

## Notes from the CAIR4HEALTH Workshop – Brussels January 19<sup>th</sup> 2009

### Presenting and taking part in the discussion:

**AB – Alena Bartonova**

**AK – Andrej Kobe**

**BB - Bert Brunekreef**

**CFH – Christian Farrar-Hockley**

**DS – Denis Sarigiannis**

**DvdH – Dick van den Hout**

**FH – Fintan Hurley**

**JK – Jaakko Kukkonen**

**RS – Ranjeet Sokhi**

**VF - Valentin Foltescu**

### **Dick van den Hout, TNO, Netherlands**

#### **Policy links of research outcomes from CAIR4HEALTH project**

**Q.** Are all levels of stakeholders involved and have we missed any needs?

All external experts agreed that within the framework of CAIR4HEALTH all the main stakeholders had been consulted and their needs considered. The main difficulty was to articulate and prioritise these needs.

**FH:** As a general comment, a relevant need to be considered would be to improve the procedure through which science is integrated into the policy process, however this is beyond the scope of the project.

**DvdH:** Explained that needs from the stakeholders are usually expressed at top level, so in CAIR4HEALTH we needed to use a “top-down” analysis approach by taking into account the relevant causal chain, in order to reveal the individual needs at all levels.

**AB:** Commented on the issue of losing information when using an integrated assessment approach.

**DvdH:** Suggested that this could be avoided by focusing on uncertainty analysis to account for unknown factors in integrated assessment modelling.

**AB:** Expressed the need for member states to get more actively involved and take action at the national level in relation to their individual needs and problems on health impacts linked to air quality. Quantified information and concerns are useful inputs from member states into the preparation of new EU Directives.

**DvdH:** In analysing the needs determined from the stakeholder process, many stakeholders went into great depth on research requirements whilst others went into less depth. The differences in expression could not be given weight as it was recognised that some groups such as NGOs probably did not have the resources to go into such depths, but this did not negate the importance of what they felt.

**CFH:** The key here is that when resources are allocated in big projects, it is not possible for NGOs to get any of this funding. This is a problem.

**Jaakko Kukkonen, FMI, Finland**  
**Review of research recommendations**

**FH:** How much development has been made to improve spatial resolution of models?

**JK:** We are getting closer to a better resolution. Several modelling systems plan to get to 10-20 km resolution. Even 1 metre scale is possible in cities.

**VF:** Can we undertake bottom up assessment of shipping emissions?

**JK:** There is an automatic system for evaluating shipping emissions which has been implemented in the Baltic Sea but there is a need to develop a global system for shipping emissions.

**AK:** Are improving mass closure more important than the integration of models/scales and what benefits can policy makers derive from advanced, integrated models?

**JK:** There is a general preference by the scientific community for integrated and more complicated modelling systems for air quality assessment purposes, and there is a justification that higher resolution and better representation of scale interaction processes, for example, are important to correctly estimate exposure and improve the understanding on health effects.

**AK:** However, policy makers are not yet convinced of the benefits of using more advanced modelling methods.

**RS:** We can agree that an important research need is to examine the role and contribution of high resolution integrated modelling approaches for policy applications.

**JK:** Aerosol mass closure is needed for evaluating models. Mass closure measurements are also good for categorising sources e.g. fires give rise to more organics.

**Bert Brunekreef, University of Utrecht, Netherlands**  
**Air quality and health research – future needs.**

**Q:** Are there ways by which effects of air pollutants can be mitigated?

**BB:** There may be a beneficial health response to filtering air for older people. There is some evidence of an improvement in muscle function and also some evidence that fresh fruit consumption may reduce the effects of air pollution due to anti-oxidants.

**Q:** Are there reasons why PM levels are not falling in Europe?

**BB:** The issue of why PM levels are not falling in many urban areas in Europe, in contrast to other traditional pollutants, was mainly attributed to incorrect emission databases and inaccurate model representation of chemical transformations.

**AB:** Also there are knowledge gaps regarding secondary aerosols that can be an important contributor.

**JK:** Another possible reason for PM levels not falling is due to increased traffic flows that results in an increase non-exhaust particle emissions which are not easily regulated.

**RS:** Pointed out that this is an important research need to be considered, as policy makers need to know whether the adopted measures are effective or if they should be modified.

**Denis Sarigiannis, JRC Ispra**

#### **Implications of indoor air pollution on health**

**RS:** Could indoor pollution be brought into EU policy?

**AK:** No, not possible to do this at the moment. The integration of air pollution and climate change modelling was slightly further on.

**DS:** Guidelines are to be set in Europe with a labelling scheme on which business has to co-operate. A way has to be found to protect the vulnerable. A public awareness campaign is needed being informative and positive rather than putting out warning messages.

**AK:** Expressed the concern that science is not consistently and effectively used in EU policy development , for example to support effective implementation of measures, although different services are active in the Commission in an effort to integrate relevant policy areas – such as air quality and climate change - based on research findings. He felt that a lot could still be done.