





AirMonTech



Current and future air quality monitoring

T.A.J. Kuhlbusch

Barcelona, 25/26.04.2012

www.airmontech.eu

- CAFE started 2001 with the aim of improving European air by
 - revising the directives (e.g. PM2.5)
 - national emission ceilings
 - revising traffic emission standards
- Major European research projects on Air Quality – Exposure – Health Effects (e.g. APHEA 1+2, ESCAPE)
- Major extension of the approach of monitoring air quality with new AQ Directive in 2008 – Average Exposure Index
- Upcoming: Revision of AQD 2013 and FP8!

Aims of AirMonTech

- Facilitating harmonisation and comparability of European air quality monitoring by making information on metrics, techniques and instrumentation available via a database
- Identification of trends and future options in measurement strategies, data quality and comparability
- Discussing and drafting recommendations of future urban air quality monitoring strategies in view of closer linkage to exposure, health effects and assessment of abatement strategies



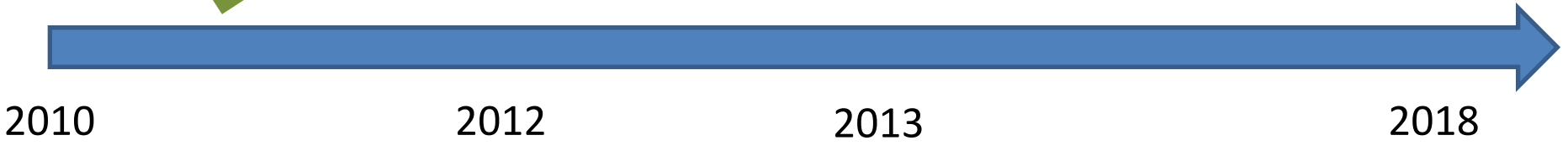
*Research Map and
FP 8 Recommendations
In view of DG ENV and AQD 2018*

*Harmonisation
through
Data Base*

*Recommendation for
Revision of AQD*

**Start of FP8
Revision of AQD**

Revision of AQD



Today

→ We will present and discuss
the database,
new strategies,
new techniques and trends in AQ monitoring,
research & development recommendations

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In close cooperation with all stakeholders
developers, manufacturers, national and urban AQ monitoring
networks, researcher, decision makers, politicians and the EU
commission

The AirMonTech team is looking forward to this workshop!
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AirMonTech Consortium: (from left) J. Moeltgen (UDE), U. Quass (IUTA), K. Torseth (NILU), K. Katsouyanni (NKUA), B. Vogel (UDE), R. Otjes (ECN), E. Weijers (ECN), P. Woods (NPL), T. Kuhlbusch (IUTA, Coordinator), P. Quincey (NPL), M. Viana (CSIC), R. Gehrig (EMPA), X. Querol (CSIC), A. Borowiak (JRC), C. Hueglin (EMPA).

Workshop Program

'Current and Future Air Quality Monitoring'

Barcelona, 25th-26th April 2012

Day 1 (25.04.2012)

12:00 *Registration of participants*

13:00 *Welcome address & technical information*
T. Kuhlbusch, IUTA e.V., Germany & M. Viana, CSIC, Spain

1st Session

Chairperson: T. Kuhlbusch, IUTA e.V., Germany

13:20 *Options for Integration of Air Quality and Health Effects Monitoring*
K. Katsouyanni, University of Athens, Greece

13:50 *Air Quality Monitoring for Exposure Assessment*
G. Hoek, University Utrecht, The Netherlands

14:20 *Coffee break (Exhibitors)*

2nd Session

Chairperson: X. Querol, CSIC, Spain

14.45 Monitoring Technologies at a Glance: The AirMonTech Database

M. Barbieri, JRC, Italy

15:15 Quality needs Assurance: SOPs, Type Approvals, Equivalence Tests for Regulated Pollutants

R. Gehrig, EMPA, Switzerland

16:00 EN 15267 - The latest standard in Type Approval and Certification of Automated Measuring Systems in Europe

K. Pletscher, TÜV Rheinland Energie und Umwelt GmbH, Germany

16:30 *Coffee break (Exhibitors)*

16:50 Time-resolved and Online Determination of Reactive Oxygen Species (ROS) in Ambient Air

M. Kalberer, University of Cambridge, United Kingdom

17:20 Personal monitoring: How the data compare to air quality measurements and what additional information can be derived

M. Nieuwenhuijsen, CREAL, Spain

18:00 End of Day 1

19:30 Social Dinner (participants registered for the dinner only)

Day 2 (26.04.2012)

1st Session

Chairperson: *C. Hüglin, EMPA, Switzerland*

- 08:30 Wrap up of day 1 and Introduction to day 2 - *X. Querol, CSIC, Spain*
- 08:40 Diffusion Charging for Easy Monitoring of Integral Particle Metrics (Average Diameter, Number and Surface Concentration)
M. Fierz, FHNW, Switzerland
- 09:10 Developments and Applications of Sensor Technologies for Ambient Air Monitoring
M. Gerboles, JRC, Italy
- 09:40 COST Action EuNeTAir
M. Penza, ENEA, Italy
- 10:00 *Coffee break (Exhibitors)*
- 10:20 Black Carbon Measurements for Improved Urban Air Quality Monitoring
X. Querol, CSIC, Italy
- 10:50 The Potential of the Aerosol Chemical Speciation Monitor for Long-Term Monitoring
A. Prévot, Paul Scherrer Institut, Switzerland
- 11:20 Trends in Instrumentation for Urban Air Quality Monitoring: New Devices and Metrics
T. Kuhlbusch, IUTA e.V., Germany
- 12:00 Discussion New Instruments / Metrics

12:20 *Lunch break (Exhibitors)*

2nd Session

Chairperson: E. Weijers, ECN, The Netherlands

13:30 Future Options and Strategies in Urban Air Quality Monitoring
P. Quincey, NPL, United Kingdom

14:00 EU Commission's Perspective
M. Schoupe, European Commission, EU

14:30 General Discussion & Concluding Remarks

15:15 *Farewell Coffee*

15:45-17:15 Core Stakeholder Cycle - *CSC Members & AMT WP leaders*

15:15 End of Day 2 (and 17:15 for Core Stakeholders)