planned, on September 14-18, 2009 at the Hotel Intur Bonaire, Benicàssim (Spain), within the the scheme of the International UJI Robotics Summer School (IURS) of the UJI partner. It consisted of four full days of lectures and an additional day of practical laboratory sessions that were developed entirely in the Campus of Jaume-I University. [http://www.robot.uji.es/lab/plone/iurs/iurs09/]

*Goal:* to exchange knowledge between the participants of the EYESHOTS project and the invited experts in the field.

*Program:* The school, titled "Visuomotor interaction" was highly interdisciplinary, covering topics that span Biorobotics, Neuroscience, Vision Science and Computer Vision. The program was articulated in twelve lectures. Among them, 7 were given by the principal investigators of the consortium, and 5 given by three invited speakers:

- Prof. Casper J. Erkelens, Head of the Department Physics of Man, Helmholtz Institute, Utrecht University, The Netherlands. [http://www.phys.uu.nl/~wwwpm/PercMot/erkelens.html]
- Prof. Michele Rucci, Director of the Active Perception Laboratory, Boston University, US. [http://aplab.bu.edu/Michele/]
- o Dr. Rosana I. Matuk Herrera, Universidad de Buenos Aires, Argentina.

	Sunday 13	Monday 14	Tuesday 15	Wednesday 16	Thursday 17	Friday 18
9:00-9:30		Welcome	Poster session	BUS to University		
9:30-10:45		Active perception	Vision with	Technical session	Interaction of	Coding of depth
		in biological and	jittering eyes		monocular and	in the oculomotor
		artificial systems	M. Rucci		binocular vision	system
		M. Rucci			C.J. Erkelens	C.J. Erkelens
10:45-11-15		Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
11:15-12:30		Neural encoding	The dorso-medial	Technical session	Tactile	Anthropomorphic
		of visual space	visual stream in		exploration of the	robot heads
		and motion	visuomotor		near space	G. Cannata
		C. Galletti	interactions		R. Matuk	
			P. Fattori			
12:45-13:45		Lunch	Lunch	Lunch	Lunch	Lunch
14:30-15:45		Learning from	3D dynamic	Technical session		Closing ceremony
		examples	perception in			
		M. Van Hulle	humans and			
			machines			
			S.P. Sabatini		Free afternoon for	
15:45-16:15	Reception at the	Coffee Break	Coffee Break	Coffee Break	social and sport	
	Bonaire Hotel				activities	
116:15-17:30		Eye movements in	Attentive	Technical Session		
		spatial exploration	cognitive agents			
		and representation	F. Hamker			
		M. Lappe				
	19:00-21:00				20:00-24:00	
	Welcome				Dinner with	
	cocktail				Karaoke party	

*Participants:* The whole EYESHOTS consortium participated with students and post-doc:

Karl Pauwels (K.U.Leuven), Nikolay Chumerin (K.U.Leuven), Frederik Beuth (WWU), Jan Wiltschut (WWU), Mark-André Voss (WWU), Robert Volcic (WWU), Katharina Havermann (WWU), Venja Wulff (WWU), Giacomo Placenti (UNIBO), Konstantinos Chatzidimitrakis (UNIBO), Agostino Gibaldi (UG), Andrea Canessa (UG), Manuela Chessa (UG), Beatriz Leon (UJI), Marco Antonelli (UJI), Mario Prats (UJI).

Four applications were selected from outside the consortium: Cem Karaoguz (*Honda Research Institute Europe*), Daniela Pamplona (*Johann Wolfgang Goethe University*), Sebastian Schulz (*Universität Karlsruhe*), Yan Wu (*Imperial College London*).

A poster session was organized to allow EYESHOTS students and postdocs to present the results achieved so far in the project.

*Discussions:* Excellent environment was provided for discussions, where participants of the EYESHOTS project were exchanging ideas and experience with the invited speakers, in the field of active perception, cognitive vision, neural correlates of visuomotor interaction and binocular vision, as well as sharing experience with the guest students.

We are very happy to be able to say that the participants had highly praised this event as being very informative and providing good possibilities for scientific exchange. Lecturers have thanked us for this nice event and the good organization. Lecturers made available on the IURS Web site, <a href="http://www.robot.uji.es/lab/plone/iurs/iurs09/">http://www.robot.uji.es/lab/plone/iurs/iurs09/</a> (with a link from the EYSHOTS website) their presentations, and videos are available on demand.

 Prof. Claudio Galletti (UNIBO): organization and Chair of the Symposium – "Neuronal processes of attention and action and their use in artificial intelligent systems", 3rd Mediterranean Conference of Neuroscience, 13 - 16 December 2009, Alexandria, Egypt S06: 14/12/09. 15:00 Hall A

- Suliann Ben-Hamed, Bron, France: Differential contributions of parietal and frontal cortices to perceptual decision and attention control

- Patrizia Fattori, Bologna, Italy: Neuronal processes of action in the superior parietal lobule of primate brain
- Leonardo Fogassi, Parma, Italy: The role of inferior parietal and premotor cortices in coding action goals
- Silvio Sabatini, Genova, Italy: Early perception-action cycles in binocular robot vision

### List of exploitable results

None in the second period.

## 6 Explanation of the use of the resources

## 6.1 Justification of major cost items and resources

# *The following tables list the major cost items (one table by participant).*

TABLE 6.1			TING AND OTHER MAJOR DIRECT COST ITEMS 1 (UG) FOR THE PERIOD
Work Package	Item description	Amount	Explanations
All	Personnel costs	167.877	Costs of the worked person months for the permanent staff working on the project and of two post-doctoral students (Manuela Chessa and Andrea Trabucco). Perla Maiolino (PhD) also worked on the project, but she has her own funding. Agostino Gibaldi and Andrea Canessa also participated to the work, but they have their own funding.
WP1, WP2, WP6, , WP7,WP8	Major travel costs	9.179	<ul> <li>Major travel costs include:</li> <li>Participation to conference CCNS'09 Boston, USA 26</li> <li>May-2 June 2009 - S.Sabatini, M. Chessa, A. Giabaldi,</li> <li>A. Canessa (€ 3.368)</li> <li>Participation to conference ECVP'09 Regensburg, D,</li> <li>23-28 Aug 2009 - S. Sabatini, M. Chessa, A. Canessa (€ 1.893)</li> <li>Technical meeting and participation to School</li> <li>IURS'09 Castellon, E 13-19 Sep 2009 - S. Sabatini, G.</li> <li>Cannata, M. Chessa, A. Gibaldi, A. Canessa (€ 2.760)</li> <li>Participation to conference CogSys'10 Zurich, CH</li> <li>26-28 Jan 2010 - S. Sabatini, A. Trabucco, P. Maiolino (€1.158)</li> </ul>
WP1, WP2, WP6, , WP7,WP8	Other travel costs	2.206	Travel costs also include: - Participation to conference ESANN '09 Bruges, B, 21-26 Apr 2009 - A. Gibaldi - Participation to Technical meeting Bologna, IT, 13 May 2009 - S. Sabatini, M. Chessa - Participation to 3rd Mediterranean Conference of Neuroscience Alexandria, Egypt 13-15 Dec 2009 - S. Sabatini - Participation to Month 24 meeting Milano, IT, 13-14 Jan 2010 - S.Sabatini, M. Chessa, A. Giabaldi, A. Canessa, G. Cannata, A. Trabucco
WP1, WP2, WP3	Major equipment costs	6.000	The main equipment purchased for the project is a 3D laser scanner (Konica Minolta Vivid 910) - Total cost: € 30,000.00, depreciation € 6.000.
WP1, WP2, WP3	Other equipment costs	3.792	Other minor pieces of equipment, such as PC, monitor, multifunction printer, projector have also been imputed to the project, according to their use.
WP6	Remaining direct costs	8.481	<ul> <li>Major consumable costs include:</li> <li>Catering and coffee breaks during the EYESHOTS</li> <li>1st review meeting in Sestri Levante, Italy, 21-22 Apr</li> <li>2009 - Hotel Vis a Vis (€ 1.089)</li> <li>Meeting room rental - EYESHOTS 1st review</li> <li>meeting in Sestri Levante, Italy, 21-22 Apr 2009 - Hotel</li> <li>Vis a Vis (€ 800)</li> <li>Working dinner during the EYESHOTS M24 meeting</li> <li>in Milano, Italy, 13-14 Jan 2010 - Ristorante La</li> <li>Carbonaia (€ 918)</li> <li>Conference fee School IURS'09 Castellon E 13-19</li> <li>Sep 2009 - M. Chessa (€ 650).</li> <li>Other minor costs for conferences, associations, books, posters, ect. have also been imputed to the project, according to their use.</li> </ul>
тот	I TAL DIRECT COSTS <sup>®</sup>	197.535	

T

	FOR BENEFICIARY 2 (WWO)FOR THE FERIOD							
Work Package	Item description	Amount	Explanations					
WP3 / WP5	Personnel costs	178.049	Permanent staff: € 50.869 Markus Lappe, Fred Hamker <u>Hired staff</u> : € 127.180 Katharina Havermann, Robert Volcic, Svenja Wulff, Dirk Calow, Jan Wiltschut, Mark-Andre Voss, Jeremy Fix, Julien Vitay.					
WP5.3 WP5.4	Major equipment costs	8.100	The main equipment purchased for the project are: - Eyetracker SR Research - Total cost: € 28.000,00, depreciation € 5.600 - Eyetracker Arrington - Total cost: € 7.501,34 depreciation € 2.500					
WP5.3 WP5.4	Other equipment costs	6.340	Other minor pieces of equipment, such as Computer Bense Systeme, Camcorder Mitfactory, have also been imputed to the project, according to their use.					
WP3, WP5	Major travel costs	10.875	Major travel costs include: - Participation to conference VSS Naples, USA 6-16 May 2009 - R. Volcic (€ 1.496) - Participation to Summer School Benicasim, E 13-19 Sep 2009 - M. Lappe, R. Volcic, K. Havermann, J. Wiltschut, S. Wulff, M. A. Voss, F. Hamker (€ 6.672) - Participation to conference ECEM GB Southampton 23-27 Aug 2009 - F. Hamker, Fix Jeremy (€ 1.612) - Participation to conference ECVP Regensburg, D, 23-29 Aug 2009 - R. Volcic, K. Havermann (€ 1.095)					
WP3, WP5	Other travel costs	1.225	Travel costs also include: - Participation to Review Meeting, Sestri-Levante IT, 20-23 Apr 2009 - M. LappeF. Hamker - Participation to BCCN Frankfurt, D, 30 Sep 2009 - 02 Oct 2009 - J. Wiltschut, M. A. Voss					
WP5	Remaining direct costs	5.098	Remaining direct costs include consumables costs: - Meeting costs Münster - M. Lappe (€ 1.224) - Experiments (€ 600) - Experiments (€ 600) Other minor costs for experiments and meetings have also been imputed to the project, according to their use.					
тот	AL DIRECT COSTS <sup>6</sup>	209.687						

### TABLE 6.1b PERSONNEL, SUBCONTRACTING AND OTHER MAJOR DIRECT COST ITEMS FOR BENEFICIARY 2 (WWU) FOR THE PERIOD

# TABLE 6.1c PERSONNEL, SUBCONTRACTING AND OTHER MAJOR DIRECT COST ITEMSFOR BENEFICIARY 3 (UNIBO) FOR THE PERIOD

Work Package	Item description	Amount	Explanations
WP4,WP5, WP7, WP8	Personnel costs	90.838	Personnel costs necessary for the realisation of the second year project activities include 59 person months, of which 4 of permanent personnel and 55 of temporary personnel devoted to the project.
WP4, WP5, WP7, WP8	Major travel costs	12.076	<ul> <li>Major travel costs include:</li> <li>Participation of 2 people, for dissemination purposes, to the VSS 2009 held in Naples, Florida USA, in May 2009 (€ 3.740)</li> <li>Participation for dissemination purposes of 2 people to the congress SFN 2009 in Chicago (USA, October 2009), (€ 2.568)</li> <li>Participation for dissemination purposes 2 people to the Third Mediterranean Conference (Alessandria, Egypt, December 2009), (€ 2.907)</li> <li>Participation of 2 people for dissemination purposes at the Gottingen conference held on the 22/03/09, (€ 1.102)</li> <li>Participation to IURS Summer School (Benicassim, Spain, Eyeshots co-organiser): 2 people as speakers to the IURS Summer School and two people as trainees (€ 1.759)</li> </ul>
WP4, WP5, WP7, WP8	Other travel costs	2.192	Travel costs also include: - Participation of 3 people at the Project Meeting in Sestri Levante of the 21/04/09 and of 4 people to the project meeting held in Milan on the 13-15/01/2010 - Participation for dissemination purposes of 1 person to the Conference IWINAC 09 (Santiago de Compostela, June 2009),
WP5	Major equipment costs	7.970	The reported equipment costs take into consideration the depreciation rules applicable by the beneficiary and the specific use for the project. The main equipment purchased for the project are an ETL-200 primate eye tracking lab (depreciation $\in$ 5.720, total cost $\in$ 17.160), an infrared TV camera for monitoring arm (depreciation $\in$ 587, total cost $\in$ 8.800) and a primate chair used in electrophysiological experiments (depreciation $\in$ 1.663, total cost $\in$ 8.315).
WP5	Other equipment costs	7.100	Other minor pieces of equipment, such as precision balance and impedance test device, have also been imputed to the project, according to their use.
WP4, WP5, WP7, WP8	Remaining direct costs	23.026	Remaining direct costs include consumables costs: lab materials (fluorescent lamps, glasses, chemicals etc. € 10.816), electrodes and microelectrodes (€ 4.465), primates (€ 5.000), 2 participation fees to IURS '09 Summer School University Jaume Castellon E (€ 1.004). Other minor costs for lab consumables and for the dissemination of project results (fees for congress and association, ect.) have also been imputed to the project, according to their use.
TOT	AL DIRECT COSTS6	143.202	

TABLE 6.1			ING AND OTHER MAJOR DIRECT COST ITEMS 4 (UJI) FOR THE PERIOD
Work Package	Item description	Amount	Explanations
WP1, WP4, WP5, WP7, WP8	Personnel costs	89.083	Permanent staff: € 22.643,53 Angel Pascual del Pobil Enric Cervera <u>Hired staff</u> : € 66.439,64 Juan Carlos García Eris Chinellato
WP1, WP4, WP5	Major equipment costs	5.031	The equipment purchased for the project is: Robotic head Model: TO40 HUMAN-LIKE STEREOVISION SYSTEM Company: Robosoft . Total cost: € 34.999,10, depreciation € 5.031
WP8	Major travel costs	3.718	Major travel costs include: - Participation to conference CoGSYS '09 Zurich, CH, 26 Jan - 01 Feb 2010 - Angel P. del Pobil (€ 1.034) - Participation to Review Meeting, Sestri-Levante IT, 20-23 Apr 2009 - Angel P. del Pobil, Eris Chinellato (€ 1.316) - Participation to Month 24 meeting Milano, IT, 13-14 Jan 2010 - Angel P. del Pobil, Eris Chinellato, Beata Joanna Grzyb (€ 1.369)
WP8	Other travel costs	1.158	Travel costs also include: - Participation to conference IWINAC '09 Santiago, ES, 18-25 Jun 2009 - Eris Chinellato - Participation to Workshop Aldebaran Paris, FR, 02- 05 Feb 2010 - Beata Joanna Grzyb
	Remaining direct costs	472	Remaining direct costs include minor costs for consumables: fees for conferences and sending of reports
TOTAL	DIRECT COSTS <sup>6</sup>	99.462	

# TABLE 6.1d PERSONNEL, SUBCONTRACTING AND OTHER MAJOR DIRECT COST ITEMS

# TABLE 6.1e PERSONNEL, SUBCONTRACTING AND OTHER MAJOR DIRECT COST ITEMSFOR BENEFICIARY 5 (K.U. Leuven) FOR THE PERIOD

Work Package	Item description	Amount	Explanations
WP2	Personnel costs	108.844	Hired personnel: Filip Deleus, junior researcher (7PM), Karl Pauwels, senior researcher (12PM) Permanent staff: none
WP2	Major travel costs	9.615	<ul> <li>Major travel costs include:</li> <li>Participation to IURS Summer School on Visuomotor Interaction, Valencia, ES 13-18 Sep 2009 - N. Chumerin, M. Van Hulle, K. Pauwels (€ 3.536) The cost is higher than 1000 Euro/person since this was a 1 week summerschool, and EYESHOTS M18 meeting</li> <li>Participation to WP2 planning, Genoa, IT 14 Apr 2009 - N. Chumerin, M. Van Hulle, K. Pauwels (€ 1.399)</li> <li>Participation to Review meeting, Sestri-Levante, IT 20-23 Apr 2009 M. Van Hulle, N Chumerin, K Pauwels (€ 1.241)</li> <li>Participation to 7th International Workshop on Self- Organizing Maps St. Augustine, FL, USA , 8-10 Jul 2009 - M. Van Hulle (€ 2.405). The cost was higher than 1000 Euro/person since this was a 5 day stay, in the USA (including hotel, flights)</li> <li>Participation to M24 Eyeshots meeting, Milan, IT 13- 15 Jan 2010 - N. Chumerin, K. Pauwels, M. Van Hulle (€ 1.033)</li> </ul>
WP2	Other travel costs	1.437	<ul> <li>Travel costs also include:</li> <li>Participation to Meeting WP2 ~ WP3 Chemnitz, DE,</li> <li>5-9 Jan 2010 - N. Chumerin</li> <li>Participation to Programming workshop Odense, DK,</li> <li>3-16 May 2009 - K. Pauwels</li> <li>Exchange visit Prof. N. Kruger's labo in the Maersk Mc Kinney Moller Institute Exchange visit Prof. N.</li> <li>Kruger's labo in the Maersk Mc Kinney Moller Institute</li> <li>N. Chumerin</li> <li>Participation to seminar + collection of experimental data Brest, Belarus, 17 dec 2009 - 4 jan 2010 - N.</li> </ul>
WP2	Remaining direct costs	1.200	Remaining direct costs include consumables costs: - Lecturer (Prof. A. Ultsch) Seminar ESOM + Visualization tools (€ 500) Other minor costs for PC hardware data storage, Graphical Processing Unit: ASUS nVidia GeForce ENGTX295 1,75GB, membership M. Van Hulle: INT'L NEURAL NETW, membership M. Van Hulle: SOCIETY FOR NEURO, catering have also been imputed to the project, according to their use.
TOT	TAL DIRECT COSTS <sup>6</sup>	121.096	

### 6.2 Budgeted versus Actual Costs

Tabular overview of budgeted costs and actual costs, by beneficiary and by major cost item including personnel. The budgeted costs are taken from the Annex I.

Cost Bu	dget Follow-up Tab	le			*) te	otal budge	t figures - not	EC fundi	ng
	Contract n. 217077	Acronym: EY	ESHOTS		Date	Date:			
				ACTU	AL COSTS	(EUR)		Pct.	Remaining
BENEFI CIARY	TYPE of EXPENDITURE (as defined by	BUDGET	Period 1	Adjust ment P1	Period 2	Perio d 3	Total	Total	Budget (EUR)
	participants)	е	a1	b1	c1	d1	e1	a1+b1 +c1+d 1/e	e-e1
Part. 1	Total Person-Month	117	38,44		43,68	0.00	82,12	70%	34,88
UG	Personnel costs Travel costs Durable Equipment	414.029,88 36.000,00	169.310 9.390	5.844	167.877 11.385	0	343.031 20.775	83% 58%	70.998,88 15.225,00
	(Depreciation) Subcontracting/Audit	33.930,28 1.863,38	4.005 0		9.792 0	0	13.797 0	41% 0%	20.133,28 1.863,38
	Other costs ('the rest')	39.788,89	4.456		8.481	0	12.937	33%	26.851,89
	Overheads	314.249,43	112.296	3.506	118.521	0	234.323	75%	79.926,43
	Total Costs	839.861,86	299.457	9.350	316.056	0	624.863	74%	214.998,86
Part. 2	Total Person-month	103,00	32,00		40,00	0.00	72	70%	31,00
WWU	Personnel costs Travel costs Durable Equipment	453.200,00 29.000,00	143.409 8.130		178.049 12.100	0 0	321.458 20.230	71% 70%	131.742,00 8.770,00
	(Depreciation) Subcontracting/Audit	38.000,00 2.000,00	10.144 0		14.440 0	0	24.584 0	65% 0%	13.416,00 2.000,00
	Other costs ('the rest')	2.200,00	4.450	-1.135	5.098	0	8.413	382%	-6.213,00
	Overheads	313.440,00	99.679	-681	125.812	0	224.810	72%	88.630,00
	Total Costs	837.840,00	265.812	-1.816	335.499	0	599.495	72%	238.345,00
Part. 3	Total Person-month	96,00	28,00		59,00	0	87	91%	9,00
UNIBO	Personnel costs Travel costs Durable Equipment	196.800,00 26.360,00	63.260 2.392	335	90.838 14.268	0 0	154.433 16.660	78% 63%	42.367,00 9.700,00
	(Depreciation)	26.000,00	18.015	288	15.070	0	33.373	128%	-7.373,00
	Subcontracting/Audit Other costs ('the rest')	0,00 36.000,00	0 15.462	-28	0 23.026	0	0 38.460	0% 107%	0,00 -2.460,00
	Overheads	171.096,00	59.477	-20 357	85.921	0	145.755	85%	25.341,00
	Total Costs	456.256,00	158.606	952	229.123	0	388.681	85%	67.575,00
Part. 4	Total Person-month	52,00	15,66	-1,79	17,07	0.00	30,94	60%	21,06
UJI	Personnel costs Travel costs Durable Equipment	257.712,00 27.000,00	63.961 9.086		89.083 4.876	0 0	153.044 13.962	59% 52%	104.668,00 13.038,00
	(Depreciation) Subcontracting/Audit	20.000,00	0		5.031 0	0	5.031	25% 0%	14.969,00
	Other costs ('the rest') Overheads	2.979,00 4.888,80 185.760,48	1.995 45.023		472 59.677	0 0	0 2.467 104.700	50% 56%	2.979,00 2.421,80 81.060,48
	Total Costs	498.340,28	120.065		159.139	0	279.204	56%	219.136,28
Part. 5	Total Person-month	12,00	4,00		19,00	0.00	23,00	48%	24,50
K.U. Leuven	Personnel costs Travel costs Durable Equipment	309.552,00 10.000,00	23.936 6.289	415	108.844 11.052	0 0	132.780 17.756	43% 178%	176.772,00 -7.756,00
	(Depreciation)	5.000,00	4.175		0	0	4.175	84%	825,00
	Subcontracting/Audit	1.000,00	0		0	0	0	0%	1.000,00
	Other costs ('the rest')	9.782,00	0	249	1.200 72.657	0 0	1.200 93.545	12% 47%	8.582,00 107.055,40
	Overheads Total Costs	200.600,40 535.934,40	20.639 55.039	664	193.753	0	249.456	47% 47%	286.478,40
TOTAL	Total Person-month	380,00	118,10	-1,79	178,75	0.00	295,06	71%	120,44
	Personnel costs Travel costs Durable Equipment	1.631.293,88 128.360,00	463.876 35.287	6.179 415	634.691 53.681	0 0	1.104.746 89.383	68% 70%	526.547,88 38.977,00
	(Depreciation)	122.930,28	36.339	288	44.333	0	80.960	66%	41.970,28
	Subcontracting/Audit	7.842,38	0	0	0	0	0	0%	7.842,38
	Other costs ('the rest') Overheads	92.659,69 1.185.146,31	26.363 337.114	-1.163 3.431	38.277 462.588	0 0	63.477 803.133	69% 68%	29.182,69 382.013,31
	Total Costs	3.168.232,54	898.979	9.150	1.233.570	0	2.141.699	<b>68%</b>	1.026.533,54

### Notes:

(1) Table 6.2 includes a column "Adjust. P1" where the adjustments for the first reporting period are reported for each cost category. The detailed justifications are listed here below, for each partner:

**UG:** The adjustment concerns personnel costs, and specifically refers to the valorization of the hours spent on the project by permanent personnel in the first 2 months of 2009 with the correct 2009 personnel costs. By the time of the 1st period reporting, we didn't have the updated hourly rates, therefore we used the one of 2008.

**WWU:** adjustment for consumable material ( $\in 1.135 + \text{indirect costs}$ ), because these costs should have been paid from Overhead costs instead.

**UNIBO:** adjustment for personnel costs (335,85 €), which refers to the valorization of the hours spent on the project by permanent personnel in the first 2 months of 2009 with the correct 2009 personnel costs; adjustment for Equipment costs (287,50 €), which refers to a miscalculation of depreciation in the first reporting period; adjustment to Other costs (-27,29€), which refers to a VAT that was not deducted from a hosting cost in the first reporting period; adjustment on Overheads costs (€ 357,63), which refers to the calculation of overheads on adjustments.

**K.U.Leuven:** adjustment for the expenditures related to the participation of M. Van Hulle to the EYESHOTS M12 Meeting, Munster, Germany 8-10 Feb. 2009. This cost has been booked after the 1st reporting period.

(2) In general the actual spending adheres to the budget spending plans. The major deviations, occurring for some beneficiaries, relate to cost categories (such as 'travel' and 'other cost') for which a minor budget was initially planned. Such overspendings, though quite relevant with respect to the single cost categories, are always far less than 1% of the planned total costs.

Specific notes for partners are added below justifying items where there was more than 10% deviation from the plan or where other important aspects needed justifications.

### UG

The above-average overspending in personnel costs (83%) is due to an increase of the hourly rate of the personnel involved in the project, and also to a slight increase of the worked PMs in the first two periods with respect to the original plan.

### WWU

The deviation of 382% on item 'other costs' correspond to subject fees for experiments. The large percentage is mostly due to the small amount that was initially allocated for 'other costs'. The absolute costs can easily be covered from slight underspending in other cost categories. This will not impact any future work.

### **UNIBO**

In general, the above-average overspending at the end of the second period is motivated by the fact that the resources reported have not been planned on a proportional basis, but taking into account the workflow and the specific role of partner UNIBO in the project, which is concentrated in the first/second period, contributing to the set-up of the neurophysiological experiments, cell recordings and data analysis. Although, for some cost categories the expenditures exceeded the planned budged, the use of the resources is continuously monitored, following the scientific workflow of the project, and in any case the direction of work has not changed with respect what was declared in the Description of Work - Annex I, apart from the recommendations of the Reviewers after the first year of the project.

### Specifically:

### 1) About the 91% PMs

A higher number of PMs was used, but with a lower cost than foreseen, because personnel was mainly composed by young researchers. Although the costs of the not-permanent personnel is less than that of

permanent personnel the quality of the research activity has been constantly monitored by the scientific responsible and maintained at a very high quality standard. This has increased the value of the project, allowing a better interaction with partner UJI in WP4.

### 2) About the 128% for Durable Equipment

All the equipments have been bought in first period. No purchase of additional equipment is foreseen in the third period, and only the depreciation of the existing one will be added.

### 3) About the 107% for Other costs

Other costs comprises costs that were not fully predictable at the beginning of the project. They included hospitality for EYESHOTS partners visiting, publications, disseminations, training, subgroup meetings that have increased the value of the project.

It is worth noting that the 91% spent of PMs corresponds to the 78% of personnel costs. The current relative underspending in cost category (Personnel) of 12.7% balances the slight overspending in other cost categories ("Durable Equipment" and "Other costs")

In the third period partner UNIBO will manage the costs so to not exceed the total allocated budget.

### UJI

The average PM costs for partner UJI have increased from Euro 4.084 in period 1 to Euro 5.218 to period 2. The reason for this increase is that in period 2 only a post-doc was contracted, while at the start of period 1 a PhD student was contracted for a few months until the post-doc with the adequate profile was available. Concerning the reported adjustments for the number of PMs in the first period, the following comments should be made:

After going over the amounts of personnel costs, partner UJI has found a mistake in the number of PM that was reported in the first period and, even though the total amount of personnel costs that were claimed is correct, the total of PM in not.

In the PM per Work Package report, 15,66 PM were introduced when the actual amount of PM performed was 13,87. We have adjusted the total PMs reported in the Cost Budged Follow-up Table, accordingly. This mistake, together with the enforcement of university regulations in terms of remuneration, more specifically the fulfilment of a "sexenio" (six year period of research at the university that increases salary) by Prof. Angel P. del Pobil, the fact that he also received additional remuneration for permanent staff as foreseen in the state regulations, and the information referring to the change in hired personnel (see above), motivates the increase in the average PM costs.

It is worth noting that this does not mean additional costs and that the future contribution of partner UJI is not threatened.

### K.U.Leuven

The 178% overspending for travel costs is motivated by unplanned meetings and visits, to work on the integration of the efforts between the partners of WP1,2,3:

- subgroup meeting, Milan, 13-14/1/2010 (Nikolay Chumerin, Marc Van Hulle)
- visit of Nikolay Chumerin to Chemnitz, 2-9/1/2010
- visit of Nikolay Chumerin to Genoa, 14-20/3/2010

Also the EYESHOTS Summer School (13-18 September 2009, Benicassim) and the travels for presenting the work at several conferences and workshops, as part of the dissemination efforts, were responsible for additional travel expenses.

In any case, the increase in travel budget is actually small in absolute terms, and well within the 10% (of the total budget) limit of the allowed shifts between expense categories.

This, in any case will not impact any future work: For the third period, partner K.U.Leuven also foresee several additional integration visits, especially to Castellon (UJI partner).

### **6.3 Planned versus Actual effort**

Tabular overview of planned person-months and actual person-months, by beneficiary and by work package. The planned person-months are taken from the Annex I.

Table 6.3: P	erson-Month Status T	able*						
CONTRACT N°:	217077		Partner	- Persoi	n-mon	th		
ACRONYM:	EYESHOTS		per Wor	kpacka	ge			
PERIOD:	01.03.2009 - 28.02.2010		S	G				ē.
			TOTALS	Coord. UG	NWU	UNIBO	ILU	K.U.Leuve.
Workpackage 1:	Eye movements for exploration of the 3D space	Actual WP total: Planned WP total:	22,5 23	21 21	0	0	1,5 2	0 0
Workpackage 2:	Active stereopsis	Actual WP total: Planned WP total:	29,0 21,0	10 9	0 0	0 0	0 0	19 12
Workpackage 3:	Selecting and binding visual fragments	Actual WP total: Planned WP total:	25,0 28,0	2 3	23 23	0 0	0 0	0 2
Workpackage 4:	Sensorimotor integration	Actual WP total: Planned WP total:	29,63 26	3,19 3	3 0	10 10	13,44 13	0
Workpackage 5:	Human behavior and neural correlates of multisensory 3D	Actual WP total:	63,0	1	13	48	1	0
Workpackage 6:	representation Project coordination and	Planned WP total: Actual WP total:	65,5 4,99	0,5 4,99	<u>16</u> 0	<u>48</u> 0	<u>1</u> 0	0
Workpackage 7:	management Knowledge Management, Dissemination, Synergies with	Planned WP total: Actual WP total:	6,0 2,3	5 0,75	0,5	0,5	0,55	1 0
Workpackage 8:	other projects Training, Education and Mobility	Planned WP total: Actual WP total: Planned WP total:	2,25 2,33 2,25	0,75 0,75 0,75	0,5 0,5 0,5	0,5 0,5 0,5	0,5 0,58 0,5	0 0 0
Total Project Pers	son-month	Actual total: Planned total:	178,75 174	43,68 43	40 40	59 59	17,07 17	19 15

# 7 Financial statements – Form C and Summary financial report

Summary financial report that consolidates the claimed Community contribution of all the beneficiaries in an aggregate form.

S	Summary Fi	nancial Report	t - Collabora	tive Project -	to be fille	d by the cooi	rdinator								
Project ac	ronym	EYESHOTS			Project nr		217077	]	Reporting period from	03/01/2009	to:	28/02/2010		Page	1/1
Funding scheme	СР	]				Ту	pe of activi	ty	•		_	otal	-		
	Adjustment	Organisation		TD A)	Demo	onstration (B)	Mar	nagement (C)	Other (D)			otal )+(C)+(D)			
Beneficiary n°	(Yes/No)	Short Name	Total	Max EC Contribution	Total	Max EC Contribution	Total	Max EC Contribution	Total	Max EC Contribution	Total	Max EC Contribution	Req. EC Contrib.	Receipts	Interest
1	no	UG	280.944	210.708	0	0	35.112	35.112	0	0	316.056	245.820	245.820	0	0
1	yes (1)	UG	9.299	6.974	0	0	51	51	0	0	9.350	7.025	7.025	0	0
2	no	WWU	335.499	251.624	0	0	0	0	0	0	335.499	251.624	251.624	0	
2	yes (1)	WWU	-1.816	-1.362	0	0	0	0	0	0	-1.816	-1.362	0	0	
3	no	UNIBO	229.123	171.842	0	0	0	0	0	0	229.123	171.842	171.842	0	
3	yes (1)	UNIBO	952	714	0	0	0	0	0	0	952	714	714	0	
4	no	UJI	159.139	119.354	0	0	0	0	0	0	159.139	119.354	119.354	0	
5	no	K.U.Leuven	193.753	145.314	0	0	0	0	0	0	193.753	145.314	145.314	0	
5	yes (1)	K.U.Leuven	664	498	0	0	0	0	0	0	664	498	498	0	
	TOTAL		1.207.557	905.666	0	0	35.163	35.163	0	0	1.242.720	940.829	942.191	0	

### FP7 - Grant Agreement - Annex VI - Collaborative Project

Separate financial statements from each beneficiary are provided in the following pages.

	Form C	- Financial Statement (to	o be filled in by ea	ch beneficiary)		
Project N	umber	217077	Funding	scheme	Collaborative	e project
Project Ac	cronym	EYESHOTS	]			
Period f	from	01/03/2009	Is this an adjus	stment to a previou	is statement ?	No
То		28/02/2010	]			
Legal Name	UNIVERSITA	DEGLI STUDI DI GENO	VA	Participant Identity Code	999976	687
Organisation Short Name		UG		Beneficiary nr	1	
Funding % f	for RTD activities (A)	75.0	If flat rate for	indirect costs, spe	cify %	60

### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

	Type of Activity					
	RTD (A)	Demonstration (B)	Management (C)	Other (D)	Total (A+B+C+D)	
Personnel costs	154,684	0	13,193	0	167,877	
Subcontracting	0	0	0	0	0	
Other direct costs	20,906	0	8,752	0	29,658	
Indirect costs	105,354	0	13,167	0	118,521	
Total costs	280,944	0	35,112	0	316,056	
Maximum EU contribution	210,708	0	35,112	0	245,820	
Requested EU contribution					245,820	

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge from third parties or did the project generate any income which could be considered a receipt according to Art.II. 17 of the grant agreement ? If yes, please mention the amount (in €)	No
3. Declaration of interest yielded by the pre-financing (to be completed only by the coordinator)	
Did the pre-financing you received generate any interest according to Art.II.19 ? If yes, please mention the amount (in €)	No
4. Certificate on the methodology	
Do you declare average personnel costs according to Art.II.14.1 ?	No
Is there a certificate on the methodology provided by an independent auditor and accepted by the Commission according to Art.II.4.4 ?	No
Name of the auditorCost of the certificate (in €), if charged under this project	
5. Certificate on the financial statements	
Is there a certificate on the financial statements provided by an independent auditor attached to this financial statement according to Art II 4.4.2	Yes

statement according to Art.II.4.4 ?			
Name of the auditor	Studio Tributario Tarigo & Saveri	Cost of the certificate (in €)	5,075

### 6. Beneficiary's declaration on its honour

#### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Matteo Pastorino
	Date & signature

Form C - Financial Statement (to be filled in by each beneficiary)							
Project	Number	umber 217077 Funding scheme			Collabora	ative project	
Project /	Acronym	EYESHOTS	]				
Perio	d from	01/03/2009	Is this an adjus	stment to a previou	is statement?	Yes	
Т	- 0	28/02/2010	Adjustment relates to Period :		1		
Legal Name	UNIVERSITA	VA	Participant Identity Code	9999	976687		
Organisation Short Name			Beneficiary nr 1		1		
Funding % for RTD activities (A) 75.0			If flat rate for	indirect costs, spe	cify %	60	

### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

	Type of Activity					
	RTD (A)	Demonstration (B)	Management (C)	Other (D)	Total (A+B+C+D)	
Personnel costs	5,812	0	32	0	5,844	
Subcontracting	0	0	0	0	0	
Other direct costs	0	0	0	0	0	
Indirect costs	3,487	0	19	0	3,506	
Total costs	9,299	0	51	0	9,350	
Maximum EU contribution	6,974	0	51	0	7,025	
Requested EU contribution					7,025	

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge from third parties or did the project generate any income which could be considered a receipt according to Art.II. 17 of the grant agreement ? If yes, please mention the amount (in €)	No
3. Declaration of interest yielded by the pre-financing (to be completed only by the coordinator)	
Did the pre-financing you received generate any interest according to Art.II.19 ? If yes, please mention the amount (in €)	No
4. Certificate on the methodology	
Do you declare average personnel costs according to Art.II.14.1?	No
Is there a certificate on the methodology provided by an independent auditor and accepted by the Commission according to Art.II.4.4 ?	No
Name of the auditorCost of the certificate (in €), if charged under this project	
5. Certificate on the financial statements	
Is there a certificate on the financial statements provided by an independent auditor attached to this financial	Yes

statement according to Art.II.4.4 ?			100
Name of the auditor	Studio Tributario Tarigo & Saveri	Cost of the certificate (in €)	5,075

### 6. Beneficiary's declaration on its honour

#### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Matteo Pastorino
	Date & signature

Form C - Financial Statement (to be filled in by each beneficiary)							
Project I	Number		217077	Funding	scheme	Collaborativ	ve project
Project A	Acronym	E	YESHOTS	]			
Perioc	l from	(	01/03/2009	Is this an adjust	stment to a previou	is statement?	No
T	0	2	28/02/2010	]			
Legal Name	WESTFAELISCHE WILHELMS-UNIVERSITAET MUENSTER Participant 999853691				3691		
Organisation Short Name	WWU Beneficiary nr 2						
Funding % for RTD activities (A) 75.0			If flat rate for	indirect costs, spe	cify %	60	

### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

	Type of Activity					
	RTD (A)	Demonstration (B)	Management (C)	Other (D)	Total (A+B+C+D)	
Personnel costs	178,049	0	0	0	178,049	
Subcontracting	0	0	0	0	0	
Other direct costs	31,638	0	0	0	31,638	
Indirect costs	125,812	0	0	0	125,812	
Total costs	335,499	0	0	0	335,499	
Maximum EU contribution	251,624	0	0	0	251,624	
Requested EU contribution					251,624	

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge fror generate any income which could be considered a receipt according to Art.II. 17	No		
If yes, please mention the amount (in €)			
4. Certificate on the methodology			
Do you declare average personnel costs according to Art.II.14.1?	No		
Is there a certificate on the methodology provided by an independent auditor and according to Art.II.4.4 ?	No		
Name of the auditor	Cost of the certificate (in €), if charged under this project		
E Cortificate on the financial statements			

<u>5. Certificate on the mancial statements</u>
Is there a certificate on the financial statements provided by an independent auditor attached to this financia
statement according to Art.II.4.4?

ement according to Art.II.4.4 ?	Yes		
Name of the auditor	VDI Technologiezentrum GmbH	Cost of the certificate (in €)	1,200

### 6. Beneficiary's declaration on its honour

#### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Katharina Steinberg
	Date & signature

		Form C	- Financial Statement (to	o be filled in by ea	ch beneficiary)		
Project	Number		217077	Funding	scheme	Collabora	tive project
Project /	Acronym		EYESHOTS	]			
Perio	d from		01/03/2009	Is this an adju	stment to a previou	s statement ?	Yes
Т	ō		28/02/2010	Adjustment relates to Period :			1
Legal Name	WESTFAELI	SCHE WILH	ELMS-UNIVERSITAET	MUENSTER	Participant Identity Code	9998	53691
Organisation Short Name	WWU				Beneficiary nr	2	
Funding %	6 for RTD activities	s (A)	75.0	If flat rate for	r indirect costs, spe	cify %	60

### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

	Type of Activity							
	RTD (A)	RTD (A) Demonstration (B) Management (C) Other (D) Total (A+B+C+D						
Personnel costs	0	0	0	0	0			
Subcontracting	0	0	0	0	0			
Other direct costs	-1,135	0	0	0	-1,135			
Indirect costs	-681	0	0	0	-681			
Total costs	-1,816	0	0	0	-1,816			
Maximum EU contribution	-1,362	0	0	0	-1,362			
Requested EU contribution					-1,362			

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge from third parties or did the project generate any income which could be considered a receipt according to Art.II. 17 of the grant agreement ?	No
If yes, please mention the amount (in €)	
4. Certificate on the methodology	
Do you declare average personnel costs according to Art.II.14.1 ?	No
Is there a certificate on the methodology provided by an independent auditor and accepted by the Commission according to Art.II.4.4 ?	No
Name of the auditorCost of the certificate (in €), if charged under this project	
5. Certificate on the financial statements	

#### 5. Certificate on the financial statements provided by an independent auditor attached to this financial is there a certificate on the financial statements provided by an independent auditor attached to this financial

statement according to Art.II.4.4 ?	Yes			
Name of the auditor	VDI Technologiezentrum GmbH	Cost of the certificate (in €)	1,200	

### 6. Beneficiary's declaration on its honour

#### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Katharina Steinberg, Markus Lappe
	Date & signature

Form C - Financial Statement (to be filled in by each beneficiary)							
Project I	Number	217077 Funding scheme Co			Collaborativ	e project	
Project A	Acronym		EYESHOTS	]			
Perioc	l from		01/03/2009	Is this an adju	stment to a previou	is statement?	No
Te	0		28/02/2010	]			
Legal Name	ALMA MAT	ER STUDIO	DRUM-UNIVERSITA DI	BOLOGNA	Participant Identity Code	999993	3953
Organisation Short Name	UNIBO Benefici				Beneficiary nr	3	
Funding % for RTD activities (A) 75.0			75.0	If flat rate for	indirect costs, spe	cify %	60

### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

	Type of Activity					
	RTD (A)	Demonstration (B)	Management (C)	Other (D)	Total (A+B+C+D)	
Personnel costs	90,838	0	0	0	90,838	
Subcontracting	0	0	0	0	0	
Other direct costs	52,364	0	0	0	52,364	
Indirect costs	85,921	0	0	0	85,921	
Total costs	229,123	0	0	0	229,123	
Maximum EU contribution	171,842	0	0	0	171,842	
Requested EU contribution					171,842	

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge from third parties or did the project generate any income which could be considered a receipt according to Art.II. 17 of the grant agreement ?	No
If yes, please mention the amount (in €)	
4. Certificate on the methodology	
Do you declare average personnel costs according to Art.II.14.1 ?	No
Is there a certificate on the methodology provided by an independent auditor and accepted by the Commission according to Art.II.4.4 ?	No
Name of the auditor Cost of the certificate (in €), if charged under this project	
5 Contificate on the financial statements	

#### 5. Certificate on the financial statements Is there a certificate on the financial statements provided by an independent auditor attached to this financial

statement according to Art.II.4.4 ?	No		
Name of the auditor		Cost of the certificate (in €)	

### 6. Beneficiary's declaration on its honour

### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Giovanni Zamboni Gruppioni
	Date & signature

Form C - Financial Statement (to be filled in by each beneficiary)							
Project	Number		217077	Funding	scheme	Collaborat	ive project
Project /	Acronym		EYESHOTS				
Period from 01/03/2009 Is this an adjustment to a previous statement ? Yes					Yes		
Т	o		28/02/2010	Adjustment relates to Period :		1	
Legal Name	al Name ALMA MATER STUDIORUM-UNIVERSITA DI			BOLOGNA	Participant Identity Code	99999	93953
Organisation Short Name	INIBO Benetician/ nr			3			
Funding % for RTD activities (A)       75.0       If flat rate for indirect costs, specify %       60							

#### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

	Type of Activity						
	RTD (A)	Demonstration (B)	Management (C)	Other (D)	Total (A+B+C+D)		
Personnel costs	335	0	0	0	335		
Subcontracting	0	0	0	0	0		
Other direct costs	260	0	0	0	260		
Indirect costs	357	0	0	0	357		
Total costs	952	0	0	0	952		
Maximum EU contribution	714	0	0	0	714		
Requested EU contribution					714		

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge from third parties or did the project generate any income which could be considered a receipt according to Art.II. 17 of the grant agreement ? If yes, please mention the amount (in €)	No
in yes, please mention the amount (in C)	
4. Certificate on the methodology	
Do you declare average personnel costs according to Art.II.14.1 ?	No
Is there a certificate on the methodology provided by an independent auditor and accepted by the Commission	No
according to Art.II.4.4 ?	NO
Name of the auditor Cost of the certificate (in €),	
if charged under this project	
5. Certificate on the financial statements	

Is there a certificate on the financial statements provided by an independent auditor attached to this financial statement according to Art.II.4.4 ?		No	
Name of the auditor		Cost of the certificate (in $\neq$ )	

### 6. Beneficiary's declaration on its honour

#### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Giovanni Zamboni Gruppioni
	Date & signature

Form C - Financial Statement (to be filled in by each beneficiary)							
Project	Number	217077	Funding	scheme	Collabora	tive project	
Project Acronym EYESHOTS			]				
Period from 01/03/2009 Is				stment to a previou	is statement?	No	
Т	Ö	28/02/2010					
Legal Name	ame UNIVERSITAT JAUME I DE CASTELLON Participant 9998829				82985		
Organisation Short Name	Beneticiary nr 4			4			
Funding % for RTD activities (A)       75.0       If flat rate for indirect costs, specify %				60			

### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

	Type of Activity						
	RTD (A)	Demonstration (B)	Management (C)	Other (D)	Total (A+B+C+D)		
Personnel costs	89,083	0	0	0	89,083		
Subcontracting	0	0	0	0	0		
Other direct costs	10,379	0	0	0	10,379		
Indirect costs	59,677	0	0	0	59,677		
Total costs	159,139	0	0	0	159,139		
Maximum EU contribution	119,354	0	0	0	119,354		
Requested EU contribution					119,354		

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge from third parties or did the progenerate any income which could be considered a receipt according to Art.II. 17 of the grant agreement ?	oject No
If yes, please mention the amount (in €)	
4. Certificate on the methodology	
Do you declare average personnel costs according to Art.II.14.1?	No
Is there a certificate on the methodology provided by an independent auditor and accepted by the Commissi according to Art.II.4.4 ?	ion No
Name of the auditor Cost of the certificate (in € if charged under this proje	
E Cartificate on the financial statements	

### 5. Certificate on the financial statements

Is there a certificate on the financial statement according to Art.II.4.4 ?	No	
Name of the auditor	Cost of the certificate (in €)	

### 6. Beneficiary's declaration on its honour

#### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Angel Pascual del Pobil i Ferré Antonio Montañana Riera
	Date & signature

Form C - Financial Statement (to be filled in by each beneficiary)							
Project N	lumber	217077	Funding	scheme	Collaborativ	e project	
Project Acronym EYESHOTS							
Period	from	01/03/2009	Is this an adjus	stment to a previou	is statement ?	No	
To 28/02/2010							
Legal Name	KATHOLIEKE	UNIVERSITEIT LEUVE	EN	Participant Identity Code	999991	334	
Organisation Short Name K.U.Leuven				Beneficiary nr	5		
Funding %	for RTD activities (A)	75.0	If flat rate for	indirect costs, spe	cify %	60	

### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

			Type of Activity		
	RTD (A)	Demonstration (B)	Management (C)	Other (D)	Total (A+B+C+D)
Personnel costs	108,844	0	0	0	108,844
Subcontracting	0	0	0	0	0
Other direct costs	12,252	0	0	0	12,252
Indirect costs	72,657	0	0	0	72,657
Total costs	193,753	0	0	0	193,753
Maximum EU contribution	145,314	0	0	0	145,314
Requested EU contribution					145,314

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge from third parties or did the project generate any income which could be considered a receipt according to Art.II. 17 of the grant agreement ?	No	
If yes, please mention the amount (in €)		
4. Certificate on the methodology		
bo you declare average personnel costs according to Art.II.14.1 ?		
Is there a certificate on the methodology provided by an independent auditor and accepted by the Commission according to Art.II.4.4 ?	No	
Name of the auditor Cost of the certificate (in €), if charged under this project		
5 Contificate on the financial statements		

# 5. Certificate on the financial statements Is there a certificate on the financial statements provided by an independent auditor attached to this financial

statement according to Art.II.4.4 ?			No
Name of the auditor		Cost of the certificate (in €)	

### 6. Beneficiary's declaration on its honour

### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Ann Placlet
	Date & signature

	Form C	- Financial Statement (to	o be filled in by ea	ch beneficiary)		
Project Number		217077	Funding scheme		Collaborative project	
Project Acronym		EYESHOTS	]			
Perio	d from	01/03/2009	Is this an adjustment to a previous statement ?		Yes	
То 28		28/02/2010	Adjustment relates to Period :		1	
Legal Name KATHOLIEKE UNIVERSITEIT LEUVE			EN	Participant Identity Code	999	9991334
Organisation K.U.Leuven				Beneficiary nr		5
Funding % for RTD activities (A) 75.0		75.0	If flat rate for	indirect costs, spe	ecify %	60

### 1. Declaration of eligible costs/lump sum/flate-rate/scale of unit (in €)

	Type of Activity				
	RTD (A)	Demonstration (B)	Management (C)	Other (D)	Total (A+B+C+D)
Personnel costs	0	0	0	0	0
Subcontracting	0	0	0	0	0
Other direct costs	415	0	0	0	415
Indirect costs	249	0	0	0	249
Total costs	664	0	0	0	664
Maximum EU contribution	498	0	0	0	498
Requested EU contribution					498

### 2. Declaration of receipts

Did you receive any financial transfers or contributions in kind, free of charge from third parties or did the project generate any income which could be considered a receipt according to Art.II. 17 of the grant agreement ?		No
If yes, please mention the amount (in €)		
4. Certificate on the methodology		
Do you declare average personnel costs according to Art.II.14.1?		No
Is there a certificate on the methodology provided by an independent auditor a according to Art.II.4.4 ?	and accepted by the Commission	No
Name of the auditor	Cost of the certificate (in €), if charged under this project	
5. Certificate on the financial statements		

14	there a certificate on the financial st	atements provided by an independent auditor attached to this financial	
	atement according to Art.II.4.4 ?		No
	Name of the auditor	Cost of the certificate (in €)	

### 6. Beneficiary's declaration on its honour

#### We declare on our honour that:

- the costs declared above are directly related to the resources used to attain the objectives of the project and fall within the definition of eligble costs specified in Articles II.14 and II.15 of the grant agreement, and, if relevant, Annex III and Article 7 (special clauses) of the grant agreement;

- the receipts declared above are the only financial transfers or contributions in kind, free of charge, from third parties and the only income generated by the project which could be considered as receipts according to Art.II.17 of the grant agreement;

Beneficiary's Stamp	Name of the Person(s) Authorised to sign this Fianancial Statement
	Ann Placlet
	Date & signature

## 8 Certificates on the financial statements

List of Certificates that are due for this period, in accordance with Article II.4.4 of the Grant Agreement.

Beneficiary	Organisation short name	Certificate provided? yes / no	Any useful comment, in particular if a certificate is not provided
1	UG	yes	Expenditure threshold reached
2	WWU	yes	Expenditure threshold reached
3	UNIBO	no	Expenditure threshold not reached
4	UЛ	no	Expenditure threshold not reached
5	K.U.Leuven	no	Expenditure threshold not reached

A copy of each duly signed certificate on the financial statements have been uploaded on the NEF portal. Signed originals will be sent by post.

Both partners UG and WWU will claim the reimbursement next year, because the invoices for these costs will be booked after period 2 in their accounting system.