

Cooperative Radio Communications for Green Smart Environments

Final Meeting & Workshop May 5th-7th 2015 Valencia



Patrons:

Wed 6-May-2015

PLENARY

1. Opening formalities
2. Adoption of the Agenda
3. Approval of the Minutes of the last MCM
4. Status of the Action
 - a) Dissemination, recent outcomes
 - b) Training Schools and STSMs report
 - c) Grant Holder Report (CNIT, R.Verdone)
 - d) Final Book status, Budget and Publisher
 - e) Final achievements report
5. Future Action and follow-up meetings from IC1004 to *IRACON*
6. Presentation and proposal from EurACoN

Thursday 7-May-2015

15:30 PLENARY

8. (Liaison rapporteurs to International Bodies and Projects →written)
9. Final Book status, report from Editorial Board (Editor)
10. Follow-up meetings, calendar
11. Final remarks from WG Chairs and Chairman
12. AOB

End of meeting by 16:15

ATTENDANCE LISTS:

Please sign the

GENERAL ATTENDANCE LIST,

ONE PER DAY

&

ONE attendance list for

EVERY **Working Group** you attend

3. Approval of the Minutes of the last MCM



Minutes are available under ...\\official documents and after MC approval also under ...\\meetings

The PDF file contains hyperlinks to WGs Minutes and other documents like reports from liaisons rapporteurs, etc.

--> Approval?

4. Status of the Action

Number of signatories countries: **30**

Number of COST country entities (institutes, etc.) currently participating: **141**

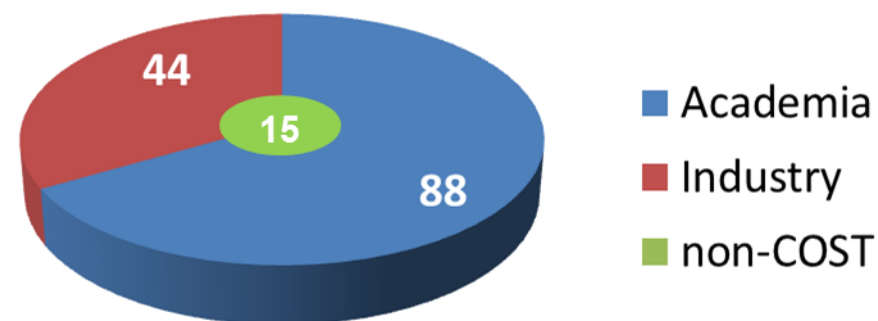
Number of COST Near Neighbour Countries: **1**

Number of COST International Partner Countries: **6**

Number of non-COST entities (institutes, etc.) currently participating: **19**

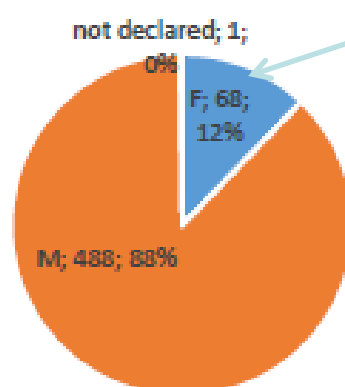
Number of MC Members: **56** (+ Chair)

Number of registered experts: **> 600**



4. Status of the Action

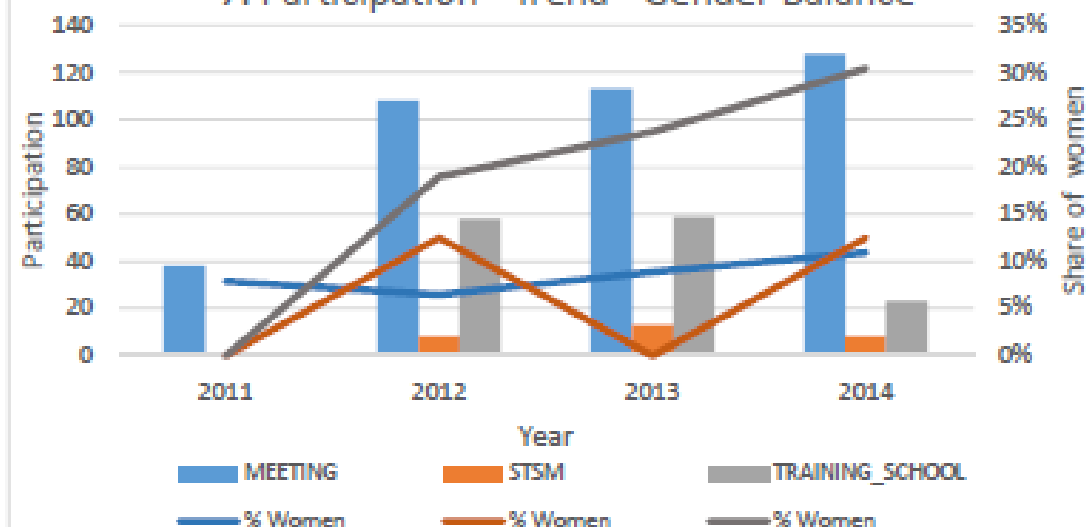
6. Gender Balance



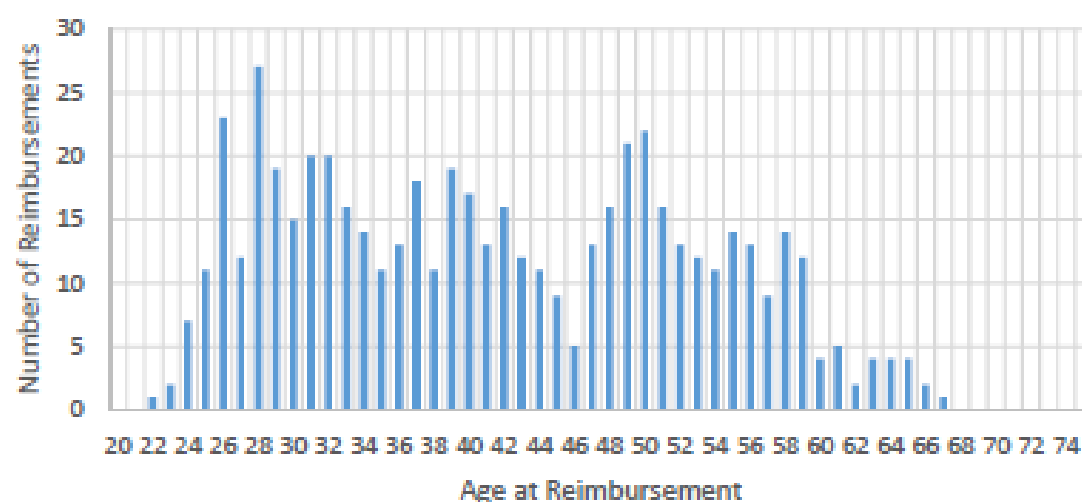
F M not declared

14%

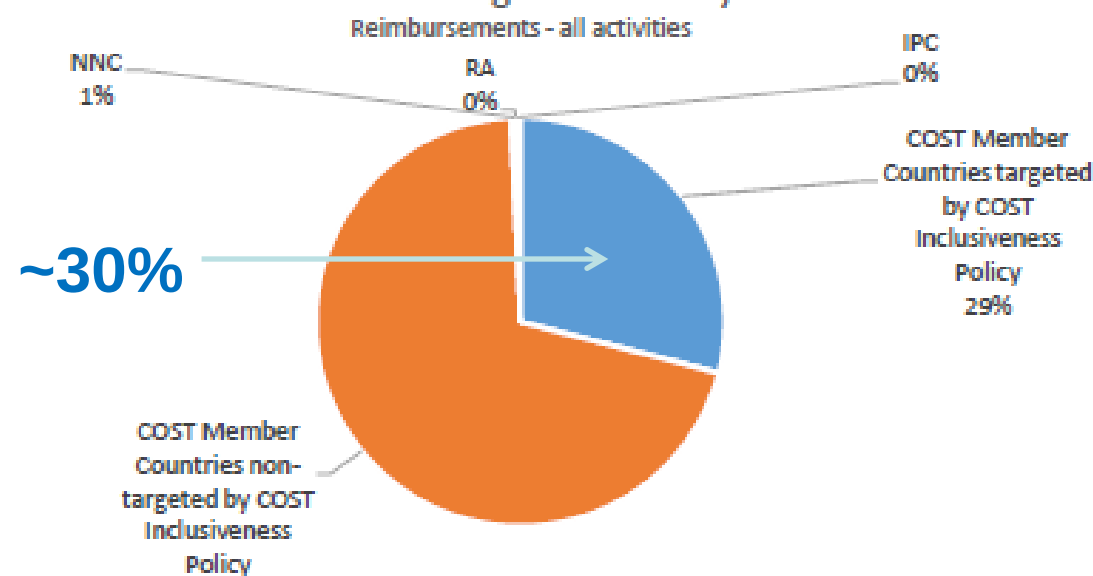
7. Participation - Trend - Gender Balance



8. Age Balance



9. Inclusiveness Targeted Country Balance



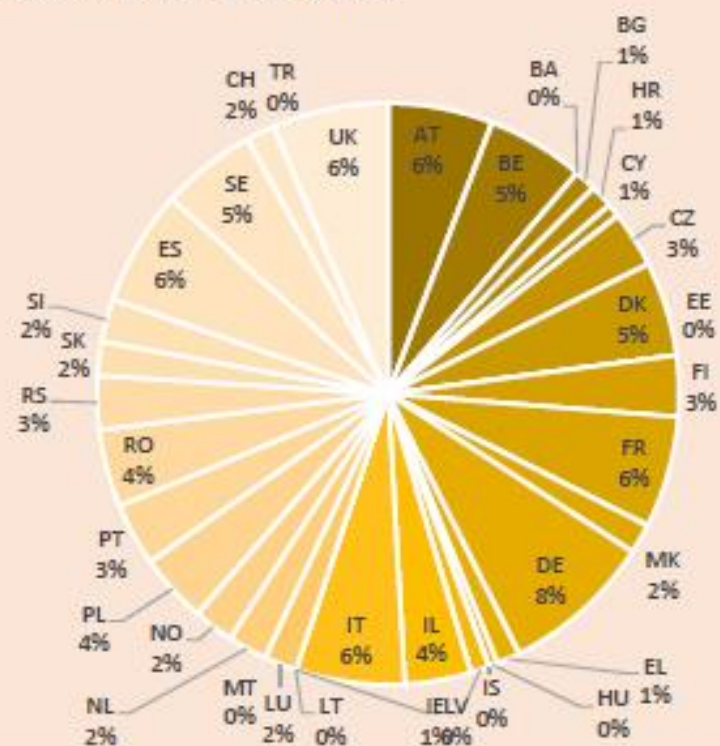
Official Data from COST Office records

4. Status of the Action

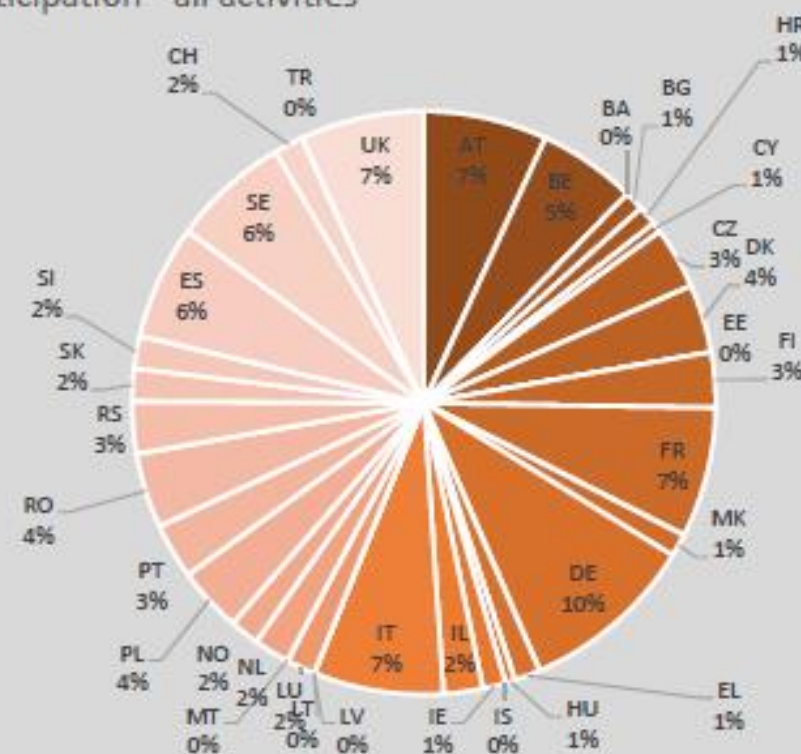
Action Number: IC1004

Data from 1/1/2010 to 31/12/2014

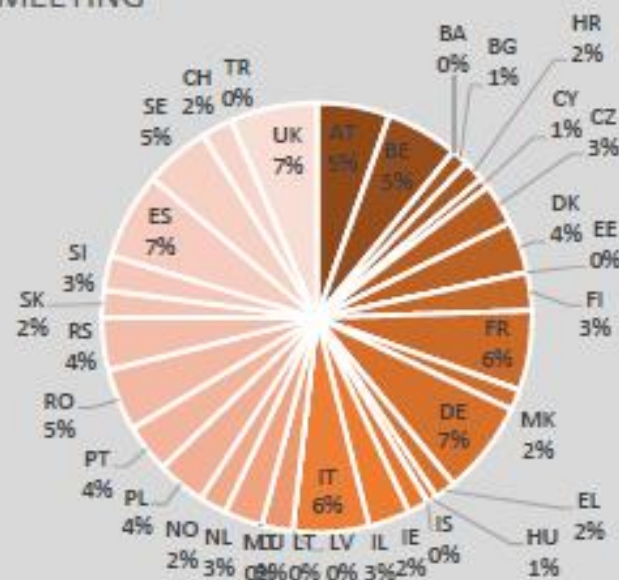
1. Reimbursements - all activities



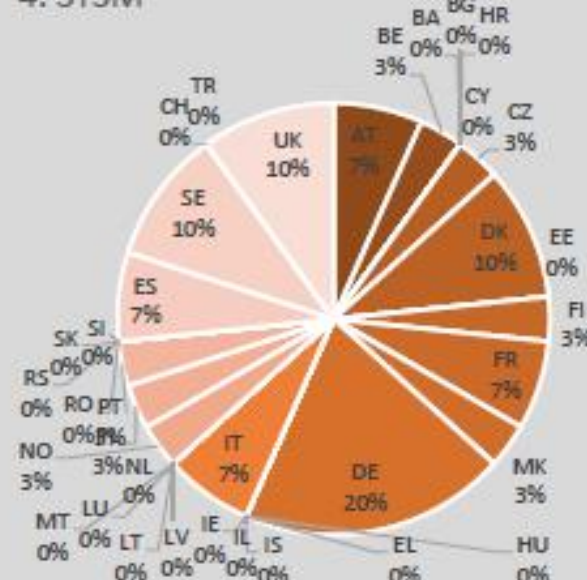
2. Participation - all activities



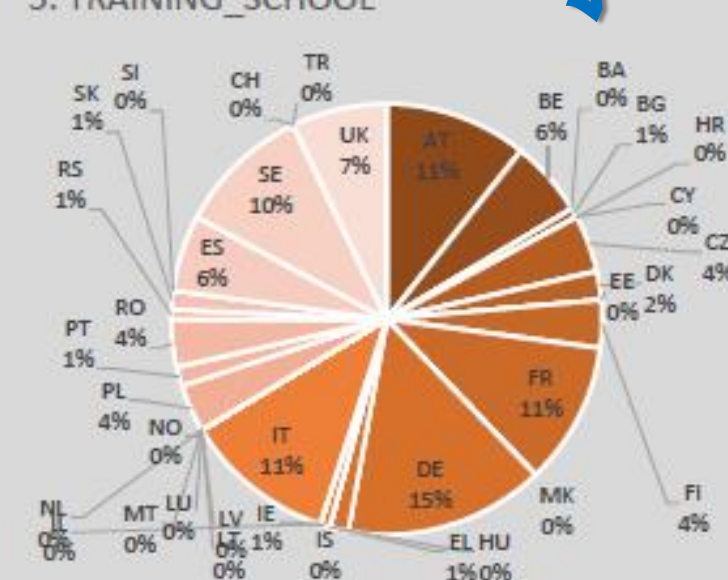
3. MEETING



4. STSM



5. TRAINING_SCHOOL



✓ BALANCED

Training activities

8th IC1004 Training School on

“From HetNets to Cloud Radio Access Networks”

Venue: Luxembourg

Dates: 2 ½ days 2015, **21-23 April**

Organisers: Lucio S. Ferreira, Symeon Chazinotas, Silvia Ruiz

Attendees: 26

14 students granted by IC1004



STSMs

14 applications received

(budget increased from the initial allocation. Approved in MC and agreed by COST Officer)

2 were cancelled, 2 rejected

10 Performed in the 4th year term:

Peter Bagot (UK-Spain); Jakub Kmiecik (Poland-Austria); Conchi Garcia (Spain-Norway); Troels Pedersen (Denmark-France); Stefan Mijovic (Italy-Belgium); Jan Hejtmanek (Czech-Germany); Slawomir Ambroziak (Poland-Portugal); Yan Zhang (Norway-Sweden); Danilo Abrigani (Italy-Spain); Marco Zoli (Italy-Germany);

Liaisons

January 2015

- Application from IC1004 to enter **5GPPP** accepted
Formal agreement to be signed after COST Office review

March 2015

No possible agreement with COST Office to reach an acceptable version of the MoU/contract.

! Lost opportunity...for COST as a whole.

Liaisons

Dec 2014 / Jan 2015

- Liaison statements presented and approved at **3GPP RAN4**;
I. Szini, W.Kotterman, G.Pedersen, T. Jamsa

February 2015

- OFCOM consultation on Spectrum above 6GHz for 5G
Alain Moraud, Sana Salous, N.Cardona, + 14 contributors
COST IC1004 is extensively cited:



Laying the foundations for
next generation mobile services
Update on bands above 6 GHz

Liaisons

- Sana Salous, ITU

*Since the meeting in Dublin we have performed measurements at 30 GHz and 60 GHz in indoor and outdoor environments and the results have been approved for submission to the **ITU Study Group 3** meeting for inclusion in ITU-R 1411 and ITU-R 1238 by the UK Study Group 3. It would be useful for the workshop to have a view of these results and perhaps for the **COST Action report**, but I am not attending the meeting.*

The documents have now been submitted by the UK to the ITU-SG3 and I will go next week to present them and hopefully they will be accepted.... The inputs to the ITU fall into two categories indoor and outdoor and previously I had submitted on body results at 60 GHz.

This year is the meeting of the SG3 when documents are approved for inclusion in the recommendations. (SG3 only meets once every two years).

Final meeting and workshop

Workshops

Local Organiser: Narcis Cardona

Technical Program Committee: Claude Oestges, Sana Salous, Silvia Ruiz, Yan Zhang, Narcís Cardona

Venue: City of the Arts and Sciences, Valencia

Attendees: 120

Concluding remarks: mmWave and new RAN architectures are two of the main pillars of the future 5G networks. IC1004 group ends up the Action with relevant results and ongoing activities in these two aspects. Two Special Issues in EURSIP JWCN have been convened; authors are welcome to submit a reviewed version of these papers to the Journal.

Workshop on
Radio Channel Models for Higher Frequency Bands

Workshop on
Evolution of Radio Access Network Technologies towards 5G

Program:

- 9:15 **"Millimeter-wave channel modeling - big challenges ahead"**. Invited talk. Katsuyuki Haneda ; Aalto Univ., Finland
- 9:50 **5G radio access and channel modeling**; Fredrik Harrysson, Jonas Medbo and Henrik Asplund, Ericsson Research, Sweden
- 10:15 **Measured Wideband Characteristics of Indoor Channels at Centimetric and Millimetric Bands**; Wei Fan, Jesper Ø. Nielsen, Ines Carton Llorente, Kim Olesen and Gert F. Pedersen; Aalborg University, Denmark
- 10:40 **Item Level Characterization of mm-wave Indoor Propagation**; M.Zoli¹, S.Häfner², E.M.Vitucci¹, R Müller², F.Fuschini¹, D.Dupleich², M.Barbiroli¹, J.Luo³, E.Schulz³, V. Degli-Esposti¹, R. S. Thomä³ ; (1) Univ. of Bologna, (2) Ilmenau Univ. of Technology, (3) Huawei Technologies Dusseldorf GmbH, Munich)
- 11:35 **Quasi-Deterministic millimeter wave channel models for access and backhaul in MiWEBA**; R.J. Weiler, M. Peter, W. Keusgen [Fraunhofer HHI]; A. Maltsev, I. Karls, A. Pudseyev I. Bolotin [Intel]; I. Siaud, A.M. Ulmer-Moll [Orange]
- 12:00 **Proposal on mmWave Channel Modeling for 5G Cellular System**; Sooyoung Hur, Sankyu Baek, Byungchul Kim and Jeongho Park; DMC R&D Center; Samsung Electronics, Suwon, Korea
- 12:25 **Channel sounding at Submillimeter Wave Frequencies**; Maria-Teresa Martinez-Ingles¹, Davy P. Gaillot², Juan Pascual-Garcia¹, Jose-Maria Molina-Garcia-Pardo¹, José-Víctor Rodríguez¹, Lorenzo Rubio³ and Leandro Juan-Llácer¹; (1) U.P. Cartagena, Spain; (2) U. of Lille , France; U.P. València, Spain
- 12:50 **Urban Microcellular Channel Characteristics at 11GHz**; Minseok Kim¹, Jun-ichi Takada², Yuyuan Chang², Jiyun Shen³, Yasuhiro Oda³, Satoshi Suyama³; (1) Niigata University, Japan; (2) Tokyo Institute of Technology, Japan; (3) NTT Docomo, Japan
-
- 14:35 **Towards User-Centric Operation in 5G Networks**; Jose F. Monserrat, Irene Alepuz, Jorge Cabrejas (iTEAM–U.P.Valencia); Vicente Osa, Javier López, María J. Domenech, Vicent Soler; (Astellia), Spain
- 15:00 **A Perspective on Virtual Radio Access Network**; Luisa Caeiro (EST Setubal, Portugal), Sina Khatibi, Lucio S. Ferreira, Luis M. Correia (IST/INOV – INESC, University of Lisbon), Portugal
- 15:25 **Green Oriented Multi-Techno Link Adaptation metric for 5G Multi-Techno Heterogeneous Networks**; Isabelle Siaud, Anne-Marie Ulmer-Moll, Orange Labs Rennes, France
- 16:10 **Invited Talk: 5G Channel Models by METIS Project**; Pekka Kyösti (Anite, Finland)
- 16:35 **Energy Harvesting Device-to-Device Communications for 5G**; Yan Zhang (Simula Research Laboratory), Norway
- 17:00 **The Effects of UE Location on Pilot Contamination in Collocated and Distributed Massive MIMO**; Paul Harris; Mark Beach, Simon Armour (University of Bristol), U.K.
- 17:25 **Location based distributed Failure Management for 5G Ultra-Dense Small Cell Networks**; S. Fortes, R. Barco, A. Aguilar (Univ. of Malaga), Spain

Progress Report

No longer Annual Progress Conferences of the ICT Domain after the swap to H2020, as well as no Action Rapporteur assigned, but **REPORT will be MANDATORY**

[illegible]

WG Chairs, reporting

Results vs Objectives

- Impact, Dissemination
- Networking
- Any other relevant achievement of your WGs

ALL report on JOINT ACTIVITIES

4. Status of the Action

ALL report on JOINT ACTIVITIES

(template circulated)



Version 2015-03-10

Co-authored publications and FP7/ H2020 proposals
Co-authored publications

This table contains the (up to) ten most significant co-authored publications resulting from the Action. All publications are on the topic of the Action, co-authored by at least two Action participants from two different countries participating in the Action.

[illegible]

FP7/ H2020 Proposals and projects

This table contains FP7/H2020 proposals/ projects spinning off from Action activities and including in the proposing consortium at least three Action participants from at least three different countries participating in the Action.

[illegible]

4. Status of the Action

Report from Grant Holder

Type of expenditure	After Adjustment	Details	Already Spent	Left
1. Meetings and WS	116.200	EuCNC and Globecom 2014 Workshops	5.947,38	41.934,74
		11 th MCM Krakow	35.746,28	
		12 th MCM Dublin	32.571,60	
		Valencia Final Meeting and Workshop	-	
2. STSMs	14.000	8 to 10 STSMs	12.710	1.290
3. Training schools	26.700	7th Training School, Vehicular Tech, (Dublin)	5.700 (grants) + 4.202,91 (trainers) + 1.500 local	5.497,09
		8th T.S. Cooperative Networking (Luxembourg)	3.300 (grants) + 5.000 (trainers) + 1.500 (local)	
		+ 9 th TS (joint) →cancelled	0	
4. Dissemination/ Publications	1.500	Web page (&server) maintenance	1.500	0
5. Others	730,43	Bank fees, post, etc.	0	730,43
Secretariat - 15% of sum(1:5)	23.869,57	Secretariat, CNIT (IT)	16.451,73 (15% of science expenditure)	7.417,84
TOTAL	183.000,00		126.129,90	56.870,10

4. Status of the Action

BUDGET for 4th year term

Report from Grant Holder

Budget left for Valencia Meeting:

48 721,83 €

Local support:

2 500,00 €

MC members/substitutes reimbursements (42): 800 € x 42 = 33 600,00 €

Invited speakers reimbursements (4 – 1 = 3): 800 € x 3 = 2 400,00 €

TOTAL

38 500,00 €

Proposal of adjustment by Grant Holder responsible

Local support:

5 000,00 €

MC members/substitutes reimbursements (42): 800 € x 42 = 33 600,00 €

Invited speakers reimbursements (4 – 1 = 3): 800 € x 3 = 2 400,00 €

WG Chairs reimbursements (4) 800 € x 4 = 3 200,00 €

Secretary 500,00 €

TOTAL

44 700,00 €

additional presenters till budget allows: WS or TD presenters? 4 000,00 €

Deadlines

May 15 **Reimbursement form claims delivered to Secretary**

June 18 **All payments made**

July 18 **Final cost statement delivered**

Travel and Reimbursement issues

Procedure @ eCOST

Before the meeting

Step 1, the participant is asked to accept or decline the invitation received by email (the usual e-cost invitation email)

Before or after the meeting

Step 2, the participant can start to fill in the claim

Step 3, the participant can encode the expenses

Only after the meeting

Step 4, the participant is asked to select a bank account

Step 5, the participant can submit the claim

AP → Upload your docs and submit claim by 15th May

(formal Action period ends May-18th !)

Additional BUDGET

(after closing the Action period)

- Book publication status: work performed by the Editor and Editorial Board; budget applied 9.650 € and approved by Officer; contract under negotiation by COST Publications Dept.

****Convenience**** of having the Publisher selection ratified by the MC, so submitted for MC approval in this meeting:

Offers received:

Publisher	Free printed	Extra printed	Free electronic	Extra electronic	Total Printed copies to distribute (COST budget)
Cambridge	80 copies	54 €	None	45€ single 85€ institutional	258
Springer	35 copies	49 €	25	38€ single	232
River	80 copies	49 €	All (Open)	n.a. (Open)	275

MC vote: Approve decision from Editor and Ed.Board to accept River's offer ?

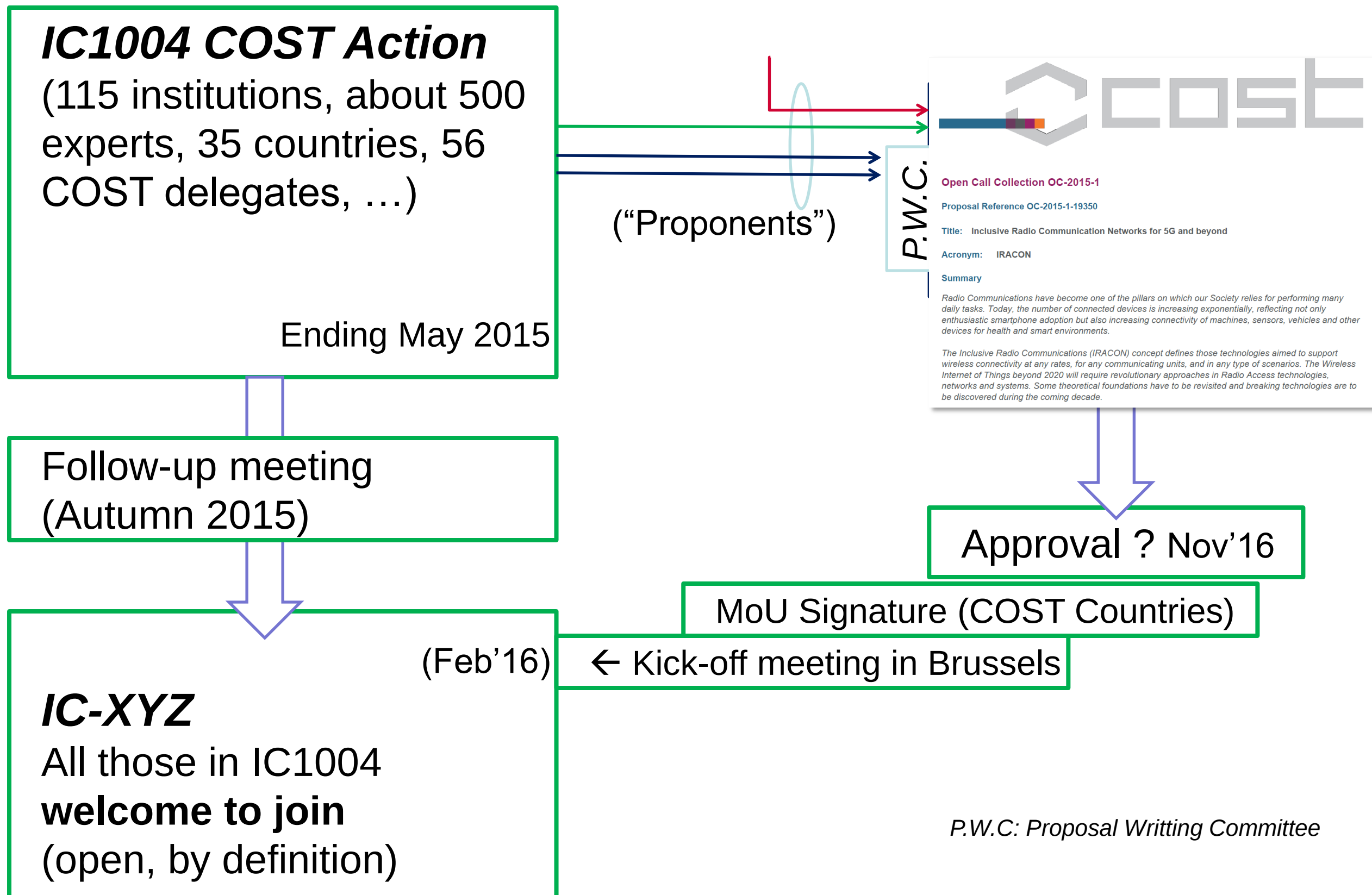
Additional BUDGET

(after closing the Action period)

- COST Session @ EUCNC'15 (Paris, June 29/July 2, 2015)

Two IC1004 speakers reimbursed: Denis Rose (TUBS), David González (Aalto)

5. Follow-up proposal: IRACON



5. Follow-up proposal



Open Call Collection OC-2015-1

Proposal Reference OC-2015-1-19350

Title: Inclusive Radio Communication Networks for 5G and beyond

Acronym: IRACON

Summary

Radio Communications have become one of the pillars on which our Society relies for performing many daily tasks. Today, the number of connected devices is increasing exponentially, reflecting not only enthusiastic smartphone adoption but also increasing connectivity of machines, sensors, vehicles and other devices for health and smart environments.

The Inclusive Radio Communications (IRACON) concept defines those technologies aimed to support wireless connectivity at any rates, for any communicating units, and in any type of scenarios. The Wireless Internet of Things beyond 2020 will require revolutionary approaches in Radio Access technologies, networks and systems. Some theoretical foundations have to be revisited and breaking technologies are to be discovered during the coming decade.

Do not disclosure !
Proponents, evaluators and National Coordinators have access through eCOST.

COST Country Institutions(31) :

Austria , Belgium , Bosnia and Herzegovina , Bulgaria , Croatia , Cyprus, Czech Republic , Denmark , Estonia , Finland , France , Germany , Greece , Hungary , Ireland , Israel , Italy , Luxembourg , Netherlands , Norway , Poland , Portugal , Romania , Serbia , Slovakia , Slovenia , Spain , Sweden , Switzerland , United Kingdom , fYR Macedonia

International Organisations(1) :

EURACON

COST International Partners(6) :

Canada , China , Colombia , Japan , South Korea , United States

Near-Neighbour Country

Institutions(1) : Montenegro

Special thanks to: Hanna Bogucka, Katsuyuki Haneda, Laurent Clavier, Buon K. Lau, Claude Oestges, Luis Correia, Roberto Verdone, Pierre Duhamel, ...and all the contributors (about 60) and proponents (99) from IC1004 and Newcom#

Network of Proposers - Features

COST Inclusiveness target countries

48.39 %

Number of Proposers

99

Gender Distribution of Proposers

80.8% Males

19.2% Females

Average Number of years elapsed since PhD graduation of Proposers with a doctoral degree

14.4

Number of Early Career Investigators

21

Core Expertise of Proposers: Distribution by Sub-Field of Science

59.6% Electrical engineering, electronic engineering, Information engineering

1.0% Computer and Information Sciences

1.0% Other engineering and technologies

38.4% Unspecified

Institutional distribution of Network of Proposers

78.2% Higher Education & Associated Organisations

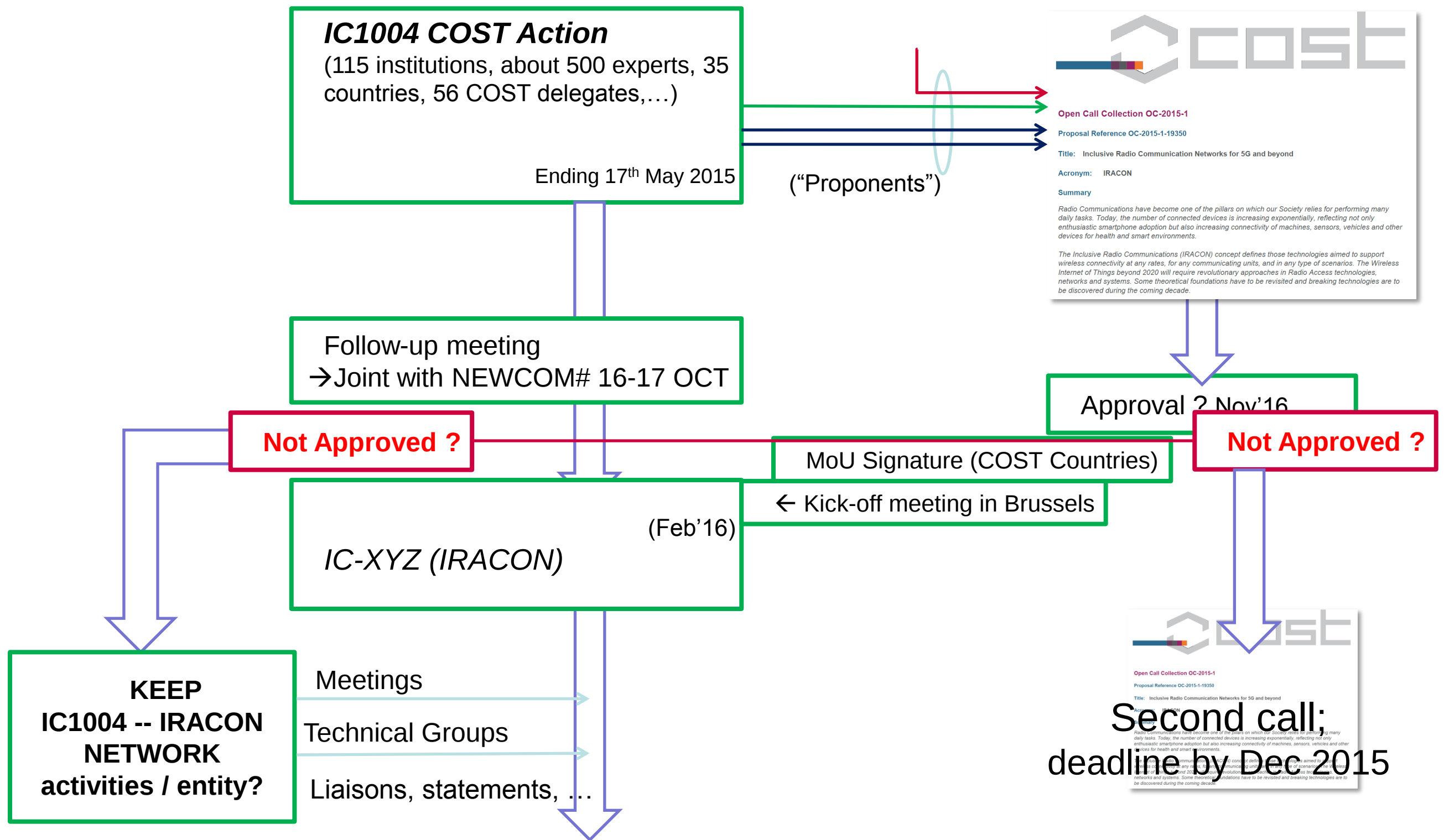
12.7% Business enterprise

4.6% Government/Intergovernmental Organisations except Higher Education

3.0% Private Non-Profit without market revenues, NGO

1.5% Standards Organisation

5. Follow-up proposal: IRACON



TOPICS TO DISCUSS during WG sessions

- **Follow-up activities, meetings, EURACON,...**

TDs allocation to WGs

WG 1	41, 36, 18, 22, 11	(5)
SWG 1.1	3, 44, 46, 47	(4)
WG1 + SWG 1.2	20, 49, 50, 24, 38	(5)
WG 2 + 2.1	6, 32, 25	(3)
WG 3	2, 15, 21, 29, 42, 48	(6)
TWG-B	5, 7, 8, 10	(4)
TWG-V	31, 33, 34, 35, 40	(5)
WG3 +TWG-U	4, 13, 14, 16, 19, 23, 30	(7)
TWG-i	12, 17, 9	(3)
TWG-O	26, 27, 28, 39, 45	(5)
Not for presentation	37	(1)

Management Committee Meeting						
Universidad Politécnica, CPI (iTEAM) Buildings						
	Wed 6th	TD#	Room		Thu 7th	
9:00	Plenary		Blue	9:00	Narcis Cardona	<i>COST IRACON and 5G+</i>
9:45	TWG-i +WG1	12, 17, 9	Blue	9:20	Roberto Verdone	<i>IoT NewNET Architectures</i>
	TWG-O	26, 27, 28	Red	9:40	Carles Anton	<i>Energy Harvesting in WSN</i>
	TWGU + WG3	14, 16, 30	Yellow	10:10	Reiner Thomae	<i>Sounding mm-W</i>
10:45	Coffee			10:40	Coffee	
11:15	WG1 +SWG1.2	20, 49, 50, 24, 38 (mm)	Blue	11:00	Buon Kiong Lau	<i>Antenna design paradigms</i>
	SWG2.1 +WG2	6, 32, 25 +DISC	Red	11:30	R. D'Errico/ K.Y. Yazdand	<i>Body-centric propagation</i>
	WG3	2, 15, 21, 29, 42, 48	Yellow	12:00	Wim Kotterman	<i>OTA beyond 4G/5G MIMO</i>
				12:30	Rocco di Taranto	<i>5G Location aware comms</i>
13:00	Lunch			13:00	Lunch	
14:15	WG1	41, 36, 18, 22, 11	Blue	14:00	Silvia Ruiz	<i>Advances in HetNets</i>
	TWG-V	31, 33, 34, 35, 40	Red	14:30	Alister Burr	<i>NewPHY challenges in 5G</i>
	TWG-O	39, 45 + DISC	Yellow	15:00	Erik Strom	<i>V2X Communications</i>
				15:30	Closing Plenary	
16:00	Coffee				End of meeting by 16:15	
16:30	SWG1.1	3, 44, 46, 47 +DISC	Blue	16:15	Coffee	
	TGW-B	5, 7, 8, 10 +DISC	Red			
	WG3 + TWGU	4, 19, 13, 23 +DISC	Yellow			
18:00						
				WIFI at Uni:		
				ssid's: EDUROAM, UPVNET, UPVNET2G		
20:00	Gala Dinner at Balneario Las Arenas			user / password: assigned individually, see registration badge		

...MC Plenary continues on Friday at 15:30

Attendance lists from WGs/SWGs/SIGs:

Have you signed the
GENERAL ATTENDANCE LIST?

No signature, no reimbursement...

Technical Plenary session. 7th May 2015

- 9:10 Narcis Cardona, Opening
- 9:20 Roberto Verdone (CNIT-Univ. Bologna, Italy) “Network Architectures for the future IoT”
- 9:40 Invited Talk: Carles Anton (CTTC, Barcelona) “Energy Harvesting for Wireless Sensor Networks: recent work and challenges”
- 10:10 Reiner Thomä (T.U. Ilmenau), “Challenges for Channel Sounding at mm-Wave Frequencies”
- 10:40 Coffee Break
- 11:00 B. K. Lau (Lund Univ., SE), “Antenna Design Paradigms for Future Wireless”
- 11:30 R. D’Errico (CEA-LETI, FR) and K. Y. Yazdandoost (NICT, JP) “A radio channel model for body-centric communications”
- 12:00 Wim Kotterman (T.U. Ilmenau, DE); “Over-the-Air testing beyond downlink 4/5G MIMO”
- 12:30 Rocco Di Taranto (Chalmers, SE) “Location-Aware Communications for 5G Networks”
- 13:00 Lunch
- 14:00 Silvia Ruiz (Barcelona TECH-UPC, ES); “Advances in HetNets”
- 14:30 Alister Burr (U. York, UK); “New physical layer challenges for 5G”
- 15:00 Erik Ström (Chalmers, SE); “V2X Communication: State-of-the-art and Open Problems”
- 15:30 Closing Plenary (Includes “The future of (Radio)COST Action; IRACON.”)

15:30 PLENARY

3. Approval of minutes of 12th MCM (Dublin)

4. Budget, reimbursements

8. (Liaison rapporteurs to International Bodies and Projects →written)

9. Final Book status, report from Editorial Board (Editor)

10. Dissemination, announcements, conferences, ...

11. Follow-up activities: from IC004 to IRACON

12. Final remarks from WG Chairs and Chairman

13. AOB

End of meeting by 16:15

3. Approval of the Minutes of the last MCM



Minutes are available under ...\\official documents and after MC approval also under ...\\meetings

The PDF file contains hyperlinks to WGs Minutes and other documents like reports from liaisons rapporteurs, etc.

--> Approval?

15:30 PLENARY

4. Budget, reimbursements

Final Book calendar:

Today:	Chapters 2-11 are 99% ready
By 5-June	Chapters 1, 12 ready Original figures, Map to literature
By 10-June	Circulate Book for review (all authors)
By 15-July	Authors send comments to Editor
By 15- August	Book ready to deliver to Publisher

(Expected 30-OCT) Book Published

Newsletter. Last issue

Editor: Prof. Alain Sibille

Welcome to **distribute the link** among your professional contacts:

<http://www.ic1004.org/index.php?page=newsletter>



CALL FOR WORKSHOPS

IEEE PIMRC 2015, Aug 30, 2015, Hong Kong Convention and Exhibition Centre, Hong Kong
www.ieee-pimrc.org/

The IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) conference is soliciting proposals for workshops to be held in conjunction with the IEEE PIMRC conference. Workshops are scheduled for Sunday, August 30, 2015, at the conference venue in Hong Kong.

Workshop topics should be consistent with the topics and goals of the broader IEEE PIMRC conference. These topic areas broadly include "Fundamentals and Physical Layer", "MAC Layer and Cross-Layer Design", "Mobile and Wireless Networks", and "Services, Applications and Business". Within this broad scope, workshop proposals should address specific technical areas or emerging/hot topic areas. Successful workshop proposals will be for topics that are sufficiently differentiated from other conferences and symposia.

Each workshop must have at least two organizers from two different institutions.

Workshop proposals should be submitted, no later than April 15, 2015, via EDAS.

Submission Deadline: April 15, 2015

For more information, please feel free to contact the Workshop Co-Chairs: [Chiu Ngo and Laurent Clavier](#).

+About 50 conferences/courses/events every year with COST participants involved in organisation; announced at (www.ic1004.org)

...all under www.ic1004.org/announcements

Joint NEWCOM# / IC1004 Meeting

14-15 OCTOBER 2015, BARCELONA

Local Organiser: Carles Antón (CTTC)

Venue: Hotel

Format:

One day Joint **Workshop**

One day “regular” Technical meeting of IC1004/IRACON group

Any other business?

- Disciplinary Working Groups:
 - WG1: Claude Oestges, U.C.L. (BE)
 - SWG1.1: Buon Kiong Lau (SE)
 - SWG1.2: Tommi Jämsä
 - WG2: Alister Burr, U.York (UK)
 - SWG2.1: Jan Sykora (CZ)
 - WG3: Silvia Ruiz, U.P.C. (ES)
- Topical Working Groups Coordinator:
 - TWGC: Alain Sibille, Telecom ParisTech (FR)

- Vehicular Environment, TWG-V
Levent Ekiz (DE), Erik Strom (SE)
- Body Environment, TWG-B
Raffaele D'Errico (FR), Kamyaz Yazdandoost (JP)
- Urban Environment, TWG-U
Sana Salous (UK), Denis Rose (DE)
- Indoor Environment, TWG-I
Pawel Kulakowski (PL), Klaus Vitrisal (AT)
- MIMO-OTA Testing, TGW-O
Gert Pedersen (DK), Wim Kotterman (DE)

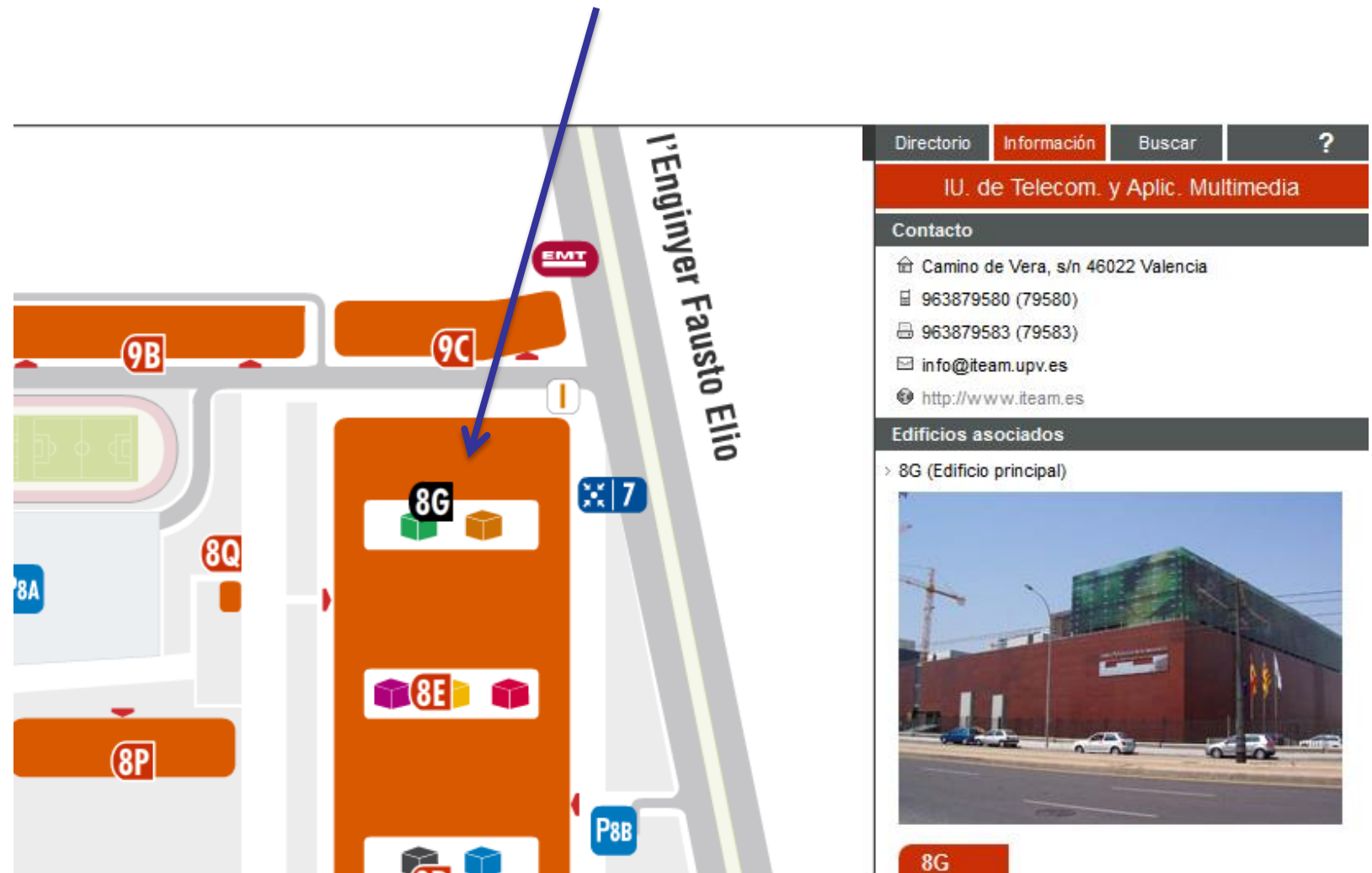
Please send MINUTES of your WGs to Secretary by **May 18th**

Action Points after 12th MCM:

AP	WHAT	WHO	WHOM	WHEN
13.3	Complete reimbursement procedure on-line	Those entitled to (MC members+ substitutes)	eCOST	15-MAY
13.2	Send Minutes of Group Meetings	Group Chairs	Chair (cc.secretary)	15-May
13.3	Liaisons: send reports	Rapporteurs	Secretary	15-May

Tell your grandchildren that in 2015 you were already in 8G

For a meeting about something related to “green cells”





Cooperative Radio Communications for Green Smart Environments

See you in Europe, ...soon

