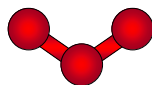


**The ASTA project is supporting a workshop that is arranged in collaboration  
with UNECE Convention Long-Range Transboundary Air Pollution**

## **Establishing Ozone Critical Levels II**



**Göteborg, Sweden**

**19-22 November, 2002**

**IVL Swedish Environmental Research Institute**

**Göteborg University**

[www.ozoneworkshop.ivl.se](http://www.ozoneworkshop.ivl.se)

### **Organising Committee:**

Dr Per Erik Karlsson, IVL Swedish Environmental Research Institute

Dr Håkan Pleijel, Dept of Applied Environmental Science Göteborg University

Prof Gun Selldén, Botanical Institute, Göteborg University

### **Background**

The UNECE Convention on Long-range Trans-boundary Air Pollution is one of the central means for protecting the European environment. Since its entry into force the Convention has been extended by eight protocols ([www.unece.org](http://www.unece.org)). The latest is the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone. Its review/ revision is envisaged for 2004/2005.

Critical levels for ground-level ozone have been developed through a series of UNECE work-shops: Bad Harzburg 1988, Egham 1992, Bern 1993, Kuopio 1996 and Gerzensee 1999. Current critical levels are defined using a Level I approach, which means that they can only be used to evaluate the potential risk to the vegetation. However, in order to quantify impacts of ozone and their economic consequences for vegetation, there is a need for a Level II approach. A first step in this direction was taken at the UNECE workshop in Gerzensee 1999. A Level II approach will have to take into account factors that modify the ozone uptake by the foliage, differences in ozone tolerance between species and varieties, spatial and temporal differences in phenology, how ozone affects plant communities, etc.

### **Aims of the workshop**

The workshop represents the main opportunity to introduce new Ozone Critical Levels II into the revision of the Gothenburg Protocol 2004/ 2005. The overall aim of the workshop is to recommend new texts for the Ozone Critical Level II approach for the Mapping Manual.

The primary aims of the workshop are:

- To review recent progress in the fields of ozone exposure–response relationships for vegetation and ozone exposure modelling and mapping.
- To suggest ozone exposure–response re-relationships for agricultural crops, natural vegetation and forest trees, based on the most recent available knowledge.
- To suggest specific changes in the text of the Mapping Manual concerning critical levels for ozone.

### **Financing**

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Swedish Environmental Protection Agency

188000 SEK

The Foundation for Strategic Environmental Research, project ASTA

150000 SEK