Brussels,
6 February (2003)

Note to the CAFE steering group

WHO systematic review of health aspects of air quality in Europe -

Follow-up round

1. BACKGROUND

WHO has set up the project ‘Systematic review of health aspects of air pollution in Europe’. The project is scheduled to run until early 2004. The objective of the review is to “provide advice and co-ordinate the regular update of the health risk evaluation of total exposure to important air pollutants, taking into account the current regulatory needs in the EU and developments within the UN ECE Convention on Long-range Transboundary Air Pollution”. To a large extent this means that WHO assists the Clean Air for Europe programme with advice on health specific issues of air quality. A first set of high priority questions for the WHO review has been agreed in the CAFE SG in December 2001 for which WHO has a close to final draft of answers (to be presented and discussed at the SG meeting 17 February). The final report on this first round is expected in March 2003. Following the first round of questions and answers WHO will initiate work to update its guidelines for the priority air pollutants. As part of the systematic review WHO will also assess the risk to human health due to the present levels of air pollutants in Europe.

The WHO regional office in Bonn and the CAFE secretariat have agreed to provide the possibility for a follow-up round of questions. The purpose with this note is to prepare for the follow-up round of questions for the WHO systematic review.

2. THE PROCEDURE

The WHO regional office in Bonn needs the follow-up questions by mid-March 2003 in order to be able to set up the appropriate working groups addressing the issues.

The first opportunity to collect issues that may be tackled in the follow-up round will be during the SG meeting 17 February.

However, also the implications of the answers to the first round of CAFE questions are not always obvious and may require some afterthought. There may also be other issues of concerns. The CAFE secretariat will therefore collect further issues from the SG members in the two weeks following the SG meeting and make a substantiated proposal...
for a set of questions for the follow-up round. Also other European stakeholders and experts may contribute to this process of collecting issues.

The draft second set of questions would then be circulated to the members of the SG for final comments before being sent to the WHO in mid-March.

3. **THE ISSUES**

The first set of questions covered the priority substances airborne particulate matter, nitrogen dioxide and ozone. The follow-up round of questions could also be addressing these issues. For the formulation of questions the following topics may provide some guidance:

- Are there substances and pollutants that have not yet been addressed in the CAFE programme that are/should be of concern for the systematic review by WHO? Possible pollutants include specific VOCs such as 1,3-butadiene, PAHs or indirect effects of HM via deposition?

- Are there specific population groups (age categories, sensitive subjects, social groups) that should be brought into special attention in the systematic review by WHO? Suggested groups could be children and elderly or groups of sick people.

- Are there critical effects of particular interest to be addressed in the follow-up round of the systematic review by WHO, such as mortality or asthma?

- What is the relevance of short-time exposure to high peak levels or exposure in hot-spots compared to medium-term and long-term exposure? Suggested aspects of exposure include the influence of indoor air vs outdoor ambient air.

- Other or new concerns
ANNEX I Questions to WHO formulated by the CAFE Steering Group in December 2001

On particulate matter:

- What are the important parameters for regulatory decisions?
- Can critical size fractions be identified?
- Can critical chemical or physical characteristics be identified?
- Can critical sources be identified?
- Is particle count an important parameter?
- Are there any types of particle which are not, or are unlikely to be, associated with effects on human health?
- Are the parameters that can be measured according to regulatory standard good indicators for effects on health? In particular
- Is PM2.5 a better indicator than PM10? Are both advisable?
- Is black smoke a relevant indicator for health effects?
- Would it be advisable to develop/improve measurement standards for other parameters?
- Is there likely to be a threshold concentration below which adverse effects on the population would not be expected?
- What averaging period (time) is the most relevant from the point of protecting human health?
- Would additional protection be provided by setting standards for more than one averaging period, e.g. daily in addition to annual average?
- What are the specific hazards of diesel soot?

On nitrogen dioxide

- Is there new scientific evidence to justify reconsideration of NO2 guidelines (short-term and annual average)?
- To what extent is the association between NO2 and adverse health effects attributable to NO2 per se?

On ozone

- Is there new scientific evidence to justify reconsideration of O3 guidelines?
- Is there likely to be a threshold concentration below which adverse effects on the population would not be expected?
- What averaging period (time pattern) is the most relevant from the point of protecting human health?
- Would additional protection be provided by setting standards for more than one averaging period or other time-related parameter?