

European Network on New Sensing Technologies for Air Pollution Control and Environmental Sustainability - *EuNetAir*

COST Action TD1105

INTERNATIONAL WG1-WG4 MEETING on

New Sensing Technologies and Modelling for Air-Pollution Monitoring

University of Aveiro, Institute for Environment and Development - IDAD

Aveiro, Portugal, 14 - 15 October 2014

Action Start date: 01/07/2012 - Action End date: 30/06/2016 - Year 3: 2014-15 (*Ongoing Action*)

CONCLUSIONS

 **cost**
EUROPEAN COOPERATION IN SCIENCE AND TECHNOLOGY



Michele Penza

Function in the Action: Action Chair

ENEA - Brindisi, Italy



WORKING GROUPS MEETING

New Sensing Technologies and Modelling for Air Pollution Monitoring: EuNetAir Air Quality Joint-Exercise Intercomparison

Aveiro (Portugal), 13 - 15 October 2014

Joint-Exercise Kick-off, 13 October 2014: IDAD - Institute of Environment & Development
WG Meeting, 14-15 October 2014: Environment & Planning Department Auditorium
University of Aveiro, Campus Universitário, 3810-193 Aveiro, Portugal



Meeting AGENDA

13 October 2014 - Monday	<i>(Participation limited to Joint-Exercise Members only)</i>
09:00 - 17:00	REGISTRATION
09:00 - 12:00	Group Meeting: EuNetAir AQ Joint-Exercise Intercomparison
12:00 - 13:00	<i>Lunch</i>
13:00 - 17:00	Installation of Sensors in AQ Mobile Lab in Aveiro City Centre
20:30	<i>Free Dinner</i>
14 October 2014 - Tuesday	<i>(Participation open to WG1-WG4 Members)</i>
09:00 - 18:00	REGISTRATION
09:00 - 09:30	Session 1: Welcome Address
09:30 - 11:00	Session 2: Plenary Session
11:00 - 11:30	<i>Coffee Break</i>
11:30 - 13:00	Session 3: Oral Presentations
13:00 - 14:00	<i>Light Lunch offered by COST Action organization</i>
14:00 - 15:00	Session 4: Poster Presentations
15:00 - 16:30	Session 5: Oral Presentations
16:30 - 17:00	<i>Coffee Break</i>
17:00 - 18:30	Session 6: Oral Presentations
20:30 - 23:00	<i>Social Dinner</i>
15 October 2014 - Wednesday	<i>(Participation open to WG1-WG4 Members)</i>
09:00 - 13:00	REGISTRATION
09:00 - 11:00	Session 7: Oral Presentations
11:00 - 11:30	<i>Coffee-break</i>
11:30 - 13:00	Session 8: Oral Presentations
13:00 - 14:00	<i>Light Lunch offered by COST Action organization</i>
14:00 - 16:00	Session 9: Oral Presentations
16:00 - 16:30	Session 10: Discussion and Future Plans of Action
16:30	End of the WG1-WG4 Meeting and Farewell

COST Action TD1105 *EuNetAir*: WGs MEETING

New Sensing Technologies and Modelling for Air-Pollution Monitoring

- **Conclusions from COST Action TD1105 EuNetAir**

- Dr. Michele Penza, Action Chair

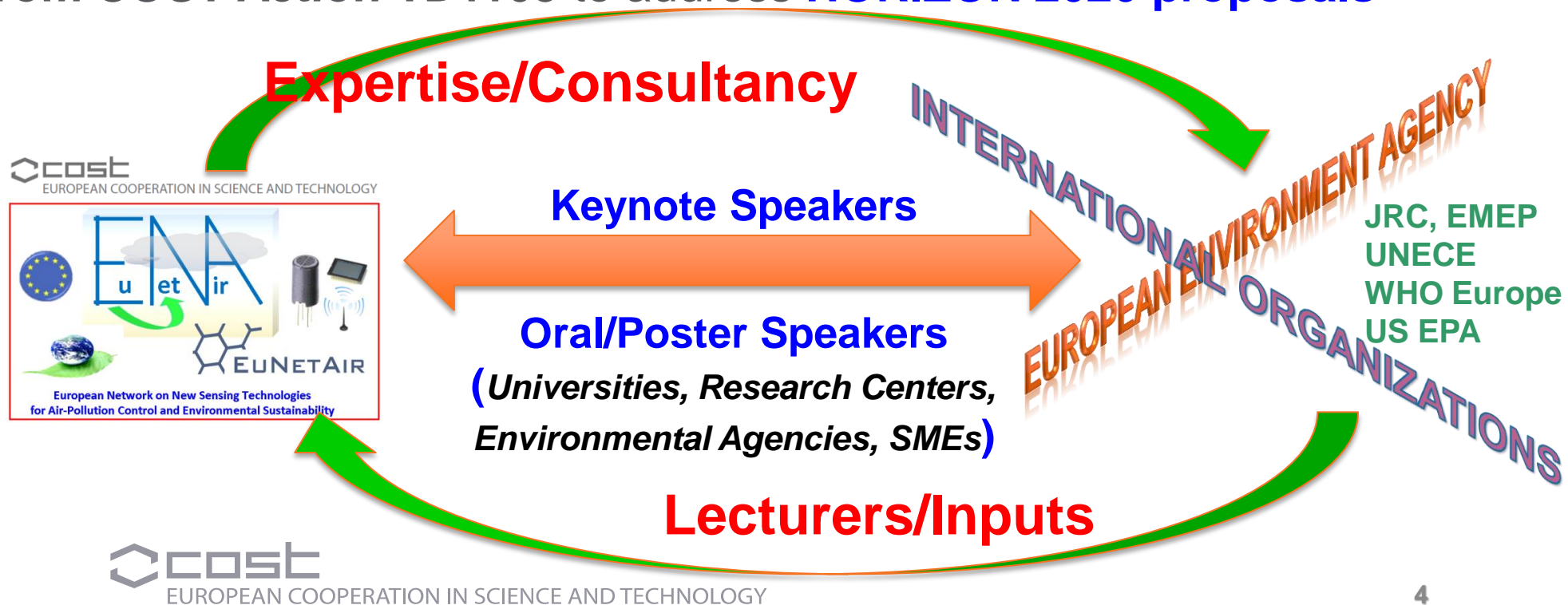
ENEA, Technical Unit for Materials Technologies, Brindisi (Italy)



AIM of *EuNetAir* WGs MEETING at Aveiro:

New Sensing Technologies and Modelling for Air-Pollution Monitoring

- **Provide** from Action TD1105 *EuNetAir* an Overview of the *Best Available Sensing Technologies, Methods and Best Practices on **Clean Air for Smart Cities in Europe*** to International Organizations (IOs), Policy Makers and Public Institutions, Local Managers.
- **Discuss and Investigate** on ***Joint-Exercise Sensors-versus-Analyzers*** from COST Action TD1105 to address **HORIZON 2020** proposals



COST Action TD1105 *EuNetAir*: WGs Meeting at Aveiro

Statistics of Action WGs Meeting at Aveiro:

e-COST Registered Participants / Total Participants:	39 / 50
Sessions including Plenary, Oral & Poster:	10
Keynote/Invited Speakers:	11
Oral Speakers (Contributed Talks):	19
Poster Presenters:	8
Round-Table Speakers:	2
Reimbursed Participants:	28
COST Countries involved in WGs Meeting: <i>Austria, Belgium, Bulgaria, Denmark, Germany, Greece, Hungary, Italy, Latvia, Netherlands, Norway, Portugal, Serbia, Slovenia, Spain, Sweden, UK</i>	17
Advisory Board Members:	5
Gender Balance in WGs Meeting:	12 F (30%) 27 M (70%)
Early Stage Researchers (ESRs):	9 (23%)

Year 3: Scientific Planning of *EuNetAir* (1/2)

Meetings/Workshops/Training Schools planned for upcoming year
([Year 3: 1 July 2014 - 30 June 2015](#)):

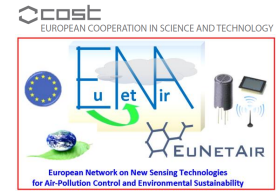
- **WG1-WG4 Meeting** on *New Sensing Technologies for Air-Pollution Monitoring and Start of the Air Quality Joint-Exercise Intercomparison* at IDAD - University of Aveiro, Aveiro (**Portugal**), 13 - 15 Oct. 2014.
- The **3rd International Workshop of the COST Action TD1105** on *New Trends and Challenges on Air Quality Control* at University of Latvia, Riga (**Latvia**), 26 - 27 March 2015.
- The **Action 3rd International Training School** on *Atmospheric Aerosol Physics, Measurements and Sampling* at Hyytiala Station of the University of Helsinki, Helsinki (**Finland**), 2 - 8 May 2015.

MC/WG Meetings planned for the upcoming year

(Year 3: 1 July 2014 - 30 June 2015):

- **3rd SCIENTIFIC MEETING: WGs Meeting and 6th MC Meeting** at Bahcesehir University and GEBZE Institute of Technology, Istanbul (Turkey), 3 - 5 Dec. 2014.
- **4th SCIENTIFIC MEETING: WGs Meeting and 7th MC Meeting** at Linkoping University, Linkoping (Sweden), 3 - 5 June 2015.
- **Special Session EuNetAir / Core-Group Meeting** to EUROSENSORS 2014, Brescia (Italy), 7 - 10 September 2014.
- **Special Session EuNetAir / Smart Cities Sensors** to IEEE SENSORS 2014, Valencia (Spain), 2 - 5 November 2014.

PRIORITIES & ROADMAP



- What do we want to provide on the long-term in relation to **routine monitoring** and **public information** ?
- **Micro-sensors should not substitute but supplement routine monitoring devices**
- **Future routine networks** may look very different from today and **include low-cost and accurate sensors** ?
- The **green routes through the city** or access to information about **air-pollution load** at specific local address **might be future goals**
- **Pervasive low-cost microsensors for indoor energy efficiency should be a must for future green-buildings**

SOME INPUTS for FUTURE RESEARCH in AQC

- Wearable Sensors to Monitor Air-Pollution Personal Exposure
- Mobile Sensing (Smartphones, Tablets, Watches)
- Fixed Sensor Nodes in Urban Wireless Networks
- Mobile Sensor Nodes on Public Transports (Buses, Trams, etc.)
- *Sensing City* (bikes, city guardians, citizens, etc.)
- Indoor Energy Efficiency Sensors (VOCs, Formaldehyde, etc)
- Sensors for Greenhouse Gases Monitoring (CO₂, CH₄, N₂O, etc.)
- Sensors for Odour Monitoring
- Sensors for PM Detection at Low-Cost

Contact Details

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CSO Approval: 01 Dec. 2011
Kick-off Meeting: 16 May 2012
Start of Grant: 01 July 2012
End of Grant: 30 June 2016

www.cost.eunetair.it

MC Chair:

Dr. Michele Penza, ENEA, IT
michele.penza@enea.it

MC Vice Chair:

Prof. Anita Lloyd Spetz
Linköping University, SE
spetz@ifm.liu.se

Grant Holder:

Dr. Corinna Hahn, Dr. Juliane Rossbach
Eurice GmbH, DE
c.hahn@eurice.eu; j.rossbach@eurice.eu

Scientific Secretary:

Dr. Annamaria Demarinis Loiotile
annamaria.demarinis@uniba.it

Science Officer:

Dr. Deniz Karaca
deniz.karaca@cost.eu

Administrative Officer:

Dr. Andrea Tortajada
andrea.tortajada@cost.eu

Rapporteur ESSEM:

Prof. Kostantinos Kourtidis (GR)
kourtidis@env.duth.gr

Rapporteur MPNS:

Prof. Joaquim Manuel Vieira (PT)
jvieira@cv.ua.pt

Rapporteur CMST:

Prof. Antonio Lagana (IT)
lagana05@gmail.com

http://www.cost.eu/domains_actions/essem/Actions/TD1105

ACKNOWLEDGEMENTS

Aveiro, Portugal, 13 - 15 October 2014



THANK YOU VERY MUCH FOR YOUR KIND ATTENTION !

