

# AIRNET Exposure Assessment Work Group

## Introduction

The objective of this work group is to facilitate an interactive communication and review forum to gather, discuss, and interpret the findings arising from research studying and assessing exposure of the general population and specific risk groups to air pollution and how this will impact the risk and health assessment. Thereby will this work package, together with the package on epidemiology and toxicology, contribute to a better understanding of health effects of air pollution and related exposure conditions important for this.

The Working Group will deliver a report "Exposure" containing the output of the Working Group. Short interim reports will be prepared based on the Annual Conferences, website information, and Working Group meetings.



Air pollution measurement at the roof of a school near a major motorway

## Activities of the workgroup

1. Identifying the questions asked by end-users.
2. Identifying all European research in the field and put it into context with research from outside Europe. Provide non-specialist summarization of research findings which are most relevant to end-users.
3. Assess the potential policy implications of these findings and identify research needs and open questions.

The starting point for the report is relevant research funded by E.C. FP4 and FP5.



Contrast in exposure to (traffic-related) air pollution

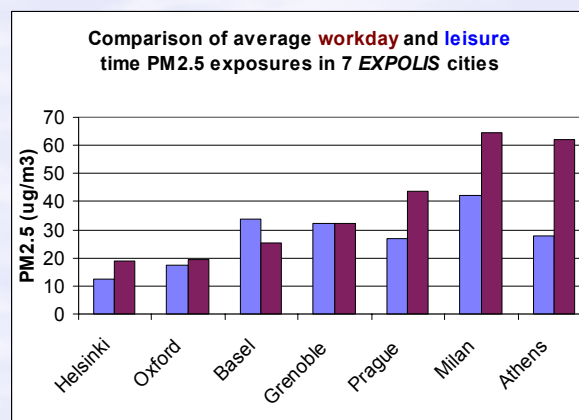
## Time path

AIRNET covers the years 2002-2004.

- The first meeting has taken place in Utrecht in June, 2002.
- The second meeting in December 2002 in London (1<sup>st</sup> annual conference) where a draft Work Plan was discussed
- The third meeting was in Utrecht in June 2003 when first draft text outlines of the report were discussed
- Rome meeting: discussion of draft texts
- Discussion of 2nd draft report at WG meeting (Spring 2004)
- September 1 2004: Completion of the report
- Presentation at 3<sup>rd</sup> AIRNET conference in Prague (Oct. 2004)

## Report Structure

1. Preface (*Janssen*)
2. Definitions of concentrations, exposure, dose (*Janssen*)
3. End-user information needs
4. State of the art in Exposure Assessment of PM, PAH, NO<sub>2</sub>, O<sub>3</sub>, CO and SO<sub>2</sub>
  - 4.1. Ambient concentrations
    - 4.1.1. Concentration levels throughout Europe (*Urbanus*)
    - 4.1.2. Temporal and spatial variation (*Briggs, Ziomas, Amann*)
  - 4.2. Modelling of exposure: determinants and surrogates (*Briggs, Ziomas, Amann*)
  - 4.3. Personal exposure to the ambient fraction (*Bayer-Oglesby*)
  - 4.4. Biological markers of exposure (*Sram*)
  - 4.5. Exposure misclassification (*Janssen*)
  - 4.6. Implications for epidemiological studies and risk assessment (*Hoek*)
5. Assessment of key issues and future research needs (*Jantunen*)
6. Potential policy implications of exposure (*Jantunen*)



### Institutes involved in the exposure assessment work group

International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria  
 TotalFinaElf, Research center BP, Solaize Cedex, France  
 National Institute of Public Health and the Environment (RIVM), Bilthoven, The Netherlands  
 Institute for Risk Assessment Sciences (IRAS), Utrecht University, The Netherlands

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