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Brindisi, 29 July 2013

Minutes of the 3rd Management Committee Meeting of COST Action TD1105 “European Network on New Sensing Technologies for Air Pollution Control and Environmental Sustainability - EuNetAir”

*IREC, Institut de Recerca en Energia de Catalunya
Jardins de les Dones de Negre, 1, 2nd floor
08930 Sant Adrià de Besos - Barcelona, Spain
June 21, 2013 - from 9.00 till 14.30*

1. Welcome to participants

The Chairman of Action TD1105, Michele Penza, welcomed all participants to the 3rd MC meeting. The Meeting Programme is presented in **Annex 1**. The 1st Scientific Meeting was well-attended with over 30 international participants.

A total of 31 participants to the 3rd MC Meeting from the following 17 Parties were attending the meeting: Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Iceland, Ireland, Italy, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, Turkey, plus Russian Federation as Near Neighbour Country with 1 MC Observer.

The list of officially nominated delegates and the participants of the 3rd MC meeting with their contact information is presented in **Annex 2**.

2. Adoption of agenda

The draft agenda of the 3rd MC meeting, as found in **Annex 1**, was approved without changes or additions by the members of the Management Committee (MC) of COST Action TD1105.

Before MC, 2 Invited Talks were given from the CH Member (Dr. Nicolas Moser, SGX-Sensortech) and PT Member (Prof. Carlos Borrego, IDAD) on the Action issues of automotive air quality sensors and challenges for a new air quality directive: role of monitoring and modeling techniques, respectively.

3. Approval of minutes and matters arising of last meeting

Approving of Minutes from the last MC meeting, which was 2nd MC meeting in Rome on 6 December 2012. The Minutes was circulated from Chair by Doodle survey on February 2013 as file in the MC for approval. The Minutes was also uploaded in the Action webpages (section *Meetings – Rome meeting*).

Additionally, the Work & Budget Plan (WBP) Year 2 (1 July 2013 – 30 June 2014) of the Action, as found in **Annex 3**, was launched by Chair on April 2013 and circulated as hardpaper file in the MC for approval, and jointly transmitted to COST Office.

The W&B Plan Year 2 has a total budget as Total Expenditure as 162,000.00 EURO consisting of 141,000.00 EURO (Science Activities) and 21,000.00 EURO (Financial and Scientific Administration and Coordination, max 15%). The details of each activity planned in the W&B Plan for Year 2 of the Action are reported by Action Chair to Management Committee for discussion, amendments, revisions and approval.

The MC was positive. MC approved unanimously.

MC3D1 The MC approved unanimously both the Minutes of the 2nd MC meeting in Rome (6 Dec. 2012) and the W&B Plan Year 2 (1 July 2013 – 30 June 2014).

4. Update from the Action Chair

a. Status of Action, including participating Countries

The chairman informed that the number of the Member Countries now has increased from 21, at the Kick-off meeting on 16 May 2012, to 25 Parties (December 2012), to 27 Parties (June 2013) with 2 COST Countries (*Serbia* and *The Former Yugoslav Republic of Macedonia*) with intention to join, after approval of the Action MC as requested by COST rules (1 year passed from CSO approval of the Action TD1105 on 1 December 2011). These Parties have already accepted MoU: *Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom*. The MC was positive. MC approved unanimously for new 2 institutions (Institute of Public Health of Belgrade, RS; Ministry of Environment and Physical Planning, MK) from COST Parties (*Serbia* and *The Former Yugoslav Republic of Macedonia*) and gave mandate to Chair to follow the e-COST procedures to finalize the approval and taking into account the new COST Vademecum (published on 28 June 2013).

Non-COST Countries involved in the Action TD1105 as International Partners Countries (IPC): Australia, Canada, China, USA; and as Near Neighbour Countries (NNC): Russian Federation.

Due to this increased number of COST Parties (27 Countries Members), the Grant budget will increase timely, as informed later by ESSEM Science Officer (SO), Deniz Karaca.

Deniz Karaca is the new SO for Action TD1105. Kent Hung is the new Administrative Officer for Action TD1105.

The chairman also showed a table reporting the main features of Action TD1105: Start of Action on Kick-off meeting (16 May 2012); Period of Grant for First Period: 1 July 2012 - 30 June 2013; including COST Officers: SO Officer, Deniz Karaca; Administrative Officer, Kent Hung; DC Rapporteurs: Prof. Kostantinos Kourtidis, ESSEM Rapporteur; Prof. Joaquim Manuel Viera, MPNS Rapporteur; Prof. Antonio Laganà, CMST Rapporteur. Moreover, the chairman gave information on the composition of the Management Committee with 48 Members and 26 Substitutes on dated June 2013. Also, Action TD1105 consists of 4 Working Groups, 4 Special Interest Groups (SIGs) and 9 Ad-Hoc Groups, a Core-Group (10 persons) and a Steering Committee (20 persons).

b. Action budget status

The Action Chair, Michele Penza, informed the Management Committee on the planned budget and related expenditures. The Action Chair was assisted in the presentation of the Action budget by Grant Holder on the financial and administrative management. The Action Grant Holder - University of Bari, Italy - temporary represented in Barcelona by Dr. Annamaria Demarinis Loiotile, gave a short report regarding the budget status updated on June 2013 - before payments of the Barcelona events: training school, workshop, MC meeting and STSMs - with a charge as about 48% of the initially-assigned budget. The pending payments and submitted claims for first period (1 July 2012 – 30 June 2013) should be reimbursed and processed by GH UNIBA by 30 September 2013, as agreed by COST Office.

c. STSM status and new applications

About the STSMs (Short Term Scientific Missions), Jan Theunis, Coordinator EuNetAir of this activity, gave some information. The Call for STSMs, posted in the Action webpages (www.cost.eunetair.it), was launched on October 2012. It has been budgeted 11 STSMs of flexible duration from 5 days to 1 month (30 days), or more. The applications should be preliminarily sent to Michele Penza and Jan Theunis for formal checking of eligibility, and then electronic submission in e-COST system is imposed as requested by COST rules. The selection was performed by a STSM Committee, chaired by Coordinator STSM, including other members from Action partnership. The STSMs applications are submitted officially in the e-COST system including the reimbursement procedure. Moreover, all requested files for a STSM application and the final Scientific Report of each concluded STSM are uploaded as well in the Members Area of the Action webpages (www.cost.eunetair.it) with password-access by credentials for Action STSM Committee members. This is useful to manage the procedure of selection, evaluation and approval from Action STSM Committee. The ESRs (Early Stage Researchers) will be prioritized for STSMs by EuNetAir. A total budget of Year 1 for this STSMs activity was as 17,125.00 Euro (see **Annex 4**). The Action budget for Year 2 in this activity was increased to 25,800.00 Euro to increase both the number of STSM

beneficiaries and duration of an individual mission. All the participating ESRs from Action teams are encouraged to apply for this activity in the Year 2 (1 July 2013 - 30 June 2014) related to the exchange of young researchers for scientific missions in laboratories of the COST Countries signing MoU and approved Non-COST institutions (NNC, IPC). Depending on Action budget, additional STSMs could be budgeted. A significant number, at least 6-7, of potential STSMs Applicants have already submitted or expressed interest (July 2013) to use this networking instrument for Year 2.

- MC3D2** The MC approved unanimously the new COST Parties: Serbia (Institute of Public Health of Belgrade, RS) and The Former Yugoslav Republic of Macedonia (Ministry of Environment and Physical Planning, MK). The Chair will start the e-COST procedure for final approval.
- MC3D3** The MC approved unanimously the budget assigned for the 11 terminated STSMs of Year 1 and the budget allocated for the planned STSMs of Year 2. Eventual remaining Action budget or extra-budget could be assigned for supporting additional STSMs.

5. Promotion of gender balance and of Early Stage Researchers (ESR)

Prof. Iveta Steinberga (Latvia), chair of Gender Balance Committee (GBC), described the Action gender balance by a note reported in the EuNetAir Newsletter Issue 2 (June 2013) as a short summary of the first period. In the Action TD1105 about 25% of the participants are female, which is in line with the fact that technological and scientific sector of this Action is male-dominated. In order to approach a 50% gender balance, top-management as Vice-Chair (Prof. Anita Lloyd-Spetz, Sweden) and as WG4-Leader (Prof. Ingrid Bryntse, Sweden), including other Sub-Working Group Leaders are female. To achieve better gender balance in WGs, women researchers are encouraged to participate in STSMs, Training Schools, and overall events to balance Action agendas. During Rome meeting (Dec. 2012) only 20% of speakers were females. Also, the Rome SIG4 session were composed by 60% female speakers. Finally, significant progress in gender balance at Duisburg meeting (March 2013) was achieved with 45% of female speakers. It was noted that the 3rd MC meeting (21 June 2013) had a gender distribution in line with the Action gender as female participants as 26% (8 female over 31 participants).

About the promotion of Early Stage Researchers (ESRs), a LinkedIn social network of the Action TD1105 has been created and launched as *social scientific ESRs network* and moderated by Mar Viana and Mariacruz Minguillon from CSIC, Spain. All young researchers and Action members from participating teams signing MoU and interested stakeholders are encouraged to sign in (46 Participants dated on June 2013; 31 Participants dated on January 2013) for wider visibility of Action and career development.

6. Update from the Grant Holder

- a. Dr. Annamaria Demarinis Loiotile, in place of Dr. Gianluigi de Gennaro, Grant Holder manager from University of Bari, showed the first instalment received as 90,935.00 Euro that represents a percentage as 65% of 139,900.00 Euro - Action Budget for First Year Grant (1 July 2012 - 30 June 2013) as first assignment. Amendment to COST Action Grant Agreement (2 April 2013) stated that COST Office decided to allocate a grant of up to a maximum of 162,000.00 Euro to carry out the Operation from 01 July 2012 to 30 June 2013. Second installment from COST Office to GH UNIBA of 70,665.00 Euro (35% remaining) was transferred on dated 23 April 2013. The actual percentage of use for payments and accruals of the grant was 48% on dated 21 June 2013. A table showed in detail all paid expenses relevant to the Participants to the three meetings (SGS-2012, ISQL-2012, TCM-2012) organized on September and October 2012, Rome meeting (4-6 December 2012), Duisburg meeting (4-6 March 2013), including the expenditure forecasting for Barcelona events (i.e., Training School, Action Workshop, 3rd MC Meeting) dated on June 2013. She also reported on the actual and next meetings expenditure forecast as planned in the Work&Budget Plan Year 1 of the Action. A delay in the payments and reimbursements was declared due to the specific Italian Fiscal Laws that contradict the COST rules on flat rate and tax liability, as stated also in previous statements and communications (emails, phone calls, etc.) by Finance Officer (Dr. Gianfranco Berardi) in charge from UNIBA for Action.
- b. Dr. Annamaria Demarinis Loiotile, in place of Dr. Gianluigi de Gennaro, Grant Holder manager from University of Bari (Italy), showed the Letter of Resignation from UNIBA as Grant Holder, as sent by email to Action Chair on 04 June 2013 (see **Annex 5**), due to the difficulties encountered to fit the COST rules on the flat rate and the Italian Fiscal Rules. This was a decision from IT GH UNIBA to promote future better relationships for the success of the Action TD1105 EuNetAir. However, IT GH UNIBA will complete the full payments and reimbursements as planned in the W&B Plan of the Year 1 (1 July 2012 - 30 June 2013), although with an extension to complete the payments by 30 September 2013, as agreed by COST Office.

Furthermore, Deniz Karaca, SO officer, communicated to the MC that a check of the tax liability to avoid double taxation is necessary to estimate the amount of claims and reimbursements for Action. This is the first step suggested by COST Office to try a solution on taxed reimbursements different from flat-rate scheme and on how to recover the Action participants. This potential solution will be decided by COST Office later after the checking of taxed reimbursements applied by IT GH UNIBA according to the IT DPR 917/86 Fiscal Law. The SO officer will send a template FORM STATEMENT (see **Annex 6**) to the Action Chair, that will circulate it in the Action participants for filling on the actual amount of reimbursement received by beneficiaries - meeting by meeting - in the framework of Action. The FORM STATEMENT, filled and signed by each participant, has to be replied to Action Chair and Action Scientific Secretary (Dr. Annamaria Demarinis Loiotile) for further processing and steps.

- c. Corinna Hahn, new DE MC Member nominated by DE CNC, from Eurice GmbH, Germany, contacted preliminarily the Action Chair with the top-manager (Jorg Scherer) of Eurice GmbH to give availability to be in charge and serve as new GH for next periods of Action grant. This is evident by a Letter of Expression of Interest as attached in the **Annex 7**. Also, Corinna Hahn was present as DE delegate to the 3rd MC meeting in Barcelona to give a presentation of the company Eurice GmbH and the great potentiality to assume the new charge as Grant Holder for Action TD1105. The presentation is in attachment as **Annex 8**. MC was convinced by Corinna Hahn on the candidature of Eurice GmbH. MC approved Eurice GmbH as new GH for future periods of Action TD1105.

MC3D4 The MC approved unanimously both the Resignation of IT GH UNIBA and elected unanimously Eurice GmbH, Germany, as new GH for future grant periods of COST Action TD1105. Eurice GmbH will enter in force to manage the second period (1 July 2013 – 30 June 2014) and future grant periods. The GH manager as Member in the MC will be Corinna Hahn. The Finance Officer of Eurice GmbH is Pascal Fichot. The Legal Representative of Eurice GmbH is Jorg Scherer. Annamaria Demarinis Loiotile, from UNIBA, will continue to serve as Action Scientific Secretary.

7. Update from the COST Office

The Science Officer (SO) for the Domain Earth System Science and Environmental Management (ESSEM), Deniz Karaca, welcomed all the participants and congratulated for the excellent organization of the meeting. She stated that our Action TD1105 started May 16, 2012 (Kick off meeting in Brussels) and ends May 15, 2016 and that it is a Trans-Domain Action. SO presentation found in **Annex 9** reported on:

- a. She pointed out that the chair of our network - Action TD1105 - attended the ESSEM meeting, Annual Progress Conference (APC), in Hannover, Germany, 12-13 June 2013 and is mandatory for the Action to report at a yearly meeting APC.
- b. Our Action will be evaluated and monitored by 3 DC Rapporteurs.
- c. SO, Deniz Karaca, announced that COST Office has activated a recruitment of active scientists to join its pool of experts from all scientific areas for evaluation of Open Call proposals.
- d. Deniz announced some new coming Actions (ES1301, ES1302, ES1303, ES1304, ES1305) within ESSEM Domain.
- e. She recommended dissemination in our Countries in other national institutions.
- f. The participation of institutions from Non-COST Countries is welcomed and is strictly based on mutual benefit. A summary of COST rules for participation of Non-COST Countries, Near Neighbour Countries, Reciprocal Countries has been clearly given to attendants.
- g. Deniz stated that Action TD1105 budget Year 2 was as 162,000.00 Euro, consisting of 141,000.00 Euro for Science Activities and 21,000.00 Euro for Financial and Scientific Administration and Coordination (FSAC, max 15%). The enhanced budget can be requested with the two installments (65% and 35%) by submitting an updated Work&Budget Plan. Action Chair has already filled the W&B Plan for Year 2 and sent to COST Office after approval by MC. The new Grant Holder Eurice GmbH will request this budget by filling forms, after the signature of a new Grant Agreement and training course on e-COST system as planned on 10 October 2013 at COST Office in Brussels.
- h. Deniz also informed us on new VADEMECUM published by COST Office for management of the Actions to address the networking needs of S&T communities. The new Vademecum will enter in force by starting on 28 June 2013. Both Action COST officers - Science Officer (Deniz Karaca) and Administrative Officer (Kent Hung) - will answer questions from Action partnership, if any.

8. Update from the DC Rapporteurs

COST Action TD1105 *EuNetAir* has three DC Rapporteurs from ESSEM, MPNS, CMST domains, which attended (some of them) the meeting and gave statements:

- Prof. Joaquim Manuel VIEIRA acts as Rapporteur MPNS domain, attended to meeting and will report to Domain on September 2013: the network has a good organization. He reported on regular start within the time span accordingly to recommendations. He affirmed that the commitment of the Action is large taking into account the numbers of signatory countries and collaboration from countries outside COST area. Action plan for Year 2 discussed at Barcelona meeting was considered excellent and ambitious with very good scientists and research organizations. Dissemination with regular EuNetAir Newsletters was very appreciated and outlined. He asked to Action Chair the Monitoring Progress Report (MPR) of the Year 1, as discussed at ESSEM APC 2013 in Hannover, and the Chair assumed the commitment to send the MPR by email. Indeed, this report MPR was circulated to MC Members and COST Officers including all 3 DC Rapporteurs.
- Prof. Antonio LAGANA, acts as Rapporteur CMST domain, not attending to the meeting due to scheduling conflicts. He informed Action Chair on his absence to meeting and asked to be forgiven.
- Prof. Kostantinos KOURTIDIS, acts as Rapporteur ESSEM domain, not attending to the meeting due to scheduling conflicts. He informed Action Chair on his absence to meeting and asked to be forgiven.

9. Annual Progress Conference (preparation and/or feedback from DC)

The MC Members were informed by Chair on the ESSEM meeting, called Annual Progress Conference (APC), held in Hannover, Germany, June 12-13, 2013 and the meeting programme (see **Annex 10**) was presented by chair to the partners in order to report at the yearly meeting APC. The presentation given by the Action Chair on activities of Action TD1105 related to the Year 1 (1 July 2012 – 30 June 2013) during the ESSEM APC-2013 was very appreciated by DC Members and ESSEM Rapporteur. The next APC-2014 has not been announced yet. The Chair or Vice-Chair or a MC Delegate will participate there to report on Action status and advancements at the ESSEM Annual Progress Conference. This is an obligation defined by Grant Agreement.

10. Follow-up of MoU objectives

a. Progress report of working groups

WG 1-4 and SIG 1-4 were asked to update their scientific programs with updated definitions of the hot-issues of the current research in each WG and SIG. A **Scientific Programme** of the Action has been timely defined and this deliverable has been published on the webpages of the Action TD1105 (www.cost.eunetair.it) in the section *Organization – Documents – Action Workplan Updating*.

WG4, chaired by Prof. Ingrid Bryntse (SenseAir AB, Sweden), has realized a **Summary Report on CO₂ sensors applications** in the different sectors and other specific Summary Reports on standards and protocols for gas sensors have been planned for future with the contribution from SMEs, spin-offs, academia and research. This Summary Report has been published on the Action TD1105 webpages (www.cost.eunetair.it) in the section *Organization – Documents – CO₂ Application Summary*.

The chairman also showed the composition of each WG, SIG and Ad-Hoc Group with the relevant number of participants to each one. This composition has not yet consolidated due to large number of participants exceeding over 150 researchers/scientists and practitioners. However, the Action is open and flexible and thus the composition is still in progress. At the current stage, the composition of the WGs, SIGs and Ad-Hoc Groups is reported and published in the COST Action TD1105 webpages (www.cost.eunetair.it) in the section *Organization*.

The chairman urged the participants to send the missing **Expression of Commitment (EoC)** to the Action Scientific Secretary, Dr. Annamaria Demarinis Loiotile, and to himself in cc in order to finish this important step of task distribution. The template of the EoC, asked also to the new affiliated members, is attached in **Annex 11**.

Events of the COST Action TD1105 *EuNetAir* to implement the MoU objectives in the period January-June 2013, after the last 2nd MC meeting in Rome (4-6 December 2012), are listed as follows:

- **WG3-WG4 Meeting** in Duisburg (Germany) on 5-6 March 2013 with at least 25 speakers and 40+ participants from 18 COST Countries (Please visit: www.cost.eunetair.it section *Meetings*).
- **Special Session Action TD1105 - Environmental Case Studies from Mediterranean, Central and Eastern Europe** - in the **AirMonTech project workshop** at Duisburg (Germany) (4-5 March 2013) with at least 12 Speakers involved from 10 COST Countries and 80+ participants attending to Special Session (Please visit: www.cost.eunetair.it section *Meetings*).
- **1st Training School on Environmental Technologies and Air Quality Monitoring** at University of Barcelona, 13-15 June 2013, with over 35 trainees (20 reimbursed), 14 trainers (5 reimbursed) from at least 15 COST Countries (Please visit: www.cost.eunetair.it section *Training Schools*).
- **1st International Workshop on New Sensing Technologies and Transducers for Air Quality Monitoring** at Barcelona International Convention Centre (CCIB) and organized by IREC, 20 June

2013, with 10 speakers from 10 COST Countries and 2 Non-COST Countries with 30+ participants attending to Open Satellite Workshop (Please visit: www.cost.eunetair.it section *Workshops*).

11. Scientific planning

- a. Scientific strategy
- b. Action Budget Planning
- c. Long-term planning (including anticipated locations and dates of future activities)
- d. Dissemination planning (Publications and outreach activities)

a. Scientific strategy

The chairman showed the main further activities planned in the Second Year (1 July 2013 - 30 June 2014). He asked comments and opinions from Management Committee members for discussion and new proposals and inputs to adapt the future joint-activities of the Action TD1105 EuNetAir.

Shortly, the proposed activities by Chair for discussion and approval are summarized as follows as:

- **15 STSMs:** 9 STSMs of 5 days and 6 STSMs of 1 month (30 days), or equivalently flexible.
- **WG1-WG4 Meeting**, European Environment Agency, Copenhagen, Denmark, 3-4 October 2013.
- **WG1-WG4 Meeting**, Cambridge, UK, 18-19 December 2013 (joined to 4th MC meeting).
- **2nd Action Workshop** on *New Sensing Technologies for Indoor and Outdoor Air Quality Control*, 25-26 March 2014, Brindisi, Italy.
- **2nd Training School of Action**, 09-11 April 2014 (tbc), Saarbrücken, Germany.
- **EMRS-2014 Symposium**, 26-30 May 2014, Lille, France - **1st Action TD1105 International Conference** as planned in MoU (joined to 5th MC Meeting).
- **STATE-OF-THE-ART** on *Air Quality Monitoring: Models, Methods, Standards and Technologies*, June 2014. To be published. Release 1.
- **NEWSLETTER: Issue 3** (Nov-Dec. 2013); **Issue 4** (April-May 2014).
- **LEAFLET/BROCHURE:** Updated Issues.
- **4th MC Meeting**, 20 Dec. 2013, Cambridge, UK, organized at Queens' College.
- **5th MC Meeting**, 30 May 2014 (tbc), Lille, France, at EMRS-2014 Spring Meeting.
- **DISSEMINATION & OUTREACH ACTIVITIES**

These issues were discussed by MC and taken decisions have been reported in the later items.

b. Action Budget Planning

A table reported the proposed activities and their planned cost with a total budget of 141,000.00 Euro. This table of the Action Budget Planning is reported in the Work & Budget Plan Year 2, as found in the **Annex 3**.

c. Long-term planning (including anticipated locations and dates of future activities)

- **WG1-WG4 Meeting** on *New Sensing Technologies and Methods for Air-Pollution Monitoring at the European Environment Agency (EEA), Copenhagen (Denmark), 3 - 4 October 2013*: The WG1-WG4 Meeting (WGM) will be held at EEA, Copenhagen (Denmark). The core-issues of the COST Action TD1105 will be surveyed and presented as current results and scientific and technological breakthrough. WG1-WG4 Meeting will discuss on *New Sensing Technologies and Methods for Air-Pollution Monitoring* in a multidisciplinary and interdisciplinary approach aiming to provide harmonization of the environmental measurements, exchange of best practices, quality assurance, quality control, data quality, methods and protocols. A plenary session will be organized and open to external participants and stakeholders for S&T discussions on the real critical cases of environmental situations across Europe with emphasis at COST Countries involved in the Action (27 Parties on May 2013). Speakers, experts and other specialists from environmental agencies, academy and industry across Europe will be encouraged to participate and give a Talk on environmental critical hot-spots existing in the Europe zone. Fruitful discussions between Action TD1105 participants, international experts, speakers and international institutional organizations delegates (e.g., WHO Europe, DG ENV, DG RTD, European Environment Agency) are strongly expected. At the open WG1-WG4 Meeting of the Action TD1105, a strong impact on focusing of the critical environmental issues would be mutual benefit. A letter of Expression of Interest to host the meeting at European Environment Agency from Dr. Valentin Foltescu, EEA, as Host-Supervisor is attached in the **Annex 12**.

- **4th MCM of Action, jointly to WG1-WG4 Meeting**, at University of Cambridge (UK), 18 - 20 December 2013. The fourth MC Meeting (MCM) jointly with WG1-4 Meeting (WGM) will be held at Queens' College, University of Cambridge (Action partner), tentatively organized with a Plenary Session (*first day afternoon*), four parallel sessions (one per WG) and a common session of the WG1-4 and the four Special Interest Groups (SIGs) (*full second day*), and finally, a MC Meeting (*third day morning*). At the Plenary Session and/or WGs and SIGs Meetings and/or MC Meeting, it will be involved and invited as external experts at least 1 Keynote Speaker from Non-COST partnership and at least 2 Invited Speakers from COST Area to give Talks on current state-of-the-art of the Action core-issues. Participation from research, academy, university, industry, environmental agencies, international stakeholders, policy-makers and institutional managers is widely planned with large outreach and dissemination activities, at high expected impact.
- **The 2nd International Workshop** of the COST Action TD1105 on *New Sensing Technologies for Indoor and Outdoor Air Quality Control* at ENEA, Brindisi (Italy), 25 - 26 March 2014: The 2nd International Workshop on *New Sensing Technologies for Indoor and Outdoor Air Quality Control* will be held at ENEA (Italian National Agency for New Technologies, Energy and Sustainable Economic Development), Brindisi Research Center (Italy). This second workshop of the Action TD1105 *EuNetAir* follows the first organized at Barcelona (20 June 2013) as Satellite Event inside *Transducers 2013 - Eurosensors XXVII*, as planned in the MoU roadmap. The core-issues of the COST Action TD1105 on the new sensing technologies for indoor and outdoor monitoring and air quality control will be surveyed by Action partners with emphasis at sensor materials, functional materials, nanotechnologies for gas sensors, low-cost and low-power chemical sensors, portable systems, sensor-instrumentations, air-pollution modelling, methods, measurements and protocols for air quality control and environmental monitoring. Speakers, experts, practitioners, stakeholders and other specialists from environmental agencies, academy and industry from Europe will be encouraged to participate and give a Talk on current state-of-art on the environmental research and existing critical issues in the ongoing Revision of the Air Quality Directive 2008/50/EC and EU Thematic Strategy on Air Pollution. Fruitful discussions between Action TD1105 participants, international experts, regional managers, speakers, including international institutional organizations delegates and policy-makers are strongly expected. A strong impact on focusing of the critical environmental issues related to the new sensing technologies for indoor and outdoor monitoring and air quality control would be mutual benefit.
- **The 2nd Training School - Saarland University, Saarbrücken (Germany), 09 - 11 April 2014**: The *three-day* Training School from Wednesday to Friday will be tentatively organized towards at least 20 reimbursed trainees and at least 5 reimbursed trainers, mainly from COST partnership. This 2nd Training School of the COST Action TD1105 *EuNetAir* follows the first Training School, already planned at Barcelona (University of Barcelona) on June 2013 in the first Year (2012-13). This Open 2nd Training School will be devoted to specific core-issues of the Action TD1105 such as nanostructures, sensor materials, gas sensors, devices, sensing technologies, portable sensor systems, sensor nodes, sensor networks, environmental measurements, models, standards and protocols. Graduated students, PhD students, Post-Doc, Early Stage Researchers will be involved from COST partnership and a fruitful exchange of knowledge and research experiences from senior teachers to young trainees is highly expected. The Training School will be organized under supervision of Prof. Andreas Schuetze (Saarland University, Department of Mechatronics, Lab for Measurement Technology), DE MC Member. The Training School Committee of the Action TD1105, chaired by Prof. Albert Romano-Rodriguez (University of Barcelona), will be involved in the organization of school with help to define program, to contact renowned trainers, to select motivated trainees, to support general affairs. This 2nd Training School will pursue a multidisciplinary approach and high education with theoretical and experimental lessons from several domains and complementary disciplines as well. In the case of remaining budget at the end of the Second Period due to saving management, this will be preferably used to increase the amount of trainees to be reimbursed from the Action partners. The scheduled dates of the 2nd Training School at Saarbrücken could be modified and revised to match and adapt the needs of the Action TD1105 planning.
- **5th MCM of Action**, connected to the **1st International Conference as International Symposium at European Materials Research Society - EMRS-2014, Spring Meeting 2014, Lille (France), 26 - 30 May 2014**: The fifth MC Meeting (MCM) will be held at Lille (France), connected to the *EMRS-2014 International Symposium on Advanced Functional Materials for Environmental Monitoring and Applications*, extension from EMRS-2014 and substitution at Strasbourg, presumably to be held on 30 May 2014, at the end of the EMRS-2014 Symposium.

This Symposium (*Symposium B* in the EMRS-2014 flyer as **Annex 13**) was approved on a competitive basis by the Board of Direction of the European Materials Research Society (EMRS) as event in the Spring Meeting 2014 and *embedded* in the big international conference *EMRS-2014* (over 2000 delegates expected). The *International Symposium* as International Conference of the Action was proposed by the Action organizers: Michele Penza (Action Chair), ENEA, Italy; Anita Lloyd-Spetz (Action Vice-Chair), University of Linköping, Sweden; Albert Romano-Rodriguez (MC Substitute), Universitat de Barcelona, Spain; Yongxiang Li (Non-COST partner), Chinese Academy of Sciences, Shanghai, China; Meyya Meyyappan (Non-COST partner), NASA Ames Research Center, USA). The program of the *Action International Conference 1* is planned tentatively for 4 full-day (26-29 May 2014), followed by the 5th MCM (compatibly on 30 May 2014). At the *Action International Conference 1*, at least 8 well-established Invited Speakers and excellent Keynote Speakers from Non-COST partnership and International Experts will be involved to give a Talk on current state-of-the-art of the Action S&T core-issues. A Steering Committee of the International Symposium (Conference) will be setup with most participation from the Action, including external membership. Outstanding participation from worldwide S&T community is highly expected with strong dissemination of the Action activities towards an international and specialized target audience. Very good visibility for the COST Action TD1105 should be provided by the *EMRS-2014* Conference Committee such as the logo of COST and/or Action TD1105 in the conference website, WGs/SIGs Action special sessions embedded, Action presenters included in conference program, and other expenditures for dissemination of achieved Action results.

- The chairman asked the MC to commit to write a **STATE-OF-THE-ART** Release 1 on *Air Quality Monitoring: Models, Methods, Standards and Technologies*, by 30 June 2014, as described in MoU. The aim was considered too ambitious for everyone in the extended version but realistic in the revised format and suggested style. It was proposed to draw up a proper table of contents in order to plan the publication in the best way. The light version of the State-of-the-Art on AQC Technologies seems to be realistic and possible to be realized accordingly to the huge commitment of all MC Members with different releases in the four years of the Action.

MC3D5 The MC approved unanimously the **WG1-WG4 Meeting** on *New Sensing Technologies and Methods for Air-Pollution Monitoring* at the European Environment Agency (EEA), Copenhagen (Denmark), 3 - 4 October 2013. The organization of the event will be in collaboration with Action Chair, WG1-4 Leaders, SIG1-4 Leaders, GH manager and Action Scientific Secretary.

MC3D6 The MC approved unanimously the **4th MCM of Action, jointly to WG1-WG4 Meeting**, at University of Cambridge (UK), 18 - 20 December 2013. Definitions and details are not yet stabilized. MC gave mandate to the Chair to contact local organizer (Prof. Rod Jones, Cambridge) and host-manager (Dr. Tim Shorey) at Queens' College.

MC3D7 The MC approved unanimously the **2nd International Workshop** of the COST Action TD1105 on *New Sensing Technologies for Indoor and Outdoor Air Quality Control* at ENEA, Brindisi (Italy), 25 - 26 March 2014. The MC gave mandate to the Chair to organize and manage this event in the ENEA research center in Brindisi (working place of Chair).

MC3D8 The MC approved unanimously the **2nd Training School - Saarland University, Saarbrücken (Germany), 09 - 11 April 2014**. MC gave mandate to Prof. Andreas Schuetze (Saarland University) to manage as local organizer the Training School in collaboration with Prof. Albert Romano-Rodriguez (University of Barcelona), Action Coordinator of the Training School Committee.

MC3D9 The MC approved unanimously the **5th MCM of Action**, connected to the **1st International Conference as International Symposium at European Materials Research Society - EMRS-2014, Spring Meeting 2014, Lille (France), 26 - 30 May 2014**: The fifth MC Meeting (MCM) will be held at Lille (France), connected to the *EMRS-2014 International Symposium on Advanced Functional Materials for Environmental Monitoring and Applications*, extension from EMRS-2014 and substitution at Strasbourg. MC approved the proposal with the symposium organizers as *Michele Penza*, ENEA, Italy; *Anita Lloyd-Spetz*, University of Linköping and Oulu University, Sweden/Finland; *Albert Romano-Rodriguez*, University of Barcelona, Spain; *Yongxiang Li*,

Chinese Academy of Sciences, China; *Meyya Meyyappan*, NASA Ames Research Center, USA. All mentioned organizers are from COST and Non-COST Action TD1105 partnership. The Scientific Committee is largely involved in the Action EuNetAir.

MC3D10 The MC approved unanimously the writing of a **STATE-OF-THE-ART** on *Air Quality Monitoring: Models, Methods, Standards and Technologies*, by 30 June 2014 (Release 1) in the light version with cost-effective format and revised style. Working Groups, Steering Committee and Management Committee will be involved timely and on voluntary basis.

d. Dissemination planning (Publications and outreach activities)

- The new **Action website** (www.cost.eunetair.it), hosted by ENEA, was announced to be online. These Action webpages cured by the Webmaster ENEA Team (Sebastiano Dipinto, Valerio Pfister, Gianfranco Zingarelli), coordinated by Dr. Marco Alvisi (ENEA, Italy), were showed to the MC. All Partners were invited to contribute with info and news on own expertise and research facilities by filling web-forms as sent from web-Master to the Action partners. New Sections were added to the webpages such as Library composed by NewsRoom, Publications, Video. The files in the pdf format of the presentations given at each meeting/workshop/event of the Action are accessible and open for public consultation. A Members Area with password access has been built in order to upload files and documents for manage STSMs from Action Committee involved in this STSMs assessment activity.
- The other dissemination activities include the preparation of **Newsletter, Leaflet, Brochure**. This activity is coordinated by Prof. Ralf Moos (*Editor-in-Chief*) and Dr. Daniela Schonauer-Kamin (*Editorial Board Manager*) from University of Bayreuth, Germany. The Issue 2 of the Newsletter has been finished and published on June 2013. The chair announced that a copy was in the Participants bag and will be available for downloading in the Action website as well. Furthermore, the Issue 3 and Issue 4 of the Newsletter will be edited in December 2013, and May 2014, respectively, as planned in the Action timetable, in conjunction of the MC meetings. Furthermore, the **Brochure and Leaflet** Issue 1 are already downloadable, while a new version (Issue 2) will be updated during Year 2 and uploaded on the Action webpages as well.
- The chair presented the proposal to disseminate the Action results in the international magazine **International Innovation** (published by Research Media). Michele Penza proposed to the MC the possibility of an interview of 2-3 involved leaders and early stage researchers from Action to be inserted in the magazine distributed also in EU Parliament, and read by over 30,000 people with a worldwide audience in the policy-maker area and general opinion. This activity, with a deadline of December 2013, has an estimated cost of about 2000 Euro. MC delegated the Chair to explore the possibility, depending on budget, to publish in International Innovation magazine when some relevant results are consolidated and worth to disseminate in the non-technical magazines. The Chair took a care of this and to inform timely on the details and definitions in progress.
- The Action Chair, Dr. Michele Penza, announced that an **Interview** on issues of the *Nanotechnologies and Nanosensors for Air Quality Monitoring* with Dr. Meyya Meyyappan (NASA Ames Research Center, USA) had been recorded and uploaded in the Action website (www.cost.eunetair.it) at the section *Video*.
- Michele Penza exhibited some informative slides by Dr. Fabio Galatioto (Newcastle University, UK), Action Chair of the Dissemination Committee, on suggested potential events such as international workshops and conferences related to the issues of the Action TD1105 planned in the further period 2013-2014. The details are reported in the **Annex 14**.

MC3D11 The MC approved unanimously the publication of the **Issue 3 and Issue 4 of the Newsletter** that will be made ready in the next December 2013 and May 2014 in conjunction with MC meetings. In addition, MC approved unanimously the publication of the updated **Issues of the Leaflet and Brochure**. Prof. Ralf Moos (Editor-in-Chief) and Dr. Daniela Schonauer-Kamin (Editorial Board Manager) from University of Bayreuth, Germany, will take a care for this activity.

MC3D12 The MC delegated the Chair to explore the possibility to publish in **International Innovation** magazine (Research Media) when some relevant results are consolidated and worth to disseminate in the non-technical magazines.

12. Requests for new members

The Action Chair presented a table (see **Annex 15**) showing the list of new WGs Members (10 new affiliations from 6 COST Countries). The Chair asked to new members by email to fill an Application Form (see **Annex 16**). The MC approved the new affiliations request.

A discussion on method to be adopted for future new affiliations to Action was followed: usually, new members should contact own Country MC Members in the Action for preliminary approval and information.

MC3D13 The MC approved unanimously the **List of new affiliations** of the Action members.

13. Non-COST applications to the Actions

The Chair showed a map of the Non-COST EuNetAir Participants at the current stage. They are 6 Non-COST Institutions: CSIRO (Australia); Chinese Academy of Sciences (Shanghai Institute of Ceramics); National Research Center Kurchatov Institute (Russian Federation); University of Waterloo (Canada); Southern Illinois University Carbondale (USA); NASA Ames Research Center (USA). A pending intention to joining from Prof. Kostantinos Kakosimos, Texas A&M University at Qatar was expressed but not finalized yet.

Also, Prof. Juan Ramon Morante, IREC, Barcelona, proposed to stimulate the participation of institutions from Argentina, a Reciprocal Agreement Country cooperating with COST Office, to join Action TD1105 EuNetAir. An email message, re-sent again by Action Chair, to a specific organization from Argentina was sent to check availability to join Action TD1105 under mutual benefit scheme.

In the meanwhile, a request of participation from a Morocco institution (University of Agadir) as Near Neighbour Country (NCC) was asked to Chair by fitting the Action issues and objectives. This request will be processed electronically by Chair according to procedures of new Vademecum COST.

14. AOB

Furthermore, the Chair informed on the ongoing **spin-offs activities** of the Action such as at least 4 FP7 NMP research proposals (deadline for first stage on 23 October 2012); it was announced that one NMP proposal, coordinated by Andreas Schuetze (WG2 Leader), including other 6 partners from Action (also Vice-Chair team and new GH Eurice) was granted and negotiation should be concluded on September 2013.

Finally, Michele Penza asked the MC members to make evident the **joint-publications** that are highly welcomed as real output of the networking in the Action partnership. The Chair invited the Action partners to promote new joint-publications and send an electronic copy of the joint-publications to the Action Scientific Secretary in order to collect them for the dissemination activities and annual reporting. A list of the joint-publications of Year 1 is uploaded in the Action webpages at section *Library - Publications*.

15. Location and date of next meeting

The Chair exhibited the Letter of commitment (see **Annex 17**) from Prof. Roderic L. Jones (University of Cambridge), SIG1 Leader and UK MC Member, to host the 4th MC Meeting joined to WGs Meeting in Cambridge, at Queens' College, presumably on 18-20 December 2013.

MC3D14 The MC approved the **Location and date** of the next 4th MC Meeting and WGs Meeting.

16. Summary of MC decisions

Chair kindly summarized the decisions and the approvals discussed by ACTION TD1105 MC.

List of MC Decisions

- MC3D1** The MC approved unanimously both the **Minutes of the 2nd MC meeting in Rome** (6 Dec. 2012) and the **W&B Plan Year 2** (1 July 2013 – 30 June 2014).
- MC3D2** The MC approved unanimously the new COST Parties: Serbia (Institute of Public Health of Belgrade, RS) and The Former Yugoslav Republic of Macedonia (Ministry of Environment and Physical Planning, MK). The Chair will start the e-COST procedure for final approval.
- MC3D3** The MC approved unanimously the budget assigned for the 11 terminated STSMs of Year 1 and the budget allocated for the planned STSMs of Year 2. Eventual remaining Action budget or extra-budget could be assigned for supporting additional STSMs.

- MC3D4** The MC approved unanimously both the Resignation of IT GH UNIBA and elected unanimously Eurice GmbH, Germany, as new GH for future grant periods of COST Action TD1105. Eurice GmbH will enter in force to manage the second period (1 July 2013 – 30 June 2014) and future grant periods. The GH manager as Member in the MC will be Corinna Hahn. The Finance Officer of Eurice GmbH is Pascal Fichot. The Legal Representative of Eurice GmbH is Jorg Scherer. Annamaria Demarinis Loiotile, from UNIBA, will continue to serve as Action Scientific Secretary.
- MC3D5** The MC approved unanimously the **WG1-WG4 Meeting on New Sensing Technologies and Methods for Air-Pollution Monitoring** at the European Environment Agency (EEA), Copenhagen (Denmark), 3 - 4 October 2013. The organization of the event will be in collaboration with Action Chair, WG1-4 Leaders, SIG1-4 Leaders, GH manager and Action Scientific Secretary.
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- MC3D10** The MC approved unanimously the writing of a **STATE-OF-THE-ART on Air Quality Monitoring: Models, Methods, Standards and Technologies**, by 30 June 2014 (Release 1) in the light version with cost-effective format and revised style. Working Groups, Steering Committee and Management Committee will be involved timely and on voluntary basis.
- MC3D11** The MC approved unanimously the publication of the **Issue 3 and Issue 4 of the Newsletter** that will be made ready in the next December 2013 and May 2014 in conjunction with MC meetings. In addition, MC approved unanimously the publication of the updated **Issues of the Leaflet and Brochure**. Prof. Ralf Moos (Editor-in-Chief) and Dr. Daniela Schonauer-Kamin (Editorial Board Manager) from University of Bayreuth, Germany, will take a care for this activity.
- MC3D12** The MC delegated the Chair to explore the possibility to publish in **International Innovation** magazine (Research Media) when some relevant results are consolidated and worth to disseminate in the non-technical magazines.
- MC3D13** The MC approved unanimously the **List of new affiliations** of the Action members.
- MC3D14** The MC approved the **Location and date** of the next 4th MC meeting joined to WGs meeting.

17. Closing

The Chair thanked the Participants for the attendance of the 3rd MC Meeting (21 June 2013), jointly to First Action Workshop (20 June 2013), in Barcelona, and a special thank to Prof. Juan Ramon Morante from IREC and University of Barcelona to host this 3rd MC meeting in IREC and to give the opportunity to manage and support the Open Satellite Workshop of Action TD1105 to *Transducers 2013 – Euroensors XXVII* (Barcelona, 16-20 June 2013).

The Chair would like to acknowledge the IT UNIBA for huge efforts to serve as Grant Holder during the first grant period (1 July 2012 – 30 June 2013) and a kind wish to new GH as Eurice GmbH (Germany) for future activities in the further grant periods.

Also, Michele Penza invited all participants to support the COST Action TD1105 EuNetAir with open and positive efforts for a successful Action and international S&T cooperation by giving the best regards for next meeting in Cambridge on 18-20 December 2013.

The Action Chair, Dr. Michele Penza, acknowledged the Participants and gave a goodbye for Cambridge (UK) on 18-20 December 2013.

List of Annexes

Annex 1: Action TD1105 3rd MC Programme and Agenda

Annex 2: COST 3rd MC Meeting Attendance List

Annex 3: Action TD1105 Work & Budget Plan Year 2 (1 July 2013 – 30 June 2014)

Annex 4: List of STSMs Year 1 of COST Action TD1105

Annex 5: Letter of Resignation from UNIBA as Grant Holder of COST Action TD1105

Annex 6: Template FORM STATEMENT on tax liability

Annex 7: Letter of Expression of Interest from Eurice GmbH, Germany, as new potential Grant Holder

Annex 8: Presentation of Corinna Hahn from Eurice GmbH, Germany, as candidate Grant Holder

Annex 9: Presentation from the Science Officer

Annex 10: Programme of ESSEM Annual Progress Conference (APC) 2013

Annex 11: Template of the Expression of Commitment (EoC)

Annex 12: Letter of Expression of Interest from Dr. Valentin Foltescu, EEA, as Host-Supervisor

Annex 13: Flyer of the EMRS-2014 Symposia, Spring-Meeting 2014, Lille, France

Annex 14: Suggested Dissemination Events of interest for the COST Action in the period 2013-2014

Annex 15: List of new affiliations as WG members of the COST Action

Annex 16: Application Form for new affiliations as WG members of the COST Action

Annex 17: Letter of Commitment from Prof. Roderic L. Jones (Cambridge) to host 4th MC and WGs meeting