

5. The Parties shall, at sessions of the Executive Body, arrange for the preparation, at regular intervals, of revised information on calculated and internationally optimized allocations of emission reductions for the States within the geographical scope of EMEP, using integrated assessment models, including atmospheric transport models, with a view to reducing further, for the purposes of article 3, paragraph 1, the difference between actual depositions of sulphur and nitrogen compounds and critical load values as well as the difference between actual ozone concentrations and the critical levels of ozone specified in annex I, or such alternative assessment methods as approved by the Parties at a session of the Executive Body.

### *Article 8*

#### RESEARCH, DEVELOPMENT AND MONITORING

The Parties shall encourage research, development, monitoring and cooperation related to:

- (a) The international harmonization of methods for the calculation and assessment of the adverse effects associated with the substances addressed by the present Protocol for use in establishing critical loads and critical levels and, as appropriate, the elaboration of procedures for such harmonization;
- (b) The improvement of emission databases, in particular those on ammonia and volatile organic compounds;
- (c) The improvement of monitoring techniques and systems and of the modelling of transport, concentrations and depositions of sulphur, nitrogen compounds and volatile organic compounds, as well as of the formation of ozone and secondary particulate matter;
- (d) The improvement of the scientific understanding of the long-term fate of emissions and their impact on the hemispheric background concentrations of sulphur, nitrogen, volatile organic compounds, ozone and particulate matter, focusing, in particular, on the chemistry of the free troposphere and the potential for intercontinental flow of pollutants;
- (e) The further elaboration of an overall strategy to reduce the adverse effects of acidification, eutrophication and photochemical pollution, including synergisms and combined effects;
- (f) Strategies for the further reduction of emissions of sulphur, nitrogen oxides, ammonia and volatile organic compounds based on critical loads and critical levels as well as on technical developments, and the improvement of integrated assessment modelling to calculate internationally optimized allocations of emission reductions taking into account the need to avoid excessive costs for any Party. Special emphasis should be given to emissions from agriculture and transport;