IRACON

3nd Management Committee Meeting

Lisbon, Portugal
1-3 February 2017

Claude Oestges

ICTEAM

Université catholique de Louvain

UCL
Université catholique de Louvain

icteam

1. Opening formalities
2. Adoption of the Agenda
3. Approval of the Minutes of the last MCM (Lille)
4. Status of the Action
   - Approval of IPC institutions
   - Reminders about rules and procedures
   - ECI Representative Mandate
   - New SWG on IoT for Health
5. Review of action deliverables
6. Report from Grant Holder
7. Report from Training Manager (STSMs, Training Schools and Tutorials)
8. Keynote talks
9. Presentation and Discussion of Technical Documents
10. Future MCMs and Workshops
11. Reports from Working Group Chairs
12. Report from Dissemination Manager
13. Liaisons with International Bodies and Projects
14. AOB
15. Close of Meeting

Any change to the agenda ?

ATTENDANCE LISTS

Please sign the attendance list for **the day(s) your are present**

AND

ONE attendance list for **EACH** WG/EWG you attend

No reimbursement of travel expenses (for those entitled to)
if attendance lists are not duly signed

NEWSLETTER MEETING

Who ? Members of the steering committee
When ? Feb 1st at 18:00
Where ? In room 02.3 (ground floor)

Any comment on the minutes (sent by email/posted on the website) ?

Lille, May 30 - June 1, 2016

Subject │ **Minutes of the Second Management Committee Meeting of COST Action CA15104 "Inclusive Radio Communication Networks for 5G and beyond (IRACON)"**

Lille, France
30/05/2016

Partners

- Number of signatory countries : **34** (out of 36)

- Number of MC Members : **67** (+ Chair)

- Near Neighbour Country Institutions : **1** e-approved

National Research Tomsk Polytechnic University	Russian Federation

- International Partner Country Institutions :
  - ✓ 13 approved (**11** activated so far)

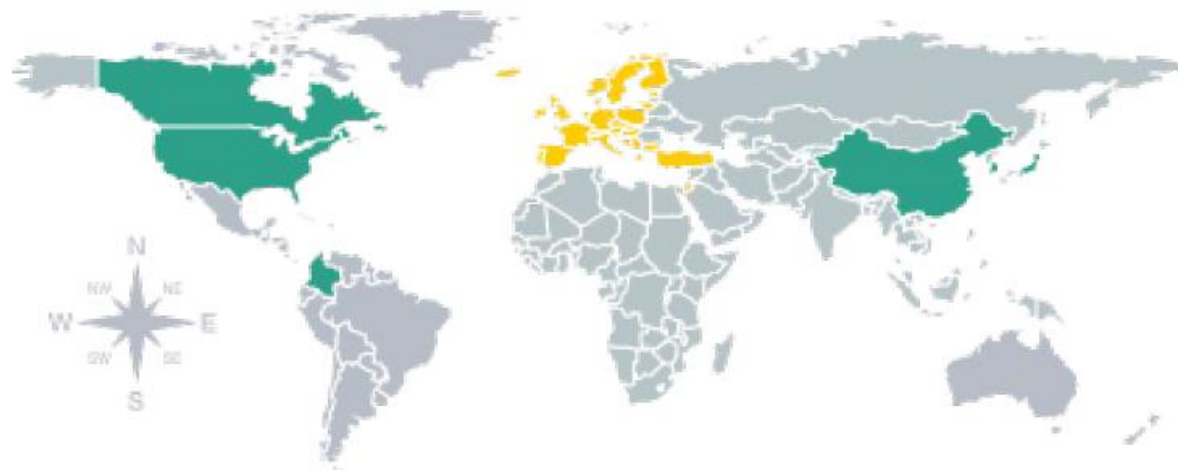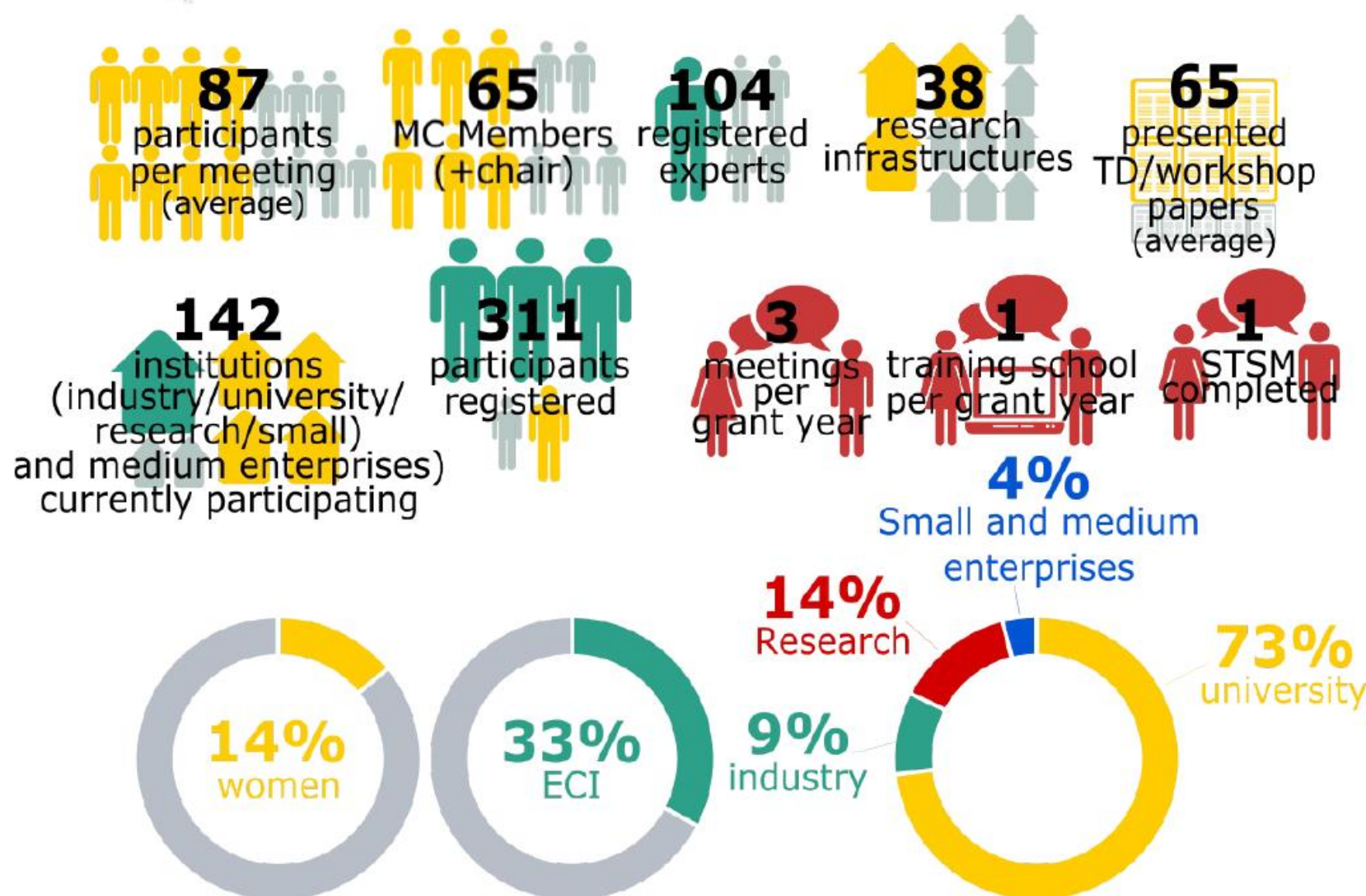 | | |
    |---|---|
    | Beijing Jiaotong University | China |
    | Tokyo Institute of Technology | Japan |
    | Comsearch | United States of America |
    | NIST | United States of America |
    | Samsung Electronics Co. | Korea, Republic of |
    | Japan Advanced Institute of Science and Technology | Japan |
    | Motorola Mobility LLC | United States of America |
    | Universidad Icesi | Colombia |
    | Niigata University | Japan |
    | University of Prishtina | Kosovo |

  - ✓ **1** pending approval

Facts & Figures

Partners (1)

- COST Country institutions

  - ✓ **Commitment to have contributions (TD, tutorial, etc.) at least at ONE meeting/training school per year**

  - ✓ **Deregistration from the internal website access if not fulfilled**

- Near Neighbour Country institutions

  - ✓ **Commitment to have contributions (TD, tutorial, etc.) at least at ONE meeting/training school per year**

  - ✓ **Deregistration from the internal website access if not fulfilled**

Partners (2)

- International Partner Country Institutions

    When should we accept applications from NCIs?

    COST rules: mutual benefit

    Other criteria: scientific excellence (Universities)
                        role in industrial context (Industries)
                        technical topics and WGs addressed
                        geographic balance

    ✓ **Commitment to have contributions (TDs, tutorial, etc.) at TWO meetings/training schools per year**

    ✓ **Deregistration from the internal website access if not fulfilled**

New approvals

- Council for Scientific and Industrial Research (South Africa)

  ✓ Representative: Dr. Albert Lysko

June 2016

Participation in EuCNC: IRACON special session on IoT (R. Verdone)

September 2016

Participation in PIMRC: IRACON workshop on 5G (L. Clavier)

Website, social media presence and IRACON newsletter

Preparation of two convened sessions, **accepted** at EUCAP 2017 (March 2017)

October 2016

2nd TM (Durham, 4-6 2016)
    50 TDs, 65 participants
    3 Invited Speakers
    Joint workshop with IET (3 Oct 2016), with about 45 participants

February 2017

3rd MCM (Lisbon, 1-3 Feb 2017)
    77 TDs, more than 130 participants
    2 Invited Speakers
    Tutorial on IoT for 5G (R. Verdone), with 30 participants

Important Reminders: Reimbursement Rules

- MC meetings

  ✓ Up to two MC members per COST Country

  ✓ MC members can be replaced by officially nominated MC substitute, if the Chairman and GH receive request by given <u>deadline</u>

  ✓ Priority for MC meetings

  1. All MC members who apply, or MC official substitutes, Action Chair, Secretary, invited speakers and ECI representative
  2. WG/EWG/SWG Chairs (while budget is available*)
  3. Non-MC members, presenting a TD, when replacing an MC member (while budget is available*)
  4. Other experts, one per country (while budget is available*)

- Technical meetings

  ✓ Priority

  1. Action Chair, invited speakers
  2. WG/EWG/SWG Chairs (while budget is available*) in combination with COST policy priorities (inclusiveness/gender)
  3. Core Group members, Secretary (while budget is available*)

Important Reminders: Deadlines and Procedures

- TD submission
  - ✓ Request a TD number (**20 days** before the meeting)
  - ✓ Send to the secretary a full TD (**10 days** before the meeting) using the cover page available on the website

These deadlines are set to enable the StC to prepare the meeting schedule

- Meeting registration: two actions are required
  - ✓ Register on IRACON website (**20 days** before the meeting)
  - ✓ Accept the e-cost invitation

Important Reminders: Deadlines and Procedures

- Reimbursement (for those entitled to)
  - ✓ Accept the e-cost invitation
  - ✓ Fill the the e-cost and submit the claim (after the meeting)

  The reimbursement procedure MUST take place on e-cost

  - ✓ If you cannot attend but are replaced by an eligible substitute
    - Send a request to the Chair and GH (cc: secretary) at least **20 days** prior to the event to enable the reimbursement of your official substitute

Important Reminders: e-Mailing and Acknowledgment

- Usage of global reflector

  ✓ From this meeting on, the global reflector (all_ca15104@iracon.org, **moderated**) should not be used to advertise events (outside those of the Action itself)

  ✓ Ask Lucia (lucia.vitiello@unibo.it) to include your announcement on the IRACON Web Page

- WG reflectors have been created

- **Acknowledge COST CA15104 IRACON on all joint publications !**

ECI Representative

- **What is an ECI ?**

  Early Career Investigator, PhD + 8 years maximum

- **Role of ECI representative in the core group (one-year mandate)**

  Participation to core group discussions

  Preparation of meetings (pre-meeting, etc.)

  Newsletter editor

  Blog moderator

  → Margot Deruyck (BE) was elected for one year

- There will be new elections in the next meeting

  → Please send candidacies to the secretary **before May 1, 2017**

New SWG on *IoT for Health*

- **EWG-IoT proposes to activate a Sub-Working Group on**

  ***IoT for Health* (SWG IoT-Health)**

- **Motivation**
  - ✓ Many partners declared interest in the topic (EUC, PUPIN, JCT, CEA-Leti, UCD, IMU, UBI, GUT, ETHZ, NIST, UPV, IST, ITU)
  - ✓ Different TDs already presented at previous and current meetings (4 TDs in Lille, 6 TDs in Durham and 7 TDs in Lisbon)

- **Co-Chair candidacy received from**
  - ✓ Slawomir J. Ambroziak, GUT
  - ✓ Kamran Sayrafian, NIST
  - ✓ Stephen Wang, OCADO

Confirmed Upcoming Meetings

- **Fourth MC meeting and technical meeting**
  - ✓ Lund (SE), May 29-31 2017 + experimental tutorial on massive MIMO on June 1st, 2017
  - ✓ Organizers: Vincent Lau and Fredrik Tufvesson

- **Fifth MC meeting and technical meeting**
  - ✓ Graz (AT), Sep 11-13 or 13-15 2017 (exact dates TBC by the end of this meeting)
  - ✓ Workshop on Localization and IoT
  - ✓ Organizer: Klaus Witrisal

Dissemination Actions (to be discussed in WG)

Special Sessions

- **IRACON special sessions at EuCNC**
  - ✓ Oulu (FI), June 12-15, 2017
  - ✓ Submission deadline on Feb 20, 2017

- **URSI GA**

- **Conferences accepting special sessions**
  - ✓ ISWCS 2017, Bologna, Aug 28-31, 2017
  - ✓ EuCAP 2018, London

Dissemination Actions (see Action Points)

- **List of research groups** with activity in the area of the Action (name of the group and contact person/email)

- **List of doctoral schools** (i.e., universities awarding a Ph.D. degree) in Europe with activity in the area of the Action (name of the university/school and contact person/email)

→ **MC members to send this list for their respective country to the secretary by March 1, 2017**

Technical deliverables for the first two years

- **Deliverable 1** (M14, **May 2017**): Working Groups first year term annual report summarising the achievements of every WG → **all WGs**

- **Deliverable 2** (M20, November 2017): Overview of IRACON Reference Scenarios and assessment of 5G radio access techniques through experimental platforms → **WG3, EWG-RA**

- **Deliverable 3** (M24, March 2018): Submission to international bodies of contributions about concerted 5G radio channel models → **WG1**

- **Deliverable 4** (M24, March 2018): Collaborative white paper on new localization techniques suitable for 5G and the Internet of Things → **EWG-LT+IoT**

- **Deliverable 5** (M26, May 2018): Working Groups second year term annual report summarising the achievements of every WG → **all WGs**

Technical deliverables for the last two years

- **Deliverable 6** (M36, March 2019): Collaborative white paper on future architecture and protocols for the Internet of Things → **EWG-IoT**

- **Deliverable 7** (M38, May 2019) : Working Group third year term annual report summarising the achievements of every WG → **all WGs**

- **Deliverable 8** (M42, September 2019): Technical inputs and liaison statements to Standardisation Groups on metrics for Over the Air (OTA) testing

  → **EWG-OTA**

- **Deliverable 9** (M42, September 2019): IRACON concerted radio channel models for 5G and beyond (draft book chapter) → **WG1**

- **Deliverable 10** (M26, May 2018): Working Group final report summarising the achievements of every WG in the overall Action (draft book) → **all WGs**

In practice, for Deliverable 1

- **Edition**
  - ✓ WG chairs are the contributors
  - ✓ Chair and Vice-Chair are the editors

- **Content**
  - ✓ 1 page per WG/meeting
  - ✓ Scientific results and dissemination activities (no equations !)
  - ✓ Will be published on IRACON website

- **Schedule**
  - ✓ Draft version by April 1, 2017
  - ✓ Review by Core Group by May 1, 2017
  - ✓ Delivery by May 31, 2017

Grant Holder

cnit

Secretary

Miss Lucia Vitiello

Budget for Y1

Networking Tool	Description	Budget	Actual balance
Meetings	2 MCMs, 1 TM, 1 workshop	97 910.00 EUR	50 346,76 EUR
Training Schools	1 TS	12 500.00 EUR	12 500.00 EUR
STSMs	6 STSMs	7 200.00 EUR	2 176.00 EUR
Dissemination	1 (website set-up)	4 500.00 EUR	0.00 EUR
Other Expenses Related to Scientific Activities	Bank fees	498.65 EUR	280 EUR
Total Science Expenditure		**122 608.65 EUR**	65 521.41 EUR
Financial and Scientific Administration and Coordination (MAX. 15%)	15 %	18 391.30 EUR	9 828.21 EUR
Total Grant		**140 999.95 EUR**	75 349.62 EUR

Grant Holder

cnit

Secretary

Miss Lucia Vitiello

Work and Budget Plan for Y2

Networking Tool	Description	Budget
Meetings	3 MCMs	126 000.00 EUR
Training Schools	2 TS	15 000.00 EUR
STSMs	6 STSMs	7 200.00 EUR
Dissemination	-	0 EUR
Other Expenses Related to Scientific Activities	Bank fees	500.00 EUR
Total Science Expenditure		**148 700.00 EUR**
Financial and Scientific Administration and Coordination (MAX. 15%)	15 %	22 300.00 EUR
Total Grant		**171 000.00 EUR**

Reimbursement schedule

- According to the new vademecum, 35 % of the Grant will be paid to the GH after the end of the Grant Period

- The consequences are ...

Training Schools

- Training School on Antennas and Propagation for Body Communications (joint with WIBEC)
  - ✓ Dresden (DE), March 1-3, 2017
  - ✓ IRACON organizers: Kimmo Kansanen, Luis Correia, Kamran Sayrafian and Narcis Cardona

- Training School on Large-Scale Propagation (joint with ESoA)
  - ✓ Louvain-la-Neuve (BE), June 12-16, 2017
  - ✓ Organizers: Vittorio Degli-Esposti, Thomas Kürner and Claude Oestges

1st Training School: Grant Selection Procedure and Results

19 applications received
- 1 after the deadline
- 3 from non eligible countries (not COST or NNC)
- 3 from the same institution ($\rightarrow$ one was rejected)

$\rightarrow$ 14 accepted (but 1 withdrawal)

$\rightarrow$ **13 PhD students funded, provided they sign the TS attendance list**

STSMs

8 proposals received so far

5 already accepted

2 rejected

1 under review

Remaining budget: 2176.00 EUR

→ **There is still room for at least 2 STSMs (maybe a few more after the Lisbon meeting, but they need to be carried out and financially concluded before April 30, 2017**

→ **Apply before March 1st, 2017**

- **Challenges and Techniques for Characterizing Massive MIMO Antenna Systems for 5G**

  Taro Eichler**,** Technology Manager, Rohde & Schwarz, Germany

- **Innovation in wireless in-body devices**

  Sebastian Schostek, Ovesco AG, Germany

- **COST: Portugal and Europe's leadership in mobile communications**

  Luis Correia, IST, Portugal

There are 75 TDs to be presented

Working Groups discussions should include

- Deliverables
- Training School proposals/topics for 2018 and beyond
- Workshop proposals for 2017 and beyond (we already have one proposal for Sep 2017)
- EuCNC special sessions
- Joint activities with H2020 projects
- Tutorial offers for upcoming meetings (starting from January 2018)

- Joint activities (experiments, papers, etc.)
- Short Term Scientific Missions among participant institutions

- Any other idea to foster the dissemination of the Action ?

IRACON

Lisbon, Feb 1-3, 2017	Day One			Day Two			Day Three		
Hours	9.00 - 11.00			9.00 - 11.00			9.00 - 11.00		
Room	Amphi			Amphi	02.2	02.1	Amphi	02.2	02.1
Sessions	**Plenary**			**WG1**	**WG2**	**WG3**	**OTA+WG1**	**EWG-IoT**	**WG3+RA**
Topic				Simulations		Spectrum+5G	Measurements	Energy+WSN	RA
TD number or other	Management Committee			35		39	15	51	73
TD number or other				36		45	67	20	74
TD number or other				41		42	47	1	DISC-RA
TD number or other				70		68	64	DISC-IoT	
TD number or other				DISC-WG1	DISC-WG2	DISC-WG3	DISC-OTA		
Coffee Break	11.00-11.30			11.00-11.30			11.00-11.30		
Hours	11.30 - 13.00			11.30 - 13.00			11.30 - 13:15		
Room	Amphi			Amphi	02.2	02.1	Amphi		
Sessions	**Plenary**			**IoT + WG1**	**EWG-LT**	**EWG-RA**	**Plenary**		
Topic	Invited talks			Body	Localisation	Testbeds			
TD number or other	Dr. Taro Eichler, Rohde & Schwarz			6	9	27	Management Committee		
TD number or other	Dr. Sebastian Schosteck, Ovesco AG			25	13	31			
TD number or other				44	49	43			
TD number or other				54	66	72			
Lunch	13.00 - 14.30			13.00 - 14.30			13.15		
Hours	14.30 - 16.00			14.30 - 16.00					
Room	Amphi	02.2	02.1	Amphi	02.2	02.1			
Sessions	**WG1**	**WG2**	**WG3**	**OTA + IoT**	**IoT + LT**	**EWG-RA**			
Topic	Simulations	Coding	RRM 4G+	Vehicular	LT+Health	CRAN, MIMO			
TD number or other	4	7	57	2	30	65			
TD number or other	26	61	75	8	18	10			
TD number or other	58	62	3	16	23	50			
TD number or other	59	33	24	11	DISC-Body	48			
Coffee Break	16.00 - 16.30			16.00 - 16.30					
Hours	16.30 - 18.00			16.30 - 18.00					
Room	Amphi	02.2	02.1	Amphi	02.2	02.1			
Sessions	**WG1**	**WG2**	**WG3**	**WG1**	**EWG-LT**	**EWG-IoT**			
Topic	Measurements	MIMO	Hetnets	Modelling	RF positioning	Testbeds			
TD number or other	12	14 (in 02.1)		34	21	22			
TD number or other	32	19 (in 02.1)		5	29	40			
TD number or other	46	60	28	52	DISC-LT	77			
TD number or other	76	69	37	55		71			
TD number or other	DISC-WG1	DISC-WG2	38	56		53			

19.00 Bus departs to dinner

Management Committee Meeting

resumes on

Friday at 11:30 am

Upcoming Meetings

- **Fourth MC meeting and technical meeting**
  - ✓ Lund (SE), May 29-31 2017 + experimental tutorial on June1, 2017
  - ✓ Organizers: Vincent Lau and Fredrik Tufvesson

- **Fifth MC meeting and technical meeting**
  - ✓ Graz (AT), **Sep 12-14 2017**
  - ✓ Workshop on Localization and IoT
  - ✓ Organizer: Klaus Witrisal

Upcoming Meetings

- **Sixth MC meeting and technical meeting**

  - ✓ Jan-Feb 2018

  - ✓ Confirmed proposal from European University Cyprus (CY)

- **Future meetings**

  - ✓ Proposals from Aalborg University (DK), U. Catania (IT), Uni. Montenegro (ME), TU Vienna (AT), CTTC (ES), Uni. Cartagena (ES), ...

Workshops

- IRACON Workshop on *Localization and IoT*
  - ✓ Graz (AT), on Sep 12, 2017
  - ✓ One-day workshop co-organized by COST IRACON and TU-Graz Lead Project "Dependable Things"
  - ✓ Organizers: Klaus Witrisal, Carles Anton and Chiara Buratti
  - ✓ Tentative schedule
    - 2 keynote talks
    - Regular workshop papers, in particular papers that combine both topics
  - ✓ Tentative submission schedule
    - Call/website to be issued before end Feb
    - Submission deadline: mid May
    - Acceptance notifications: mid July

Workshops

- Workshop on localization and IoT (Graz, AT, co-located with Sep 2017 meeting)

  ✓ Organizers: Klaus Witrisal, Carles Anton and Chiara Buratti

- Proposal for a joint workshop with H2020 SANSA project, co-colated with one of our meeting

DWGs

1. WG-1 (radio channels): Sana Salous and Katsuyuki Haneda

2. WG-2 (PHY-MAC): Hanna Bogucka and Jan Sykora

3. WG-3 (NET): Silvia Ruiz and Hamed Ahmadi

EWGs

1. WG-OTA: Wim Kotterman and Moray Rumney

2. WG-IoT: Erik Ström and Chiara Buratti

   ✓ SWG IoT-Health: Slawomir J. Ambroziak and Kamran Sayrafian

3. WG-LT: Carles Anton and Klaus Witrisal

4. WG-RA: Florian Kaltenberger and Mark Beach

WG-LT

- Statistics
  - 6 papers, 2 sessions (attendance 35/10)
- Topics
  - Measurement acquisition and modeling
  - Tracking filters and data fusion
- Dissemination
  - Joint IoT and LT workshop planned for Graz meeting: "**Dependable Wireless Communications and Localization for the IoT**"; Sept. 2017
  - Whitepaper "Localization in 5G" (planned for M24)
  - Workshops at IEEE conferences: GLOBECOM 2016; ICC 2017; WCNC 2018 (planned)
  - Tutorial/training school: tentatively planned for 2018/19

Leaflet

- Goal: high-level introduction of the Action
  - ✓ Explains the key aspects of our activities
- Updated after each meeting
- Available at www.iracon.org under "Publications"

Newsletters

- All issues available at www.iracon.org under "Publications"
- Number of downloads latest issue (26/01): 243
- Next issue to be expected in the beginning of March

Blog

- To launch discussions and/or express views on matters dealt with within the Action
  - ✓ Possible blog posts include, but are not limited to: a short survey, a technical overview, a small tutorial, etc.
- Schedule ensuring (at least) a bi-monthly contribution
- Contributors: members of Steering Committee
- If you have an interesting contribution for the blog, contact Margot Deruyck

Social media

- Facebook: @CA15104
- Twitter: @IRACONAction
- Linkedin

Participation in COST corporate video

- Interview of young researchers (preferably living in Belgium, but not necessarily Belgian) who participated in COST Actions. The idea is that they explain how their participation in a COST Action helped them to develop their professional career

→ Evgenii Vinogradov (UCLouvain, BE), who has participated in COST IC1004 and IRACON, was interviewed

COST Portugal initiative

- As described by Luis Correia during the plenary

List of liaisons with international bodies, standards and projects

- **3GPP –** Aki Hekkala

- **URSI –** Sana Salous

- **ITU-R** – Sana Salous and Belen Montenegro

- **H2020 METIS-II –** Narcis Cardona

- **H2020 mmMAGIC** – Mark Beach

- **H2020 5G X-haul** – Mark Beach

- **CommNet** (EPSRC network) – Mark Beach

- **IEEE 1900.6** – Kostas Katzis

- **EurAAP –** Claude Oestges

- **EURACON –** Roberto Verdone

- **WiBEC –** Narcis Cardona

- **5G initiative –** Fernando Velez

Open calls for papers of interest

- **IWCMC 2017** (13th International Wireless Communications and Mobile Computing Conference)

  - ✓ June 26-30, 2017 (Valencia, ES)

  - ✓ Submission deadline: Feb 15, 2017

- **New journal (EiC: Fernando Velez):** Journal of Ambient Wireless Communications and Smart Environments (AMBIENTCOM)

- Special issue on IoT and Machine-Type Communications in **IEEE Communications Standards** magazine

  - ✓ Extended deadline: Feb 16, 2017

  - ✓ Those interested should declare their intention, sending a title and abstract to Narcis Cardona by Feb 7, 2017

Action points

AP	WHAT	WHO	WHOM	WHEN
4/1	Submit reimbursement forms	Those entitled to	e-cost	March 1
4/2	Send Minutes of Group Meetings	Group Chairs	Chair + Secretary	March 1
4/3	Send STSM Applic.	Those interested	e-cost +Training Chair	March 1 Open call
4/4	Send list of research groups/PhD schools	MC	Secretary	March 1

IRACON

Action points

AP	WHAT	WHO	WHOM	WHEN
4/5	Send WG reports for D1	Group Chairs	Chair + Vice-Chair	April 1
4/6	Apply for ECI Rep	ECIs	Chair + Secretary	May 1
4/7	Register to 4th MCM	Attendees	Website	May 10
4/8	Request TD number	Authors	Website	May 10
4/9	Submit TD	Authors	Website	May 20

Thank you !

See you in
Lund, SE
May 29-31, 2017

Claude Oestges
ICTEAM
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