**NIAM activity on PM2.5**

As one of our first activities in NIAM we would like to look at how countries are addressing PM2.5 pollution, including how they model it, how they assess the health impacts, and how this feeds into policy. As a first step we are gathering information on current work in this area towards organisation of a virtual meeting in November.

If you are interested in participating please register your interest with an e.mail to [h.apsimon@imperial.ac.uk](mailto:h.apsimon@imperial.ac.uk). And if you are already working in this area we shall be grateful if you can also send a response to the questions below which will help us in planning a focus on this topic.

1. **Modelling PM2.5**

If you model PM2.5 concentrations in your country:-

1. Do you use GAINS, or independent modelling- in which case please give brief details.

***We use an independent model, E2Gov projections (***[***http://www.techne-consulting.com/joomla/it/software/19-plugin/46-projections***](http://www.techne-consulting.com/joomla/it/software/19-plugin/46-projections)***), at LAU2 territorial level, for regional planning***

1. What distance scales do you cover- e.g. European, national, city: and with what spatial and temporal resolution?

***Municipal LAU2 level, hourly***

1. What components of PM2.5 do you include- e.g. primary PM2.5, secondary inorganic aerosol, secondary organic aerosol, natural dust etc?

***All***

1. What emissions data do you use e.g. a national inventory. Are there particular sources you think are uncertain, missing, or would like to discuss?

***We realize integrated assessment included emission inventory***

1. Have you undertaken validation of your model against measurements, and if so what measurements do you have available to use

***Yes, we use measures from official regional air quality networks in Italy and national networks in other countries we worked in the past (Montenegro, Albania)***

1. What do you think are the most important uncertainties or aspects of PM2.5 modelling that you would like to discuss

***I’m particularly interested in characterization of sources at detailed local level and uncertainty propagation from emissions to models***

1. **Assessing health impacts**

The health impacts of PM2.5 are a major driver to reduce air pollution.

1. We are interested in how you use data on concentrations of PM2.5, either modelled or measured or both, to assess human exposure and health impacts?

***yes***

1. If you undertake such assessments of health impacts of PM2.5, do you follow WHO guidance and base this on total mass of PM2.5, or do you focus on particular components and/or differentiate relative toxicity?

***We use some speciation for emission inventory (also used as input for CAMx AQ model)***

1. What health impacts do you consider e.g. mortality, asthma etc; and what risk coefficients do you use?

***We only realize some pilot experience in this field***

1. Do you assess the economic costs of health impacts, and if so what do you include e.g. life years lost, hospital/medical costs, loss in productivity/working days lost etc.?

***We only realize some pilot experience in this field***

1. **Policy applications**

We are also interested in the application of your work, particularly as input to development of policy.

1. How do you relate your work to environmental goals e.g. compliance with regulations, or comparison with WHO guidelines?

***Our work is realized in the frame of realization of regional and national plans and programs in the frame of Air quality directives application***

1. **Publications**

Have you published your work, in which case please give references is available?

A lot of publication can be retrieve here: <http://www.techne-consulting.com/joomla/it/pubblicazioni> or in my research gate profile <https://www.researchgate.net/profile/Carlo_Trozzi>

1. **Questions**

Are there particular aspects of questions that you would like NIAM to address on PM2.5, including at the virtual meetings proposed for November.

***Territorial dimension of modelling and fine characterization of sources to use for AQ planning at zones and agglomerates level***

Please e.mail your response to Helen ApSimon: h.apsimon@imperial.ac.uk