

## **Minutes of the Ninth Management Committee Meeting**

### **COST Action IC1004 – Cooperative Communications for Green Smart Environments**

**Wednesday, February 05th, 2014 – Ferrara, Italy**

#### **1. Welcome and opening formalities**

The plenary of the ninth MC meeting of COST Action IC1004 was chaired by Prof. Narcis Cardona, Chair of the Action, who opened the meeting at 9.20 am.

Prof. Velio Tralli, the Local Organizer, welcomed the audience and provided information about the city and local arrangements.

#### **2. Adoption of the agenda**

The agenda for the ninth MC meeting was adopted. The attendance list was circulated.

#### **3. Approval of the Minutes of the last MCM**

The minutes of the 8th MC Meeting were posted on the IC1004 website, under the section Official Documents. The minutes have been approved.

#### **4. Status of the Action**

Prof. Cardona reported the status of the Action to the audience. Up to now, the Action is:

- composed by 28 signatories countries
- represented by 52 MC Members (+ Chair)
- Number of registered experts so far: 551
- Number of COST country entities (institutes, etc.) currently participating: 126
- Number of COST International Partner Countries: 6
- Number of non-COST entities (institutes, etc.) currently participating: 14 (+2 in process)

#### 4.1 Status of the Action, NCIs

##### Current Non-COST Members

The current approved Non-COST Members (13) are the following:

Australia	La Trobe University
Canada	The Communications Research Centre
China	Academy of Broadcasting Planning
China	Beijing University of Posts and Telecommunications, Wireless Technology Innovation Institute
China	Beijing Jiaotong University (BJTU)
China	Tongji University
Colombia	Universidad Icesi
Japan	Japan Advanced Institute of Science and Technology
Japan	National Institute of Information and Communications Technology
Japan	Tokyo Institute of Technology
USA	COMSEARCH
USA	Motorola Mobility US
USA	National Institute of Standards and Technology

The following two applications are still in progress:

Lebanon	American University of Beirut
Japan	NTT DOCOMO

#### 4.2 Recent activities

The Chair reported about the following recent activities:

- White Paper → the final version has been published online on December 2013 and in 7 weeks there have been over 1.200 downloads;
- Invited talks → after the 8<sup>th</sup> MC Meeting, the Chair was invited to give the following two talks: the first one to promote the Action "Cooperative Radio Communications for Green and Smart Environments" during the COST-TERRA Meeting held in November 2013 at OFCOM, Biel, Switzerland; the second one to represent the ICT Domain during the 12th FP7 Concertation meeting held in Brussels on 22-23 October 2013.

#### 4.3 Short Term Scientific Missions (STSM)

Regarding the STSMs, the Chair reminded that:

- 18 STSMs have been completed during the 1<sup>st</sup> and 2<sup>nd</sup> year term;
- 3 STSMs have already been performed during the 3rd year term, and 2 are still in progress.

The results are usually presented during the MC Meetings.

The Chair reminded again the procedure to apply for a STSM (the applicant has to fulfill form at eCOST tool: <https://e-services.cost.eu/stsm> and then sends it to Chairman and Host Institution 6 weeks prior to the STSM start) and the evaluation procedure (the applications are evaluated by Evaluation Panel including at least three among WGs Chairs).

The Call is open.

#### 4.4 COST ESR grants

The Chair announced that the 14<sup>th</sup> call for applications for *Conference Grants opportunity for Early Stage Researchers (ESR)* is now open. The ICT Domain offers 3 supporting grants (max. 3000 Euro each) per year for Early Stage Researchers to participate in an international conference outside of COST Action activities (COST Strategy for Early Stage Researchers, COST 212/07).

Only one grant assigned per call for the whole Domain Actions and only one candidacy proposal per Action and call can be submitted.

These are the criteria per IC1004 pre-selection of candidates:

- Mention the COST IC1004 in the document (mandatory)
- Relevance of the conference in our area
- Relevance of the topic for the Action objectives
- CV of the applicant
- Activities of the Applicant's Institution related to COST IC1004

Regarding the DC selection criteria, the Chair asked the COST Office for more information on this and the following info has been provided:

The process followed by the COST Office for the evaluation of the ESR grants is as follows:

1. *The applications are being checked first by the COST Office to ensure that all the necessary documents are in place.*
2. *The COST Office sends the applications to the DC-ICT executive group for ranking. The Executive Group ranks the applications based on the following criteria:*
  - a. *How can the event help the career of the applicant?*
  - b. *What is the benefit for the current research of the ESR?*
  - c. *What is the benefit of the COST Action?*
  - d. *What are the networking reasons for going to the international conference?*

The deadline for the current call is set on February 20<sup>th</sup>, 2014. The IC1004 Action requires to have the applications by February 11<sup>th</sup>, 2014 in order to pre-evaluate the proposals and send the selected one to the COST Office by February 20<sup>th</sup>, 2014.

#### *4.5 Meeting reimbursement*

The Chair reported that 39 participants (including Chair, MC members and official substitutes) are entitled to be reimbursed for their attendance to the current MC Meeting (the list can be found [here](#)).

Reimbursement will be based on COST rules and the eligible participants were invited to hand their original forms to the Secretary at the end of the Meeting or send them by post no later than February 28<sup>th</sup>, 2013.

## **5. Training Schools and Tutorials**

The Chair reminded to the audience the IC1004 Training Schools that have already been organized:

- First IC1004 Training School: "Vehicular Connectivity" May 21-23, 2012, Vienna; 45 registered // 20 grants
- Joint IC1004-WiserBAN Training School: "Wireless Body Area Networks" June 4-6, 2012, Bologna; 50 registered
- Third IC1004 Training School: "Propagation Measurement, Modelling, and OTA-Emulation" November 12-14 2012, Ilmenau (Germany); 31 attended // 28 granted
- Fourth IC1004 Training School: "Tools for Cooperative Communications" 20-22 May 2013, Prague; 23 attendees // 20 granted
- Joint IC1004/Newcom# Training School: "Beyond 4G Networks in

Cities: From Theory to Experimentation and Back” , November 25-28, 2013 - CTTC premises, Barcelona (Spain). The school was organized by Miquel Payaro (CTTC) and received very good feedback from students about the contents and the approach. Furthermore the most inspiring trainer was from IC1004 too. 64 attendees // 27 granted

By the end of the year the following Training School will take place:

- 6th IC1004 Training School: “SAR & EM exposure in wireless networks”

Venue: Paris (Telecom Paristech)

Dates: 2 ½ days, 15-17 April 2014

Organiser: Alain Sibille (Telecom Paristech) jointly with LexNET FP7 project

Attendees: 30 - 35 students

Confirmed lecturers: Serge Bories, Narcis Cardona, Luis Correia, Benoît Derat, Vincent Lau, Yves Lostanlen, Luc Martens, Joe Wiart

IC1004 support: Trainers travel costs, 25 grants for PhD and ESRs, organisational support (as approved in 3rd Year Term Budget)

Prof. Alain Sibille provided some information regarding the 6<sup>th</sup> Training School.

- Finally Prof. Claude Oestges provided information about the Short Course about “Propagation and channel modelling for beyond 4G cellular networks” organized within the EuCAP 2014 Conference on April 11<sup>th</sup>, 2014 (Den Haag, NL).

Speakers: Thomas Kürner and Claude Oestges

Content (3h):

1. Introduction to beyond 4G communication networks
2. Challenges in radio network planning and optimization
3. Propagation models for small cells and femto cells
4. Multi-link channel sounding: techniques, challenges and experimental results
5. Reference and standardized 4G channel models

Registration: [www.eucap2014.org/conference/short-courses](http://www.eucap2014.org/conference/short-courses)

Attendees: 30-35 students; IC1004 support: 3.5 k€ (15x200€ grants)

## **6. Final book. ToC and Editors**

The Chair lauched the proposal for the Editorial Board: 7 representatives for the steering committee + 1 person per TWG (5), to be discussed within the TWGs and to be approved or not during the final plenary.

The proposed book structure shall consider a total number of pages of

approximately 350, should be focused on “environments”, and have the following chapters (not necessary in this order):

- Intro- Scenarios, environments, evolution of Mobile Comms, ...
1. Urban Radio Access Networks
  2. Indoor Wireless Communications Systems
  3. Vehicular Communications Environments
  4. Wireless Body Area Communications
  5. Radio Communications (horizontal concepts, technologies,...)
  6. Innovations in Antenna Systems for Communications
  7. Over the Air Testing of MIMO systems
  8. Radio Channel Characterisation, modelling
  9. Evolved Physical Layer , cooperative, ...
  10. RAN Architectures and Spectrum Management
  11. Future trends and Recommendations

Attendees are welcomed to discussed about the book structure during the technical sessions.

Future calendar

- Online Meetings, create mailing lists
- Chapter editors have to define the TDs Map to Chapters and define the Chapter sections.
- In Aalborg approve the table of content, the section editors and define Editor Guidelines

The editorial board will work on the book according to this calendar.

The discussion about the Final Book will be carried on during the final plenary, on Friday.

## **7. Presentation and Discussion of Technical Documents**

85 TD number requests were requested by the deadline, and 84 TDs have been finally submitted, and will be presented and discussed by the Working Groups during the three days of the meeting.

One special session in memoriam of Prof. Pertti Vainikainen was included in the scheduled of the MCM, and it will be chaired by Prof. Narcis Cardona and co-chaired by Katsu Haneda.

The list of TDs can be found here: [TD\\_list\\_9thMCM](#)

The Chair reminded the WG Chairs to dicuss on the following topics during technical sessions:

- Proposal or joint activities (tutorials, training schools, ect)

- Dissemination activities, conferences
- Book contributions to Table of Contents, in particular: Editorial Board (WGs), List of topics, ect.

## **8. Liason with other Actions**

Due to time constraints the Chair decided to postpone the liaison with other Actions to the final plenary.

Prof. Alessandra Costanzo presented to the audience the COST Action IC1301 "Wireless Power Transmission for Sustainable Electronics (WiPE)", started in November 2013. The Action could be a sister Action of IC1004.

## **9. Technical Plenary**

Invited talk: "5G Non-Orthogonal Waveforms for Asynchronous Signalling. 5GNOW project overview". Dr. Gerhard Wunder, Fraunhofer HHI Berlin, Germany

The plenary resumed on

**Friday, February 07th 2014, at 13.35**

and was chaired by Prof. Narcis Cadona, Chair of the Action.

## **8. Liaisons to other Bodies/Projects**

The following liaisons have been established so far:

- Buon Kiong Lau (SE), VISTA
- Sana Salous, (UK) Vice-Chair of URSI C
- Ron Borsato (USA), CTIA
- Haibin Zhang, (NL) GreenTouch
- Luis Correia, COST BM1309 "European network for innovative uses of EMFs in biomedical applications (EMF-MED)"
- Tommi Jämsä, Narcis Cardona, FP7 METIS
- Roberto Verdone, Newcom# → the Memorandum of Understanding between the two projects has been approved
- Roberto Verdone, EurACON

The rapporteurs have been invited to send their reports about Projects by February 28<sup>th</sup>, 2014

## **10. Report from Grant Holder responsible**

The GH reported about the Third Year Term budget (June 1, 2013 - May 31, 2014):

- A grant of 177.900 EUR has been assigned to the Action
- On October 2013 the first installment has been received (65%)
- On January 2014 the European Commission Financial Report has been approved
- By the end of February 2014 the GH will send to the COST Office the Intermediate Financial Report in order to ask for the second installment (35%)

The Grant Holder reminded about the budget split approved during the 7<sup>th</sup> MC Meeting.

Furthermore the Grant Holder reported about the expenses already occurred during the 3rd Year Term.

## **11. Report on Newsletters**

### Newsletters

The Chair provided some information about statistics regarding the newsletters.

The Chair and Prof. Alain Sibille invited to disseminate the link among contacts and to use the LinkedIn group as a dissemination tool.

## **12. Reports from WG Chairs**

The WG and SWG Chairs were asked to report about the activities:

Prof. Claude Oestges reported about the activities carried out within WG1 ([Minutes](#)) ([Attendance list](#))

Dr. Buon Kiong Lau reported about the activities carried out within SWG1.1 ([Minutes](#)) ([Attendance list](#))

Dr. Tommi Jämsä reported about the activities carried out within SWG1.2 ([Minutes](#)) ([Attendance list](#))

Prof. Alister Burr reported about the activities carried out within WG2 ([Minutes](#)) ([Attendance list](#))

Dr. Jan Sykora reported about the activities carried out within SWG2.1 ([Minutes](#)) ([Attendance list](#))

Prof. Silvia Ruiz reported about the activities carried out within WG3



[\(Minutes\)](#) [\(Attendance list\)](#)

The TWG Chairs were asked to report about the activities:

Dr. Kamyā Y. Yazdandoost reported on behalf of Dr. Levent Ekiz about the activities carried out within TWG-V ([Minutes](#)) ([Attendance list](#)).

Dr. Raffaele D'Errico reported about the activities carried out within TWG-B ([Minutes](#)) ([Attendance list](#)).

Dr. Dennis Rose reported about the activities carried out within TWG-U ([Minutes](#)) ([Attendance list](#)).

Dr. Klaus Witrissal reported about the activities carried out within TWG-I ([Minutes](#)) ([Attendance list](#)).

Prof. Gert Pedersen reported about the activities carried out within TWG-O ([Minutes](#)) ([Attendance list](#)).

The WG Chairs were asked to send their Minutes to the Action Chair by February 28<sup>th</sup>, 2014.

### **Final Book, Table of Contents**

*Proposal book organisation (not necessary in this order)*

Intro- Scenarios, environments, evolution of Mobile Comms, ...

Part 1. Urban Radio Access Networks

Part 2. Indoor Wireless Communications Systems

Part 3. Vehicular Communications Environments

Part 4. Wireless Body Area Communications

Ch. x+1. Innovations in Antenna Systems for Communications

Ch. x+2. Over the Air Testing of MIMO systems

Ch. x+3. Radio Channel Characterisation, modelling

Ch. x+4. Evolved Physical Layer

Ch. x+5. PHY cooperation techniques (Cooperative communications/networking)

Ch. x+6. RAN Architectures and Network Efficiency

Ch. x+7. Future trends and Recommendations

The proposal of Editorial Board has been approved, while the chapter editors will be defined later.

The MC Members agreed to focus on "environments" and on committing the Editorial Board to make the final list of Book Chapters.

Calendar to the next MC Meeting

- 12th Feb, Editor → Editorial Board (launch the process)

- 19th Feb, Editorial Board meeting (online)
- 9th March, Editorial Board → Complete List of Chapters/ Titles and appoint Chapter Editors
- 30th Apr, Chapter Editors → Map TDs to Chapters and define Chapter Sections
- 26th May (Aalborg), MCM → Approve ToC, Section Editors and define Edition Guidelines

### **13. Future meetings and conferences**

#### *13.1 Dissemination activities. Conferences*

- EuCNC 2014, Bologna, Italy, June 23/26, 2014 → IC1004 Special Session on “Propagation Models and Channels for Future Mobile Communications” + Joint Special Session IC1004/TERRA on “Spectrum Management”

#### *13.2 Dissemination activities. Web page*

The Chair reminded the (T-) (S-) WG Chairs to send updates regarding the description of WGs Activities for the IC1004 Web Page.

#### *13.3 Future meetings and workshops*

The Chair reminded about the dates of the next MC Meetings:

- 10<sup>th</sup> MC Meeting, 26-28 May 2014, Aalborg – DK  
Local organizers: Gert Pedersen, who provided information about the local venue and the program.
- 11<sup>th</sup> MC Meeting, 24-26 September 2014, Krakow – PL  
Local organizer: Pawel Kulakowski.  
Dates have been fixed during this meeting
- 12<sup>th</sup> MC Meeting, 28-30 Jan 2015 (tentative dates), Dublin – IE  
Local organizer: Brennan Conor  
Dates still to be fixed

### **14. AoB**

Nothing has been reported.

## **15. Close of Meeting**

The Action Points to be performed after the end of the 9th MC and Scientific Meeting were reminded to the audience.

Prof. Narcis Cardona closed the meeting by thanking Prof. Velio Tralli, all his team for hosting the meeting and all attendees.