LASERLAB-EUROPE
Coordination Meeting

July 7, 2010

Berlin, Germany

COORDINATING TRAINING AND EDUCATION IN OPTICS AND PHOTONICS

FIRST MEETING 7 JULY 2010

MINUTES

1 – 3 p.m.

1. Welcome and introduction

Wolfgang Sandner welcomes the participants who briefly present their organisations and their responsibilities within these organisations in the context of training and education.

Roberta Ramponi (Photonics21, Chair of Work Group 7 "Photonics Research, Education & Training"): The European Technology Platform *Photonics21* is a voluntary association of industrial enterprises and other stakeholders in the field of photonics in Europe and counts more than 1,400 members from 49 countries. Photonics21 has developed a Strategic Research Agenda which has led to the establishment of the Photonics Unit within the EC Directorate Information Society. Workgroup 7 addresses all questions related to education and training in photonics for industry's and academia's needs.

Katharina Flaig (Photonics21): The Secretariat of Photonics 21 provides organisational and operational support to the Photonics21 Executive Board, the Board of Stakeholders and to the seven work groups. Furthermore, the Secretariat Photonics21 is responsible for the internal communication to the members of the platform as well as for the external communication.

Markus Klemmt (EOS): The *European Optical Society* comprises stakeholder from industry and research, including 18 member societies, with a total of about 5000 members in Europe and worldwide. In cooperation with Photonics21, EOS is conducting a survey on the needs of companies and institutes regarding students' internships.

Laurent Sarger (Université Bordeaux / Laserlab-Europe): Laurent Sarger is actively involved in Work Group 7 of Photonics21 and in training activities of the region Aquitaine in France, organising the PYLA portal for training in optics and lasers.

Karoly Osvay (ELI): ELI, the *Extreme Light Infrastructure*, ELI will be a European scientific infrastructure for high-level research on ultra-high intensity lasers, laser-matter interaction and secondary sources. ELI facilities, dedicated to three of the scientific pillars of the project will be built in Prague (Czech Republic), Szeged (Hungary) and Magurele (Romania) and should be operational in 2015. ELI will be the first large-scale infrastructure based in Eastern Europe, with a total investment exceeding €600m. For ELI, training activities especially at Master's and technician's level, but also PhD trainings would be most important. Several ELI

partners submitted an application for a Marie Curie ITN which was not successful. Reapplication for the next call is planned.

Anne-Marie Clarke (HiPER): HiPER, the *European High Power Laser Energy Research Project*, is a Pan-European ESFRI project on Laser Fusion as an energy source which currently receives funding from the EC for the preparatory phase until April 2011. The next phase of the project will mainly deal with technology development before the construction of an infrastructure can start.

Wolfgang Sandner (Laserlab-Europe): *Laserlab-Europe* is a consortium of 26 Laser Research Infrastructures from 16 European member states, mainly national infrastructures. Its main activities are Transnational Access to the labs for European research teams and Joint Research Activities, in part related to ELI and HiPER, but also to other interdisciplinary topics such as biophotonics. Training of users and staff mobility are among the networking activities of the consortium.

2. Strategy discussion

Wolfgang Sandner summarises the main tasks for today:

- To reach an agreement on the importance of the human resources question in all spheres related to this field of science in connection with industry.
- To discuss measures how to improve and enhance success of activities related to training and education which have so far been taken independently without knowing about each other;
- To formulate a Memorandum of Understanding stating that the organisations present are willing to act jointly in these activities and tasks and to coordinate their efforts.

The participants state that in general the level of training and education is satisfactory, even though in some countries basic skills in optics or other specific topics are not part of the curricula. More importantly, however, the number of students in optics and photonics is too low. Measures thus should not only address high-end research but have a view to long-term effects and should be supported by appropriate communication of career opportunities.

Following the discussion on common fields of interest and joint activities, the participants agree on the following steps:

- Phrase a Memorandum of Understanding of the organisations present;
- Collect information from surveys conducted by ELI, EOS or others on the needs of industry and academia for human resources;
- Collect information on existing education and training opportunities in the European countries;
- Collect information on funding opportunities for human resources development actions;
- Match the collected information and define a strategy for joint activities.

The Memorandum of Understanding should reflect the common interest of the different partners in order to define the needs of the communities and to reach a better coordination of common activities for human resources and staff mobility in lasers and photonics at all levels, thus contributing to an increase in the human resources base. Contributions from other partners are welcome. Following the signature, the MoU will be communicated in a press release.

To do:

- **Roberta Ramponi to draft and circulate an MoU.**

- **Laserlab office to provide a joint web page for human resources activities.**
- **All partners will create cross links between their projects' web pages on training and education.**
- **The Photonics21 member area will serve for public documents of the group.**

3. Assignment of tasks and contacts

Contact persons:

- Roberta Ramponi volunteers to coordinate the steps towards a joint strategy.
- Laurent Sarger is contact person for Laserlab-Europe.
- Anne Marie Clarke is contact person for HiPER.
- Karoly Osvay is contact person for ELI.
- Markus Klemmt is contact person for EOS.
- Katharina Flaig is contact person for Photonics21.
- Daniela Stozno is contact person for the common web page.

Suggestion of opportunities for joint applications within the limits of the different status and specific goals of the organisations:

- Marie Curie Initial Training Networks (ITN) for (mainly) PhD programs;
- Erasmus projects for master courses which have a higher success rate than Marie Curie proposals;
- Possibly a Coordination and Support Action (CSA) in the ICT call to be published in September 2010.

4. AOB/Future meetings

Suggested next meeting: During the EOS Annual Meeting, Paris, 26 - 29 October 2010, which includes a workshop on education and training, a meeting of the Photonics21 work group 7 will be planned which could be extended to representatives of the present group.

Personal discussions with EC representatives responsible for human resources activities are suggested.

Participants:

Name		Institution
Clarke	Anne-Marie	HiPER (via video conference)
Flaig	Katharina	Photonics21
Klemmt	Markus	EOS
Osvay	Karoly	ELI
Ramponi	Roberta	Photonics21 / EOS
Sandner	Wolfgang	Laserlab-Europe
Sarger	Laurent	Laserlab-Europe / Université Bordeaux
Stozno	Daniela	Laserlab-Europe

Daniela Stozno (Minutes)