

COST ACTION 1101 OPTICWISE
MINUTES OF THE 9th MC/WG MEETINGS
İSTANBUL, TURKEY ON 07-10, 2015

September 07, 2015

8:30 - 9:00	Registration
9:00 - 9:15	Opening Note Prof. Dr. Reha Civanlar, Ozyegin University Vice Rector
9:15 - 10:15	Keynote Speech <i>Addressing Spectrum Scarcity through Optical Wireless Communications</i> Prof. Dr. Mohamed-Slim Alouini, KAUST
10:15 - 10:45	Coffee Break
10:45 - 12:00	IWOW Session 1 Visible Light Communications
12:00 - 13:15	Lunch
13:15 - 14:45	IWOW Session 2 Optical Wireless Communications for Underwater and Space Applications
14:45 - 15:15	Coffee Break
15:15 - 16:15	IWOW Poster Session 1 & Demo Session
16:15 - 17:00	MC/WG Meeting - Part 1 (OPTICWISE Members) Opening remarks and discussion on agenda items for MC&WG meetings

IWOW sessions took place on September 07. First part of the MC/WG meeting took place between 16:15-17:00. Action Chair presented the agenda items for the next three days. A brief discussion of Final Achievement Report also took place.

September 08, 2015

9:00 - 10:00	Keynote Speech <i>High-Capacity Free-Space Optical Communications Using Multiplexing of Multiple Orbital-Angular-Momentum Modes</i> Prof. Dr. Alan Willner, University of Southern California
10:00 - 10:30	Coffee Break
10:30 - 12:00	IWOW Session 3 Free Space Optical Communications
12:00 - 13:30	Lunch & Group Photo Shoot
13:30 - 14:45	IWOW Session 4 Optical Wireless Networks
14:45 - 15:15	Coffee Break
15:15 - 16:15	IWOW Poster Session 2
16:15 - 16:45	MC/WG Meeting - Part 2 (OPTICWISE Members) Discussion on future IWOW organizations

IWOW sessions took place on September 08. Second part of the MC/WG meeting took place between 16:15-16:45. It was discussed that IWOW workshop launched by the Action has

been very succesful and should be continued after the end of the Action. Most MC members indicated that a bi-annual workshop would be more attractive. A steering committee was established. This includes Murat Uysal, Fary Ghassemlooy, Carlo Capsoni, Eszter Udvary and Stanislav Zvanovec. The committee will discuss and decide on when and where the next edition of IWOW will take place.

September 09, 2015

09:00 – 10:30	MC/WG Meeting – Part 3 Report on Action Progress, M. Uysal Discussion on Final Report
10:30 - 11:00	Coffee break
11:00 - 13:00	WG Meetings Invited Talks <i>Free-Space Optical Links for Airborne Communication Networks</i> Dr. Kai-Daniel Büchter, Bauhaus Luftfahrt e.V. VLC research at ULPGC: Applications for a Smart Tourism Destination Prof. Dr. Rafael Pérez Jiménez, Universidad de Las Palmas de Gran Canaria
13:00 - 14:00	Lunch
14:00 - 15:30	WG1 & WG2 Meetings WG1 Progress Report WG2 Progress Report Input Documents
15:30 – 16:00	Coffee Break
16:00 - 17:00	MC/WG Meeting – Part 4 Discussion on Final Report

Third part of the MC/WG meeting started at 9:00. Action Chair presented the Minutes of the VII. MC Meeting held in Berlin. It was pointed out that trainee payments for local students (discussed and approved at the last meeting) were not mentioned within the Minutes. Those meeting minutes should be revised indicating that international trainees will receive 600 Euro while local trainees (coming from outside the city) will receive 250 Euro. Local trainees living within the city will receive 100 euro. Minutes of the VII. MC Meeting are approved with those corrections.

Action Chair pointed out that there might be some delays in reimbursements until the second installement arrives. It was decided that remaining cash will be used as a priority to reimburse LOS, Keynote/Invited Speakers outside the Action and Traning School attendees and, the rest will be reimbursed when the second installment arrives.

Action Chair Murat Uysal and German MC Member Volker Jungnickel updated the MC members about the OPTICWISE participation in the ongoing standart activity IEEE 8021.5.7. The importance of this initiative was emphasized and it was agreed that this should be conveyed as a success story to the COST office. OPTICWISE participants also wrote an invited

conference paper called “An European View on the Next Generation Optical Wireless Communication Standard” which summarizes the activities within the IEEE 802.15.7

Action Chair Murat Uysal updated on the Final Action Publication. As agreed before, it will be an edited book “Optical Wireless Communications-An Emerging Technology”, with editors M. Uysal, C. Capsoni, F. Ghassemlooy, A. C. Boucouvalas, E. G. Udvary. The book will be published by Springer. We need to deliver the whole content at latest by September 30 (this is an extended deadline). It was also pointed out that VLC book lead by SIG VLC Chair Luis Alves is an additional achievement.

MC members asked questions about a potential new COST Application. Action Chair reminded the application deadlines (Sept 08, 2015 and 09-09 Feb 2016) and new rules for proposals such as one step application and blind review process. Despite the significant budget reductions, it was anonymously agreed that OPTICWISE has been a very successful Action and a follow-up Action should be considered. Action Chair agreed to lead the writing of the new proposal. The session ended at 10:30.

As part of the WG Meetings, invited talks started at 11:00. Two invited talks were delivered.
Free-Space Optical Links for Airborne Communication Networks
Dr. Kai-Daniel Büchter, Bauhaus Luftfahrt e.V.
VLC research at ULPGC: Applications for a Smart Tourism Destination
Prof. Dr. Rafael Pérez Jiménez, Universidad de Las Palmas de Gran Canaria
The session ended at 13:00.

In the afternoon, the session dedicated for WG1 & WG2 Meetings started at 14:00. WG1 Progress Report was presented by Carlo Capsoni followed by the presentation of two Input Documents

- Estimation Of Fog Drop Size Distribution Based On Meteorological Measurement, Vladimir Brazda, Ondrej Fiser, Martin Grabner.
- Clear-air Turbulence Effects Modeling on Terrestrial and Satellite Free-Space Optical Channels, *F. Marzano; D. Carrozzo; S. Mori; F. Moll*

WG2 Progress Report is presented by F. Ghassemlooy followed by the presentation of an Input Document

- VCSELS for compact and low-cost Optical Frequency Comb Generation for Wireless Optical Communications, Pablo Acedo

The session ended at 15:20.

Part 4 of MC/WG Meeting started at 16:00. Action Chair presented the format of Final Achievement Report. He also shared an initial draft written based on the inputs collected during the summer from OPTICWISE participants. Some discussions took place on which publication should be highlighted as “most significant” as well as which achievements should be featured in “Impact” Section. Action Chair will improve the draft and finalize it in early October in consultation with WG Chairs. It is expected that the final version will be submitted to MC members approval before the end of October.

September 09, 2015

9th MC/WG Meetings & 4th IWOW

09:00 - 10:30	SIG Meetings SIG-VLC Report SIG-UW Report
10:30 - 11:00	Coffee break
11:00 - 13:00	WG Meetings Invited Talks Car-Centric View of Networking Dr. Onur Altintas, Toyota InfoTechnology Center Beyond Illumination with LEDs: Sensing, Communication and Control Dr. Ashish Pandharipande, Philips Research
13:00 - 14:00	Lunch
14:00 - 15:30	WG3 & WG4 Meetings WG3 Progress Report WG4 Progress Report Input Documents
15:30 - 16:00	Coffee Break
16:00 - 16:30	Closing

SIG Meetings started at 9:00. SIG-VLC reported on the preparation of an edited book. This is one of the first dedicated VLC books. The first eight chapters are ready and prepared by Action Members. The second part of the book will be collected through an Open Call. Some discussions took place on the content and which authors from outside the Action can be approached. SIG-UW reported on the ongoing activities. Some discussions on a joint proposal attempt were made. Italian MC Member Ernesto Ciaramella made a presentation on their involvement in the ongoing SUNRISE project which aims to create a network of underwater testbeds. The session ended at 10:15.

As part of the WG Meetings, invited talks started at 11:00. Two invited talks were delivered.
Car-Centric View of Networking
Dr. Onur Altintas, Toyota InfoTechnology Center
Beyond Illumination with LEDs: Sensing, Communication and Control
Dr. Ashish Pandharipande, Philips Research
The session ended at 13:00.

In the afternoon, the session dedicated for WG3 & WG4 Meetings started at 14:00. Since WG3 chair was not present, a brief presentation was made by Prof Ghassemlooy on his behalf particularly summarizing WG3 contributions to the FAP. WG4 Progress Report was presented by the WG4 Chair Eszter Udvary. This was followed by the presentation of two Input Documents

- LED based underwater optical wireless communications for autonomous underwater vehicles, Luis M. Pessoa, Bernardo Silva, Nuno Cruz, Henrique M. Salgado
- Multi-Band Carrier-Less Amplitude And Phase Modulation For Highly Bandlimited Visible Light Communications, Paul Anthony Haigh, Alejandro Aguado, Zabih Ghassemlooy, Petr Chvojka, Khald Werfli, Stanislav Zvanovec, Ezgi Ertunç, Thavamaran Kanesan

The session ended at 15:30

The final session started at 16:00. Action Chair made a brief talk and thanked all MC members for their contributions to a very succesful Action. This was followed by Vice Chair's talk. The session ended at 16:15.