## COMMISSION OF THE EUROPEAN COMMUNITIES

COM(94) 109 final Brussels, 04:07.1994

94/0106 (SYN)

Proposal for a

COUNCIL DIRECTIVE

on Ambient Air Quality
Assessment and Management

(presented by the Commission)

#### **EXPLANATORY MEMORANDUM**

#### concerning

## the Proposal for a Council Directive on Ambient Air Quality Assessment and Management

## 1. <u>Justification of the proposal</u>

## 1.1 Reference to the 5th Action Programme

The 5th Action Programme acknowledges the continuing need for legislative measures at Community level, particularly with respect to the establishment of fundamental levels of environmental care and protection; in addition it highlights the need for base-line data, statistics and indicators to assess environmental conditions and trends and where necessary to adjust and optimise policy. This Programme also advocates the setting of long-term objectives.

With regard to ambient air quality, the objectives fixed in the 5th Action Programme are the effective protection of all people against recognized risks from air pollution and the establishment of permitted concentration levels of air pollutants which should take into account the protection of the environment. These objectives imply:

- extension of the list of regulated substances
- monitoring and control of concentrations with regard to standards.

Successive programmes of action of the European Communities on the protection of the environment have stressed the need to find a balance between the use of different tools: product standards, emission limits and environmental quality objectives/standards.

## 1.2 Scientific and technical basis for the proposal

The existing Directives, particularly those on sulphur dioxide and suspended particulate matter and on lead, gave a major push to reduce the concentrations of the respective pollutants in ambient air and there are only a few 'hot spots' left in the Community where breaches of the limit values occur.

However, the implementation of these Directives highlighted the existence of various problems which need to be addressed in a more detailed manner; the most important difficulties were:

- the measures taken by Member States did not achieve compliance with the limit values within the shortest possible time;
- long term air quality objectives have not been considered to be very important by the majority of Member States;
- there are large differences in monitoring strategies in comparable situations between and within Member States;
- the harmonisation of measuring methods is only partially reached due to national practices;
- the quality of the measurements also depends very much on calibration and quality assurance procedures. There are obvious differences in these among, and within, Member States;
- the information forwarded by Member States about the results of the survey and the measures taken is seldom complete and is difficult for the Commission's services to assess. In the past, mainly due to the extremely limited resources available for this task, only an administrative treatment of the information provided by countries has been carried out.

### 1.3 Objectives of the proposed legislation

The parallel development of ambient air quality standards and emission/product standards is accepted as the best way of safeguarding air quality. The principle of prevention can be implemented via stringent ambient air quality objectives which are low enough so that adverse effects are unlikely to occur according to the available knowledge.

Under the present proposal a Community-wide framework is provided for assessing and managing ambient air quality in the future.

A high degree of harmonisation is proposed in the assessment strategy which will:

- allow identification of areas where specific actions need to be taken,
- highlight the need for Community-wide legislation in other areas, and
- provide a direct way of measuring the impact of the measures implemented in order to reduce the emissions of atmospheric pollutants.

Data on ambient air quality made available through this proposal can be linked with data on emissions by models. In the long run, the models can help to improve emission inventories, air quality surveillance and the design of control measures. The detailed information collected through the assessment could also be used in relation to observed effects on environment and health.

The policy proposed also aims at limiting as far as possible the economic implications for Member States by restricting the list of pollutants to those of most concern and by making the system of assessment highly flexible.

Air pollution at the workplace, whether indoors or outdoors, is subject to other Community legislation on the health and safety of workers at work.

### 1.4 Means for achieving the assessment and management

In order to provide environmental quality standards needed for the control of emissions and to protect human health it is proposed to set air quality objectives for a list of substances which are relevant to both.

Criteria are fixed for the assessment in order to have a coherent and reliable system. Limit values, alert thresholds, location of monitoring sites, measurement methods and other specific criteria will be set on a pollutant to pollutant basis through Acts under the Directive which will be agreed by Council.

With regard to management, the aim is to maintain the quality of air and when necessary, to improve it. To meet that aim requirements are fixed and in cases where there is a need for improvement; measures and plans have to be designed and implemented by Member States to improve the situation.

## 2. Need for action at Community level - Subsidiarity.

## 2.1 What are the objectives of the action envisaged in relation to the Community's obligations?

The aims of the Directive are outlined in section 1.3; these are in complete agreement with the objectives set in Article 130r of the Treaty which include: preservation, protection and improvement of the quality of the environment and protection of human health. The introduction of a Community-wide approach for the assessment and management of air quality will contribute to achieving this objectives.

The protection of health is one of the main motivations for action at all levels. For ambient air quality in particular, it is logical that common standards should be established within the Community. There is no evidence to suggest that populations in different parts of the Community vary in their tolerance of air pollutants.

With regard to environmental protection, the proposal aims at ensuring the protection, and when necessary; the improvement of environmental resources in the Community.

## 2.2 <u>Is the action envisaged an exclusive competence of the Community or a shared competence with the Member States?</u>

The competence is shared with the Member States, taking into account the subsidiarity principle stated in paragraph 4 of Article 130r of the Treaty.

With regard to the protection of health, the Community is not seeking to legislate for every potentially detrimental substance, but only those commonly present in the environment and known to be in ambient air at levels which might be hazardous. The standards to be proposed will be based on the recommendations of international, Community and national expert groups competent in this field.

Existing legislation on ambient air quality (Directives 80/779/EEC amended by 89/427/EEC on sulphur dioxide and suspended particulate matter, 82/884/EEC on lead, 85/203/EEC on nitrogen dioxide and 92/72/EEC on ozone) pre-dates even the introduction of the Single Act which defined the subsidiarity principle; the first Directive was adopted in 1980 and the most recent, on ozone, was approved in 1992. The problems encountered with the earlier Directives, outlined in paragraphs 1.2 and 2.3.3, have demonstrated the need for a harmonised approach to the assessment and management of ambient air pollution in the Community.

## 2.3 What is the Community dimension of the problem? What solution has been in force until now?

All Member States face the problem of assessing and managing ambient air quality. In nearly all industrialised countries, objectives for ambient air quality and for emissions of air pollutants have been laid down. The situation in the Member States, at Community level and in some other countries is summarised below.

#### 2.3.1 Situation in the Member States

All Member States have at least the air quality objectives required by current EC legislation.

The evaluation of the situation in different countries has shown large differences with regard to national air pollution policy in general and to the use of emission or product standards and/or ambient air quality standards. It underlines the fact that countries which have achieved a high degree of protection are, as a rule, basing their policy on both emission/product standards and ambient air quality standards. For these countries the question of whether the emission/product standard approach is more advanced than the ambient air quality standard approach or vice versa depends mainly on the importance given to preventive actions and on feasibility aspects. There are several reasons why some countries have still not achieved a high degree of protection, for example, the air quality policy has only recently been defined and is still in a development stage; air pollution is not a priority in national politics; economic interests of specific industrial groups are strong and hamper progress, etc.

### **Belgium**

Besides the air quality standards required by EC legislation, emission and product standards have been laid down for a few categories of sources at national level and for many industrial processes through locally-issued authorizations; these emission standards relate mainly to sulphur dioxide, dust and nitrogen dioxide.

There are relatively few independent national laws or regulations in force in addition to the Community Directives.

#### Denmark

The Danish legislation and the practice of air pollution control aims at covering all the aspects needed for a complete management system. However, at present this still does not seem to be fully developed; there are gaps in the setting of emission standards and ambient air limit values are only in force for very few pollutants. Recently published guidelines may close these gaps.

The Danish air pollution policy aims more towards complete emission control than to drafting further ambient air quality standards. In the frame of the international convention of the Economic Commission for Europe of United Nations on long range transport and the corresponding protocols, Denmark places the emphasis on emission reduction rather than the definition of new air quality objectives.

#### F.R. Germany

In Germany the air pollution management system exists at two levels: national and with the Länder. Emissions standards are laid down for all major sources of air pollution and are regularly up-dated according to the development of 'best available technology' and application of the principle of prevention. For a number of pollutants air quality limit values have been laid down linked to the authorization procedure for new plants. These limit values also undergo regular revision which generally means that they are tightened-up; in addition, alert concentrations are fixed at national and local level for some pollutants.

The monitoring of ambient air also covers pollutants which are not regulated; screening programmes are often carried out for these. Concentrations of many of the regulated air pollutants are surveyed continuously in the most polluted zones as well as in background areas.

However, it is worthwhile to note that even in this well developed management system the number of pollutants for which air quality standards are set is much smaller than the number of pollutants for which emission standards have been laid down.

#### <u>France</u>

At the present time, French air pollution control policy is orientated towards prevention and emissions reduction. There is also an 'air quality objective' element, i.e., because binding emission standards have been laid down for very few sources, actual concentrations of pollutants in ambient air play a major role as soon as the limit values are approached in heavily polluted zones.

While the French authorities pursue their efforts to abate sulphur dioxide within the "Special Protection Zones" they have started to generally reduce emissions of sulphur dioxide, oxides of nitrogen and volatile organic compounds.

Continuous monitoring of industrial and related emission at source and of ambient air quality is being developed in order to improve the enforcement of measures.

Even at local level comprehensive management of air quality has been developed for control of sulphur dioxide and, to much a lesser extent, Black Smoke. Local authorities are increasing the numbers of other pollutants monitored and treat breaches very seriously; local measures against nitrogen dioxide and ozone have been implemented or are planned.

#### Greece

Greece is still in the phase of building an efficient environmental management system; major progress is being made in all fields (legislation, administration and enforcement).

No national air pollution management plan is being implemented although from time to time plans are developed at the political level. In practice, in this area the Greek government is largely driven by Community legislation.

The focal point of Greek air pollution policy is the Greater Athens Area for which detailed plans have been developed linking emissions and ambient air quality in a very complex strategy, including the setting of additional air quality objectives and the use of techno-economical studies on emission reduction, air quality monitoring, etc., for achieving the objectives. Air quality modelling and forecasting of emissions have been developed with the aim of abating photochemical pollution.

While the application of a complete management system is poor for the whole country, it is quite well developed, but with some gaps, for Athens.

#### Ireland

In the past, Irish policy was clearly orientated at 'ambient air quality'. However, in recent years Community legislation on emission and product standards and the serious breaches of the ambient air limit values for black smoke in Dublin have led to substantial revision of Irish legislation. The ambient air quality approach and the emission approach have both been strengthened. However, while there are clear definitions of ambient air quality standards, the regulations for emission standards for stationary and mobile sources are less binding. In practice, only the standards laid down in Community legislation are mandatory.

Nevertheless, at national level a comprehensive air pollution management system is not applied because it is considered to be unnecessary for many of the potential air pollutants. Apart from a few 'hot spots', Ireland enjoys very clean air. At local level, Irish legislation includes provisions to draft 'Air Quality Management Plans' but comprehensive plans comparable, for example, to those for some German areas have not been forwarded to the Commission. On the other hand, the plan made for Dublin involves many elements of a full air quality management scheme including detailed assessment of air quality, emission inventories, modelling, assessment of different possible abatement measures, selection of the most appropriate measures and implementation of measures.

#### Italy

The Italian air quality management strategy is in a transition phase: while, in the past, it was almost entirely 'ambient air quality' orientated, emission control is beginning to play a more important role. There now seems to be a better balance between these two approaches. The major reasons for the change are:

- i) the ineffectiveness of the ambient air quality approach;
- ii) the greater importance given to international efforts to reduce emissions.

The Italian authorities have issued ambient quality guide values for pollutants other than those covered by EC legislation (in total for 8 substances) but in reality this has had little effect, indicating that the air quality management is not complete in practice either at national or local level. The recently published emission guidelines try to close this gap and it is interesting to note that emission standards for about 400 substances have been laid down in the decree, 50 times more than covered by air quality objectives.

The Italian air pollution policy is currently equally based on emissions/product standards and air quality objectives with a well developed legal basis. However, due to important gaps in enforcement, the air quality management system, with the exception of sulphur dioxide abatement in a few regions, cannot be considered as well developed.

#### Luxembourg

The practical air pollution policy in Luxembourg appears to be concentrated on emission controls rather than the application of an 'ambient air quality objective' approach. Legislation does not reflect this policy and only very few emissions standards are in force. The government has prepared, and is preparing additional, legislation on emission limits.

A quite complex authorization procedure for industrial sources is in operation but, as far as legally binding emission limits are concerned, only very few installations are covered. For emission standards the Community Directives play an important role as well as relevant German technical guidelines ( $\Gamma$ .A.-Luft). Currently, a national air quality plan is in the preparatory phase.

## The Netherlands

In the 1960s, the Dutch air pollution control policy was characterised by a sectoral approach, nowadays it is an integrated part of a total environmental policy.

For the implementation of the new policy, which tries to cover national, regional and local levels, The Netherlands has developed one of the most comprehensive strategies for environmental protection of all EC-countries.

Environmental policy in The Netherlands is effect-orientated and emission-(source-)orientated.

The underlying premise of the effect-orientated approach is that the physical environment should be such that effects from pollution are not detrimental to humans, plants, animals or goods. To accomplish this, air quality standards are set with risk management providing the basis for standard setting.

A list of priority substances has been developed on which action is focused. As far as acceptable air quality levels are concerned a three level system has been established:

- limit values,
- guide values,
- target values.

The policy aims at achieving the target values in the long term with the limit values being revised downwards to reach these.

The air quality limit values for sulphur dioxide, suspended particulates, carbon monoxide, lead and nitrogen dioxide are included in legislation. The three levels of government involved are urged to maintain the limit values when they have been legally set.

In addition to the priority substances for which air quality objectives have been set, there are other compounds entering the environment which have the potential to cause serious effects to humans and the environment. A source-orientated approach is advocated for these.

Many of the Dutch target values cannot be achieved without international emission reductions. Therefore, the Dutch environmental programmes includes initiation and support for international activities which has resulted in the past in the drafting of the World Health Organisation Air Quality Guidelines for Europe (1987).

#### **Portugal**

The relatively recent Portuguese air quality policy still does not seem to be fully developed. At present, driven mostly by EC-legislation, both lines of the effect-orientated ambient air quality policy and the source orientated emission control policy, are being developed. However, with the establishment of a system of identification of "heavily polluted zones" and the parallel creation of extended monitoring networks, the effect-orientated approach linked to the most polluted zones seems to have a somewhat higher priority. An air quality management system, interconnecting both approaches, has still not been set up either at national, regional or local levels.

### <u>Spain</u>

Spanish air pollution control policy appears to be more orientated towards ambient air quality than emission control. In fact, only very few emission limit values are in force in Spain. In contrast, as far as the survey of air quality is concerned, relatively large networks are in operation focusing mainly on sulphur dioxide, suspended particulate matter and Black Smoke. For these substances breaches of the relevant EC-limit values have been identified and measures to remedy these are in preparation. Detailed air quality management plans, either at national or at regional or local level, aiming at more general emission reductions are still in preparation.

#### United Kingdom

The major element of the UK's clean air policy is flexibility. This appears to be strongly effect-orientated but the fact that no national ambient air quality standards have been set as yet, other than those of the EC, contradicts this view. Such standards are currently being developed. It appears that there will be more emphasis on emission control in the future as

demonstrated by the increasing number of guidelines on scheduled works.

The element of flexibility is accompanied by the great importance given to research in the UK's clean air policy. General research into air pollution sources, control technology, dispersion of pollutants and effects is conducted by a wide variety of bodies; much of this is commissioned by the Department of the Environment. In many air pollution issues of international concern, policy decisions are influenced by results of this work.

The pairing of "flexibility in measures" with "research to identify the problem in all aspects" is considered to be the most cost-effective approach because it allows tailor-made measures for specific problems. The major drawback of this approach is that the research can take a long time to provide answers, and the chance to take early measures at low costs to avoid adverse effects has been lost.

UK clean air policy is well-developed although with some gaps which will be addressed to some extent by the increasing number of guidelines on scheduled works and the establishment of ambient air quality standards.

## 2.3.2 Situation in other countries

#### Austria

Air pollution control is enforced by laws setting maximum allowable emission levels as well as maximum ambient air concentrations; these laws may be on a federal as well as on a regional basis. With the exception of the laws on smog-alert and protection of forests, there is no direct connection between the regulations on emissions and ambient air concentrations. Therefore, the policy tools have to be considered as still not being fully developed, e.g., the application of models and emission reduction scenarios which link emission reductions with ambient air quality. Recently, the first steps towards such an integration were made with regard to ozone pollution.

The present policy applies nearly equally to emission and product standards as well as ambient air quality objectives.

#### <u>Japan</u>

The Japanese Ambient Air Quality Management System is characterised by the existence of many regional or local 'agreements' to improve the quality of air which are based on the criterion of "social acceptance". If only the national policy is considered, the management system seems to be based on both approaches, emission/product standards + air quality objectives although the emission standard approach seems to be further developed, e.g., a large number of emitters are covered, while air quality objectives which are not legally binding, are set for only a few pollutants. It is not clear whether an efficient connection between ambient air quality and emissions has been set up in all regions. However, at least for the large agglomerations, there are detailed emission inventories, modelling studies, and emission reduction plans available showing a well-developed state of air quality management.

#### Sweden

Air Pollution Control Policy in Sweden is highly centralized and based on a national "masterplan", the "philosophy" of which is to prevent, as far as possible, future adverse effects on the environment and to restore any parts of the environment that may already have been damaged. The preventive principle of the Swedish environment policy is realized by comprehensive emission control and reduction.

These measures are implemented even if the ambient air quality data do not exceed the standards. In fact, limit values are in force for only very few pollutants and do not play a major role in the overall air quality management system. However, in the light of the 'Critical Load' discussion, taking place at the United Nations Economic Commission for Europe, Sweden is currently preparing a set of ambient air quality target values; so it is to be expected that the achievement of certain targeted ambient air levels will play a more important role in the future.

#### Switzerland

In recent years, Switzerland managed to create a well-developed air pollution management system. It covers the main emission sources by applying a preventive approach as well as the use of ambient air quality standards. As in other countries, the number of pollutants covered by limit values is fewer than those covered by emission standards.

Both approaches are linked by regional and local air pollution management plans and where ever air quality standards are breached such plans have to be created.

Such plans have already been published for a number of 'cantons' and, in addition, the federal government has issued, and is preparing further, national measures necessary for implementing this approach. The overall aim is to avoid breaches of the limit values and to bring emissions back to the levels of 1950 (for sulphur dioxide) or 1960 (for oxides of nitrogen and volatile organic compounds).

#### United States of America

As far as the classical pollutants are concerned, the US air quality management system is clearly air quality objective orientated: emission reduction measures are tailored to comply with the standards. Prevention does not play such a dominating role in the US policy as in some of the other countries considered above. For example, emission limits which are in line with BAT are required only for areas where the limit values are breached, in other areas less stringent emissions standards apply.

The management system is fully developed and operated at a very high level of technical and scientific quality; all the necessary administrative prerequisites have been created. For air toxics no air quality standards have yet been laid down but the strategy for their management concentrates on emission control applying the principle of 'Maximum Achievable Control Technology'. The next step of this strategy will link emissions and ambient air quality again: the emission standards are to be revised for those pollutants which still exceed a maximum individual risk of cancer of 1 in 1 million.

## 2.3.3 Situation in the European Community

The dominating aspects of the Commission's clean air policy in the period 1975 - 1985 were definition of and legislation for air quality standards. The aims of this policy were to set ambient air quality standards for priority pollutants principally to protect human health, and to require Member States to take the necessary measures for complying with these standards within a given time. In addition the Commission prepared legislation for those pollution sources requiring Community wide action. The first actions focused on:

- the definition of air quality standards for sulphur dioxide and suspended particulate matter as well as proposals on emissions from large combustion plants and on the sulphur content of gas oil
- the setting of an ambient air quality standard for lead accompanied by measures to reduce the lead content of petrol.

This process also provided the basis for the definition of the nitrogen dioxide strategy (ambient air quality standards and emission limits for motor vehicles).

However, during the implementation of this policy, it appeared that:

- i) the process of defining air quality standards was much more time-consuming than expected;
- the simple principle 'achievement of compliance with the limit value can be obtained by tackling a few well-defined sources' did not work for all primary air pollutants and was even less successful for secondary pollutants and also did not work at all levels of action (national, local);
- the degradation of the total environment could not be remedied by an approach which focused mainly on the protection of human health;
- iv) practical difficulties hampered the harmonised application of the air quality Directives.

Therefore, from around 1985 onwards, prompted by the 'forest decline' problem, the Commission formulated a more general emissions reduction policy. Measures against the emissions from power plants, stationary industrial sources and mobile sources followed while the air quality standard concept was not developed further.

All negotiations on emissions reductions, always return to the point where reductions need to be justified by effects on the environment. The establishment of ambient air quality standards which are closely linked to air pollution effects provides a clear basis for the justification of emissions reduction measures.

Five Directives already exist regarding ambient air quality. These differ in the times when they were adopted and the philosophical basis on which they were agreed and do not provide an overall view of the situation regarding ambient air quality in the European Community.

## 2.4 What is the most effective solution, comparing the means of the Member States and the Community?

The need for an harmonised assessment and management of ambient air quality throughout the Community has been highlighted above. The present proposal provides an effective framework for such action and will provide the same high degree of protection to human health and the environment throughout the Community.

One of the key elements of the solution proposed is the quality of the data collected through the assessment; these must be reliable and comparable to allow actions to be taken on an appropriate basis, and thus, Community-wide, minimum harmonised criteria have to be fixed. The information collected needs to be made available to the Commission to enable it to make a Community-wide assessment of ambient air quality and to enable actions to be apportioned to the appropriate level.

## 2.5 What is the added value brought about by the action envisaged to the Community and what would be the cost of inaction?

In addition to the improvements highlighted in paragraphs 1.2 and 1.3 above, the information which will be made available will allow optimisation of measures for reduction of emissions. Moreover, ambient air quality standards will become a key planning tool for industry: they will provide a basis for the definition of emission standards and therefore have a role in consideration of Single Market matters. The Proposal for a Council Directive relating to measures to be taken against air pollution by emissions from motor vehicles amending Directive 70/220/EEC (COM (92) 572 final) states, in Article 4.1, that:

"The future strategy will be based, inter alia, on the following requirements:

The need for compliance with the Community's air quality criteria and implementation of common Community measures relating to the monitoring and measurement of air quality."

The present proposal defines a new approach for developing Community-wide ambient air quality policy and sets out a long-term programme.

The work to be carried out by the Commission in implementing the approach is complex and comprehensive. This was foreseen in the frame of the proposal for the establishment of the European Environment Agency. Technical contributions from the Joint Research Centre at Ispra are anticipated; and to assist the Commission in handling the information collected under the proposed Directive a management committee will be set up.

Benefits are foreseen for health and the environment but it is not possible to assess them at the present stage as no precise objectives have yet been set.

## 2.6 What action is available to the Community?

This framework legislation represents a fundamental change in policy related to ambient air quality which needs to be translated into national law in Member States thus requiring the use of a Directive. The specific requirements under the Directive, for example, quality objectives, measurement methods etc., will be established on a pollutant to pollutant basis through individual Council Acts.

Directives already exist setting ambient air quality objectives for some pollutants; amendment of these makes it desirable that any new legislation is in the form of a Directive.

## 2.7 <u>Is uniform regulation necessary or is a Directive</u> setting out the general objectives leaving the detailed execution to the Member States enough?

The assessment of air quality allows the identification of areas within the European Community where the concentrations of different pollutants are at levels where the protection of health and ecosystems can not be guaranteed. In these areas, the requirements in terms of monitoring and actions to be taken in order to improve the air quality are greater than in other zones where a greater flexibility—for the methods used for assessing the air quality is allowed and where industrial development may take place provided that the quality objectives are met . The laying down of norms for the levels of pollutants in ambient air allows definition of the reasons and the conditions for the improvement of air quality. The present proposal defines the framework for setting broad Community-wide ambient air quality objectives but leaves the responsibility for taking specific actions to reduce pollution levels with the Member States. In order to take into account the actual concentrations of the different substances considered and the time needed to implement the measures necessary to reduce the levels, the quality objectives are foreseen to be such that in areas where levels of pollutants are high, continuous improvement is necessary. Compliance must be achieved in all areas in the long term (10-15 years). Quality objectives are fixed on the basis of present knowledge and will be reviewed at the end of the period referred to above.

#### 3. Results of consultation with affected partners

Consultation has taken place with Member States through meetings with National Experts and the need for a new, more coherent approach to improving ambient air quality in the Community is acknowledged.

Different sectors of industry, in particular the motor and oil industries, are aware of the proposal through meetings with Commission officials and welcome the introduction of legislation providing clear and planned requirements for assessing and managing ambient air quality.

## 4. Choice and justification of the legal basis

Article 130 S of the Treaty is chosen as the legal basis for the proposal because the objectives pursued relate to conservation, protection, improvement of the quality of the environment and the protection of health. This same legal basis was used for the last two air quality Directives (89/427/EEC and 92/72/EEC).

## 5. Provisions of the proposal

## 5.1 The scope of the Directive

The proposal aims at defining a strategy which limits or prevents harmful effects of air pollution to human health and the environment. It does not apply to air pollution at work place which are subject to separate Community legislation.

It sets out the principles to be used to:

- fix objectives for ambient air quality in the European Community;
- assess the air quality in a uniform manner;
- make information on air pollution available to the public;
- maintain or improve ambient air quality.

## 5.2 <u>Topics covered by the Directive</u>

The proposal addresses the following subjects:

- the substances to be considered;
- the types of ambient air quality objectives;
- • the methods for assessing ambient air quality:
- the actions needed according to the state of the air with regard to the ambient air quality objectives;
- the information/data which should be made available through the Directive.

#### 5.3 Substances covered

The pollutants covered by the Directive have been selected considering the following:

- the effects on health and the environment;
- all substances for which EC-air quality objectives are in force;
- all substances for which emission limits have been laid down in at least one of the EC-Directives on mobile and stationary sources;
- other substances for which international guidelines are available, such as those from the World Health Organisation and the United Nations Economic Commission for Europe;
- source-related measures which are being prepared or are planned within the Commission.

In addition, the existence of ambient air quality objectives in the Member States and the existing or possible transboundary aspect were also taken into account. The list of substances which will be covered under the present proposal is in Annex I and the guidelines used for selecting them are in Annex II.

## 5.4 Objectives for ambient air quality

The present proposal foresees two different kind of ambient air quality objectives:

- limit values (mandatory within a period of 10-15 years)
- alert thresholds (requiring provision of information to the public);

The criteria considered for proposing these different air quality objectives are:

- the need to reach ambient air concentrations which are under recommended (or-proved) no adverse-effect levels;
- the availability and the feasibility of measures to reduce emissions at Community, national or local level
- the existing air pollution levels
- the need for long term objectives
- the avoidance of an increase of pollution in areas where pollution is low
- the need for the public to be informed about air pollution levels
- the occurrence of (very) high pollution levels for short periods of time for which the measures/actions required go beyond those necessary for compliance with the limit values.

Continuous improvement of air quality is required in order to reach the long term limit value by the compliance date which will be fixed according to the procedure laid down in the Directive. A margin of exceedance of the limit value, which decreases with time, may be permitted and if  $so_4$  will be specified when the limit value is set. (The long term limit value + permitted margin of exceedance is referred to below as the current permitted value).

## 5.5 Assessment of ambient air quality

In order to construct a comprehensive picture of ambient air pollution throughout the European Community, and to guarantee that air quality will be assessed in the same way where the ambient air quality objectives apply, precise requirements have to be defined and agreed.

The proposal allows the possibility of using modelling and estimation techniques as well as 'precise' measurements as parts of an overall and comprehensive assessment system. This flexibility will allow optimization of the resources available for the assessment of ambient concentrations.

In order to ensure an objective and uniform assessment of ambient air quality, quality

assurance programs, in sine with the requirements of European standards are required.

The establishment of criteria for the selection and localisation of measuring points and for the use of modelling and estimation techniques is a very complex and difficult task which needs careful scientific and technical analysis. Moreover, these criteria are pollutant specific and it is not possible to set up general rules which are valid for all substances. The present proposal aims at setting up the principles and only requirements of a general nature are proposed. These criteria will fixed pollutant by pollutant through individual Acts to be agreed by the Council after the adoption of the present Directive.

## 5.6 Actions foreseen according to the state of ambient air.

With regard to the actions required under the present proposal, four different cases are considered:

- i) in cases where the levels are above the current permitted value (long term limit value + permitted margin of exceedance). Member States have to take measures and develop plans/programmes in order to improve the Air Quality so that:
  - the current permitted value is reached as soon as possible,
  - compliance with the long term limit value is achieved within the time limit specified

Where appropriate, short term remedial measures must be taken in order to limit the length and avoid repetition of any exceedance.

The information to be included in the plans / programmes for improvement of the air quality is listed in Annex III.

The Commission shall regularly check the implementation of the plans / programs and their impact on ambient air quality.

- ii) when the levels are between the current permitted value and the long term limit value, no increase in concentration is allowed and compliance with the long term limit value has to be achieved within the time fimit fixed.
- iii) in cases where the concentration is below the long term limit value, no particular requirements exist.
- iv) in cases of exceedance of alert thresholds, the necessary steps must be taken to inform the public.

The proposal requires Member States to classify areas according to paragraphs i) - iii) above and provide this information to the Commission

## 5.7 Operational requirements

It is required that the Commission be informed about the authorities and laboratories/institutes which will be involved from the administrative and technical point of view, the aim is twofold:

- i) to allow the Commission to have clearly identified bodies with which it can examine the matters related to the Directive:
- ii) to guarantee the reliability of the assessment of ambient air quality conducted in the Member States.

In order to allow Member States to collect, centralise and check the validity of information and data, and to draft plans where necessary, the following timetable is set out for supplying information to the Commission:

- every year, at the latest 3 months after the end of the reference period (calendar year) for the identification of poor air quality areas.
  - 6 months after the reference period (calendar year) for the levels recorded in cases where they are above the permitted values and the reasons for these.
- at the latest, 2 years after the reference period for the plans which are required for the improvement of the air quality.
- 3 months after their occurrence for exceedances of alert thresholds.

On the basis of the information above the Commission shall publish annually a list of areas where the levels of air pollution are highest, and, every 3 years in collaboration with the European Environment Agency, a report of the quality of air in the European Community which will include a list of areas classified according to the levels of air pollution.

#### 5.8 Implementation of the Directive - Calendar

The proposal does not cover specific details regarding the individual substances, for example:

- the quality objectives
- the assessment criteria
- the measuring methods

and related subjects.

It is proposed that these be addressed, under the present Directive, through individual Acts, agreed by Council on a pollutant by pollutant basis.

An advisory Committee will be created in order to assist the Commission on the follow-up to the present Directive. This Committee will be consulted regarding the specific details above for each pollutant before the Commission submits its proposals for the Acts to the Council. It will also assist the Commission in evaluating the information sent by Member States.

The timetable fixed for the implementation of the Directive makes two commitments for the establishment of quality objectives and related matters:

- before 31 December 1996 for the substances covered by existing Directives
- before 31 December 1999 for the other substances listed in Annex I.

Existing Directives on air quality (80/779/EEC, 82/884/EEC, 85/203/EEC, 89/427/EEC and 92/72/EEC) will cease to be valid when the relevant *Acts* for the substances covered by those Directives are adopted.

## Proposal for a Council Directive on Ambient Air Quality Assessment and Management

The Council of the The European Union;

Having regard to the Treaty establishing the European Community and in particular Article 130 s, paragraph 1, thereof;

Having regard to the proposal from the Commission<sup>1</sup>;

In cooperation with the European Parliament<sup>2</sup>;

Having regard to the opinion of the Economic and Social Committee<sup>3</sup>;

Whereas the fifth Action programme of 1992<sup>4</sup> on the environment foresees amendments to existing legislation on air pollutants and extension of the list of regulated air pollutants and requires the establishment of long term objectives;

Whereas in order to protect the environment as a whole and human health, concentrations of harmful air pollutants shall be limited and ambient air quality objectives set;

Whereas the numerical values for the ambient air quality objectives shall be based on the findings of work carried out by international scientific groups active in the field;

Whereas the ambient air quality needs to be assessed, against quality objectives;

Whereas the needs for the assessment of the ambient air quality in the European Community have to be proportional to the degree of pollution;

Whereas the strategy for this assessment has to be finked to the air pollution levels and to the size of populations and ecosystems exposed to these levels;

OJ N°

<sup>&</sup>lt;sup>2</sup> OJ N<sup>6</sup>

<sup>3</sup> O.T. N.C

<sup>4</sup> OJ Nº

Whereas, at a regional scale and in order to optimize the cost effectiveness of prevention measures, greater flexibility for ambient air quality management is foreseen in order to allow sustainable development;

Whereas in order for assessment of ambient air quality based on measurements made in Member States to be comparable, the location and number of sampling points and methods of measurement shall be specified when values are set for ambient air quality objectives;

Whereas to allow for the use of other techniques of estimation of ambient air quality besides direct measurement it is necessary to define the criteria for use and required accuracy of these techniques;

Whereas the general rules set up under the present Directive have to be completed by others specific to the individual substances covered:

Whereas in order to protect the environment as a whole and human health—it is necessary that Member States take action when limit values are exceeded in order to comply with these values within the time fixed:

Whereas these actions require time to be implemented and become effective, permitted margins of exceedance of the ambient air quality objectives may need to be set;

Whereas areas may exist in Member States where levels are greater than the limit value but within the allowed margin of exceedance, ambient air quality shall not be allowed to deteriorate significantly or permanently and the limit value shall be complied with within the time specified;

Whereas the setting of alert thresholds at which precautionary measures should be taken by the public will make it possible to limit the impact of pollution episodes on health;

Whereas in order to facilitate handling and comparison of data received, this shall be provided to the Commission in standardised form;

Whereas the implementation of a wide and comprehensive policy for ambient air quality assessment and management needs to be based on strong technical and scientific grounds and permanent exchange of views with the Member States:

Whereas in order to provide the Commission with the necessary assistance with these matters, an advisory Committee shall be set up;

Whereas in order to manage the information collected and to evaluate exceedances of the limit value and the actions being taken in Member States, the Commission will act with the assistance of the advisory Committee:

Whereas in order to promote the reciprocal exchange of information between Member States and the European Environment Agency (EEA), the Commission with the EEA shall publish a report on ambient air quality in the European Community every 3 years;

Whereas Directives on air quality already exist, and whereas the substances covered by Directives: 80/779/EEC amended by 89/427/EEC, 82/884/EEC, 85/203/EEC and 92/72/EEC shall be addressed first;

#### HAS ADOPTED THIS DIRECTIVE:

#### Article 1

Objectives - scope.

The general aim of this Directive is to define the basic principles of a common strategy to:

- establish objectives for ambient air quality in the European Community designed to limit or prevent harmful effects the environment as a whole and to human health;
- assess the ambient air quality in Member States in a uniform manner;
- make available to the public information on ambient air quality;
- maintain good ambient air quality and improve poor ambient air quality.

This strategy shall cover:

- the procedure and the criteria by which ambient air quality objectives are required to be set at Community level;
- the types of ambient air quality objectives foreseen:
- methods of carrying out ambient air quality assessment;
- the actions / measures required when and where the ambient air quality objectives are exceeded;
- the information required under this Directive.

#### Article 2

**Definitions** 

For the purpose of this Directive:

1. "Ambient air": outdoor air in the troposphere, excluding workplaces and indoors;

- 2. "Pollutant" means any substance introduced directly or indirectly by man into the ambient air and which are listed in Annex I.
- 3. "Level": the concentration in ambient air or the deposition rate of a pollutant on surfaces in a given time;
- 4. "Assessment": any method used to measure, compute, predict or estimate the level of a pollutant in the ambient air.
- 5. "Quality Objective": a limit value or alert threshold which when exceeded is subject to the conditions laid down in the following articles.
- 6. "Limit value": a quality objective fixed with the aim of preventing harmful effects on environment and/or health—which shall not be exceeded and beyond which actions shall be taken by the Member States as laid down in this Directive.
- 7. "Permitted margin of exceedance": the percentage of the limit value by which this value might be exceeded during according to the conditions laid down in the following articles.
- 8. "Alert threshold": a quality objective beyond which there is a risk to human health in the event of short term exposure and at which immediate steps shall be taken by the Member States as laid down in this Directive.
- 9. "Agglomeration": an area where the population and/or the economic activities are sufficiently concentrated that it is necessary for ambient air quality to be assessed and managed.
- 10. "Zone": any other definited geographical area:
- 11. "Area of poor air quality": an agglomeration or a zone in which the levels of a given pollutant are higher than the limit value plus the permitted margin of exceedance and where measures shall be taken to ensure that the limit value is achieved within the time limit specified.
- 12. "Area of improving air quality": an agglomeration or a zone in which the levels of a given pollutant are higher than the limit value but lower than the limit value plus the permitted margin of exceedance and where care should be taken in order not to increase air pollutant concentrations in a continuing way; in these areas, measures shall be taken to ensure that the limit value is reached within the time limit specified.
- 13. "Area of good air quality": an agglomeration of a zone in which the levels of a given-pollutant are lower than the limit value and where the levels are to be kept below this value.

Implementation - responsibilities.

For the implementation of the provisions of this Directive, the Member States shall:

- designate those national, regional or local authorities which are to be responsible for the implementation of this Directive, as well as the accreditation of laboratories and inform the Commission thereof:
- inform the Commission which laboratories or institutes are to be responsible in line with the requirements of European standards for quality assurance, for assessing and for estimating ambient air quality.
- inform the Commission which Central Authority is responsible for the coordination on their territory of Community-wide quality assurance programmes organised by the Commission.
- make the necessary provisions to ensure that the laboratories/institutes here above organize systematic internal quality controls including measuring sites;
- carry out at regular intervals an analysis of the methods of assessment for examining the quality of ambient air, specially with regard to actual levels compared to the objectives, and modify it if it no longer correspond to the provisions in force relating to the quality of air.

#### Article 4

Setting of the ambient air quality objectives

- 1. For those substances listed in Annex I, the Commission, after consultations with the advisory Committee referred to in Article 12, shall submit to the Council proposals for the setting of the ambient air quality objectives according to the following timetable:
  - no later than 31 December 1996 for substances 1 to 5;
  - in accordance with Article 8 of the Council Directive 92/72/EEC for ozone;
  - as soon as possible and no later than 31 December 1999 for substances 7 to 14;

For the other substances not fisted in Annex I, the Commission shall submit to the Council proposals for limit values and alert thresholds if, on the basis of scientific progress and taking into account the guidelines in Annex II, the environment and/or human health in the European Community have to be protected against their effects; these proposals will be made after consultations with the advisory Committee.

2. At the time of setting the ambient air quality objectives, time limits for compliance shall be fixed and criteria shall be established for:

#### a. the measurement

- + the location of the sampling points;
- + the minimum number of sampling points;
- + the measuring techniques
- b. the use of other techniques for assessing ambient air quality.

These criteria shall be established in respect of each substance and according to the size of agglomerations or the pollution level in agglomerations or zones where the ambient air quality is assessed.

3. If necessary and in order to take into account the existing levels of a given pollutant at the time of setting quality objectives as well as the time needed to implement measures aiming at improving the ambient air quality, a temporary permitted margin of exceedance shall also be set by the Council for the limit value.

This margin shall be reduced each year by a constant factor allowing the limit value to be reached within the time limit referred to in paragraph 2 here above.

- 4. When a Member State sets more stringent objectives, than those agreed by the Council, it shall inform the Commission thereof.
- 5. When a Member State intends to set quality objectives for substances not covered by ambient air quality objectives of the European Community it shall, before implementing these, inform in due time the Commission in order to allow examination of the need to act at Community level following the guidelines in Annex II.

#### Article 5

Assessment of ambient air quality

- 1. Once quality objectives are set, ambient air quality shall be assessed throughout the territory of the Member States according to the provisions of the following paragraphs.
- 2. Measurement is mandatory in the following areas:
  - agglomerations of more than 250.000 inhabitants with a population density of more than 1000 inhabitants/km2
  - areas of poor or improving air quality
- 3. Provided that representative measurements or survey campaigns show that the levels in an area are below 75% of the limit values, measurements combined with modelling might be used.

- 4. Provided that representative measurements or survey campaigns show that the levels in an area are below 50% of the limit values, techniques of modelling or objective estimation, might be used alone to evaluate the levels.
- 5. In cases where substances shall be measured, this shall be carried out at fixed sites either continuously or by random sampling; the number of measurements shall be sufficient in order to allow the determination of the quality objectives.

Improvement of ambient air quality - General requirements

Any actions taken in order to achieve the aims of this Directive shall not:

- (i) induce additional pollution in another media;
- (ii) have an adverse effect on the air at the workplace or the arrangements made for the protection of safety and health of workers at work;

#### Article 7

Improvement of ambient air quality - Measures applicable in areas of poor air quality.

- 1. Member States shall take appropriate measures to ensure that, within the time limits which will be fixed in the Acts referred to in Article 4, the limit values set at Community level are not exceeded.
- 2. Member States shall make short term plans for actions to be taken in cases when an exceedance is forecast in order to reduce the likelihood of exceedance and to limit its duration.
- 3. In areas of poor air quality,
  - **a.** Member States shall inform the Commission about:
  - the occurrence of levels above the limit value + the permitted margin of exceedance, the date(s) or period(s) of occurrence and the values recorded within three months after the end of each year;
  - (ii) the reasons for each occurrence within six months after the end of each year;
  - b. Member States shall take measures to ensure that a plan or programme shall be produced and implemented which shall result in the limit value being attained within the time limit fixed.

This plan or programme, which has to be made available to the public, shall at least specify the information listed in Annex III.

- c. Member States shall:
- (i) send these plans or programmes to the Commission as soon as possible and at the latest within two years after the end of the year during which levels were observed;
- (ii) inform the Commission annually of the progress in the implementation of the plan/programme.
- 4. In areas where levels of more than one pollutant exceed the quality objectives, Member-States shall provide an integrated plan covering all substances concerned.
- 5. The Commission, assisted by the advisory Committee referred to in Article 12, shall regularly check the implementation of the plans / programmes submitted under paragraph 3.b) by examining their progress and the trends in air pollution.

Measures applicable in area of improving ambient air quality.

In areas of improving air quality, the necessary measures shall be taken to ensure that the requirements of Article 7.1 shall be met.

The list of areas of improving air quality and information summarising the levels assessed in these areas shall be transmitted to the Commission according to the requirements of Article 11.

#### Article 9

Requirement in areas of good air quality

Areas of good air quality shall be notified to the Commission and information summarising the levels assessed in these areas shall be transmitted to the Commission according to the provisions of Article 11.

#### Article 10

Measures applicable when levels are above the alert thresholds

When the alert thresholds are exceeded, Member States shall take the necessary steps to inform the public (e.g. by means of radio, television and the press). Member States shall also forward to the Commission, information about the levels recorded and duration of episode(s) within 3 months of their occurrence. A list of minimum details to be supplied to the public shall be specified together with the alert thresholds.

Transmission of the data - reports.

After adoption by the Council of the first proposal referred to in Article 4.1:

- 1. Members states shall provide to the Commission:
  - a. Each year and at the latest three months after the end of each year, the list of areas of improving and good air quality.
  - b. Every three years and at the latest six months after each three year period, the information on the levels required under Article 8.
- 2. The Commission shall publish:
  - **a.** Each year, a list of areas of poor air quality in the European Community.
  - b. Every three years, a report on the ambient air quality in the European Community. This report shall show in a summarized form the information received under Articles 7, 8,9 and 10 above as well as that relating to the activities set out in Article 3; it will also include the data collected following the decision ... / ... / EEC setting up a reciprocal exchange of information and data collected from the networks and individual stations measuring atmospheric air pollution in the Member States.
- 3. The Commission shall call upon the expertise available in the European Environment Agency in drafting the report referred to in Article 11.2.b.

#### Article 12

The advisory Committee

- 1. The Commission shall be assisted by a committee of an advisory nature composed of the representatives of Member States and chaired by the representative of the Commission.
- 2. The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion to the draft, within a time limit which the chairman may lay down according to the urgency of the matter, if necessary by taking a vote.
- 3. The opinion shall be recorded in the minutes a in addition, each Member State shall have the right to ask to have its position recorded in the minutes.
- 4. The Commission shall take the utmost account of the opinion delivered by the committee. It shall inform the committee of the manner in which its opinion has been taken into account.

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 31 July 1996.

When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such a reference at the time of their official publication, the procedures for such a reference shall be adopted by Member States.

2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field covered by this Directive.

## Article 14

This Directive is addressed to the Member States and shall enter into force on the 20th day following its publication in the Official Journal of the European Communities.

Done at Brussels, ...

For the Council

The President

#### ANNEX I

List of atmospheric pollutants to be taken into consideration within the framework for assessment and management of Ambient Air Quality.

## 1) Pollutants covered by EC Directives

- 1. Sulphur Dioxide (SO<sub>3</sub>)
- 2. Nitrogen Dioxide / Oxides (NO<sub>2</sub> / NO<sub>3</sub>)
- 3. Black Smoke (B S)
- **4. Suspended** Particulate Matter (S.P.M.)
- 5. Lead (Pb)
- 6. Ozone (O<sub>3</sub>)

## 2) Other ambient air pollutants for consideration

- 7. Carbon Monoxide (CO)
- 8. Cadmium (Cd)
- 9. Acid deposition
- 10. Benzene  $(C_6H_6)$
- 11. Poly-Aromatic Hydrocarbons (PAH) (Benzo-a-Pyrene (BaP) as indicator)
- 12. Arsenic (As)
- 13. Fluoride
- 14. Nickel (Ni).

#### ANNEX II

## Guidelines for selecting air pollutants for consideration

- 1. possibility, severity and frequency of effects; with regard to human health, the irreversible effects must be of special concern;
- 2. **ubiquity** and abundance of the pollutant in the atmosphere;
- 3. environmental transformations or metabolic alterations, as these alterations may lead to the production of chemicals with greater toxicity:
- 4. persistence in the environment, particularly if the pollutant is resistant to environmental degradation and can accumulate in humans, the environment or food chains;
- 5. impact of the pollutant:
  - + size of exposed population, living resources or ecosystems;
  - + existence of particularly sensitive targets.

The criteria established under the Directive 67/548/CEE and its successive adaptations shall be taken into account for the selection.

#### ANNEX III

Information to be included in the local, regional or national programmes for improvement in the air quality

Information to be provided under Article 7.3

## 1. Localization of the exceedance

- region
- city (map)
- measuring station (map, geographical coordinates)

#### 2. General information

- type of area (city, industrial or rural area)
- estimate of the polluted area (km<sup>2</sup>) and of the population exposed to the pollution
- useful climatic dată
- relevant data on topography
- sufficient information on the type of targets requiring protection in the area

#### 3. Responsible authorities

names, addresses of persons responsible for the development and implementation of improvement plans.

## 4. Nature and assessment of pollution

- concentrations observed over previous years (before the implementation of the improvement measures)
- concentrations measured since the beginning of the project
- techniques used for the assessment

## 5. Origin of pollution

- list of the main emission sources responsible for pollution (map)
- total quantity of emissions from these sources (t/year)
- information on imported pollution in the area.

#### **6.** Analysis of the situation

- details of those factors responsible for the excess (transport, formation)

1. 18 E T

- details of possible measures for improvement of air quality

- 7. Details of those measures or projects for improvement which existed prior to the entry into force of this Directive i.e.
  - local, regional, national, international measures
  - observed effects of these measures
  - funding set aside for these measures
- 8. Details of those measures or projects adopted with a view to reducing pollution, following the entry into force of this Directive
  - listing and description of all the measures set out in the project
  - timetable for implementation
  - estimate of the improvement of air quality planned and of the expected time required to attain these quality objectives
  - funding required and funding available for the project
- 9. Details, including a timetable, of the measures or projects planned or being researched for the long term.
- 10. List of the publications, documents, work, etc used to supplement this annex

## FINANCIAL STATEMENT

## Section 1: Financial implications

## 1. Title of operation

Proposal for a Council Directive on ambient air quality assessment and management.

## 2. Budget headings involved -

B4-306 Awareness and subsidies (Report publication foreseen under Article 11)
B4-304 Environment legislation (technical evaluations)

## 3. Legal basis

EC Treaty Article 130S.

## 4. **Description** of operation

## 4.1 Specific objectives of operation

To establish objectives for ambient air quality in the European Community designed to limit or prevent harmful effects on human health and on the environment as a whole.

To establish a common framework under which air quality can be assessed and managed such that areas requiring specific actions can be identified, the need for Community-wide legislation in other areas is highlighted and such that there is a direct way of assessing the measures implemented to reduce emissions.

To inform the general public about the quality of ambient air.

To maintain good air quality and improve poor air quality

To reform existing legislation regarding ambient air pollutants.

#### 4.2 Duration

Not defined

## 4.3 Target population

The Directive is aiming at a high degree of protection for human health against atmospheric pollution caused by different substances for which quality objectives have to be fixed according to a calendar. The setting of maximum allowable concentrations in the ambient air will affect all people in the European Community.

In addition, the proposal includes different practical requirements related to the assessment of the air quality (monitoring and measuring systems) and its management; the different national, regional or local centers in charge of these matters are also concerned.

## 5 Classification of expenditure or revenue

- 5.1 Non-compulsory
- 5.2 Differentiated
- 5.3 No receipts

#### 6. Type of expenditure

Publication of summarized information each year and of a report every three years (Part B of budget)

Technical and scientific support is needed for the achievement of the objectives foreseen (Part B of budget)

#### 7. Financial impact of operations (Part B of budget)

#### 7.1 Method of calculating total cost of operation

Studies have to be carried out in order to provide the technical/scientific basis needed to draft the regulations foreseen under the present Directive; they will cover the different issues linked to monitoring/modelling criteria and the measuring techniques; 14 substances are to be covered within a period of 6 years; costs are estimated between ECU 50 000 - 75 000 per contract. A reserve of ECU 50 000 is foreseen at the end of the drafting period in order to allow a review of the work carried out.

Information collected through the Directive need to be assessed, summarized and published. Costs for that have been estimated to be on average ECU 15 000 for the annual information and ECU 75 000 for the three year report. The different reports will replace and extend those required under Directives 80/779/EEC, 85/203/EEC and 82/884/EEC. The annual information is foreseen to start in 1997 and the three year one in 1999.

## 7.2 Indicative schedule of commitment and payment appropriations

Commitments and payments (1000 ECU in constant money terms)

•	95	96	97 .	98	99	00	01	02
B4-304	150	100	100	150	100	100	50	
B4-306			15	15	- 9()	15	15	90

### 8. What anti-fraud measures are planned in the proposal for the operation

The contracts between the Commission and the parties involved include clauses on anti-fraud measures, controls, audits, where appropriate, and the contractor's obligations

## Section 2: Administrative expenditure

Titles A1 and A2: expenditure relating to persons working with the institution.

## Budget lines concerned:

A 250. Meetings in general

A 2510: Expenditure on meetings of committees whose consultation is compulsory in

the procedure for drafting community legislation.

#### 1. Increase in personnel

The implementation of the Directive, once adopted, will imply an increase of the work for drafting the regulations, managing the committee, assessing the information collected and drafting the reports.

1 A-grade and 1 B-grade officials are needed in 1996 onwards, in order to handle these new tasks

The resources shall be found by either internal reallocations or within the framework of the Commission's decision on the resource programming.

 $Cost : 2 \times 90\ 000\ ECU = 180\ 000\ ECU/year$ 

### 2. Operating expenses generated by the action. (In 1993 prices)

Budget line A 2510

Travel expenses for governmental representatives to attend meetings of the advisory Committee. This Committee will assist the Commission with the Scientific and technical issues related to the preparation of the subsequent Acts on individual pollutants and with the



management and evaluation of the information collected.

6 meetings per year beginning in 1995, after 1998 4 meetings/year

Cost 6 x 620 ECU/meeting x 12 persons = 44 640 ECU/year for 3 years (1995 to 1997) 4 x 620 ECU/meeting x 12 persons = 29 760 ECU/year after that (starting in 1998)

#### Budget line A 250:

Travel expenses for governmental representatives to attend annual meeting to discuss progress and recommendations of advisory. Committee.

2 meeting per year, beginning in 1996.

Cost  $2 \times 620$  ECU/meeting x 12 persons = 14 880 ECU/year

## Section 3: Elements of cost-effectiveness analysis

#### 1. Objectives and coherence with the financial programme

For specific objectives see attached proposal

The present proposal updates and extends earlier legislation on ambient air quality as outlined in the 5th Action Programme.

In order to protect human health and to provide environmental quality objectives needed for the control of emissions it is proposed to set air quality objectives for a list of substances which are relevant to both.

Criteria are fixed for the assessment in order to have a coherent and reliable system. Limit values, alert thresholds, location of monitoring sites, measurement methods and other specific criteria will be set on a pollutant to pollutant basis through Acts under the Directive which will be agreed by Council.

With regard to management, the aim is to maintain the quality of air and when necessary to improve it. To meet that aim requirements are fixed and in cases where there is a need for improvement; measures and plans have to be designed and implemented by Member States to improve the situation.

#### 2. Justification of the action

This proposal replaces and updates earlier legislation on ambient air quality. The range of pollutants covered will increase but assessment and reporting will be harmonised, increasing the efficiency of the evaluation process.

-36

The objectives of the Directive are fully in line with the provisions of Article 130R of the Treaty which fixed objectives including: preservation, protection and improvement of the quality of the environment and protection of human health. The introduction of a Community-wide approach for the assessment and management of air quality contributes to these aims.

In the area of health, the Community has not sought to legislate for every potentially detrimental substance, but only those commonly present in the environment and known to be in ambient air at levels which might be hazardous. The ambient air quality objectives to be proposed will be based on the recommendations of international, Community and national expert groups competent in this field.

The protection of health is one of the main motivations for action at all levels. For ambient air quality in particular, it is logical that common ambient air quality objectives should be established within the Community. There is no evidence to suggest that populations in different parts of the Community vary in their tolerance of air pollutants.

With regard to environmental protection, the proposal aims at ensuring the protection, and when necessary, improvement of environmental resources in the Community.

## 3. Follow-up and evaluation of the operation

The Directive will set in place a common framework by which air quality can be assessed and managed in the European Community. Regulations agreed under the Directive will establish air quality objectives, criteria for location of monitoring sites, measurement methods, criteria for use of other techniques of assessment etc. Exceedances of air quality objectives and plans of measure being taken to improve air quality in areas where it exceeds objectives will be communicated to the Commission in standard form at regular intervals. This can then be compared and further measures taken if necessary.

#### IMPACT ASSESSMENT FORM

## THE IMPACT OF THE PROPOSAL ON BUSINESS with special reference to small and medium sized enterprises (SMEs)

Title of Proposal: Council Directive on Ambient Air Quality Assessment and Management

### Reference Number (Repertoire):

1. Taking account of the principle of subsidiarity, why is <u>Community</u> legislation necessary in this area and what are its main aims?

Legislation on ambient air quality exists since 1980 and the most recent Directive, on ozone, was approved last year. Various problems were encountered with the earlier Directives and have demonstrated the need for a harmonised approach to the assessment and management of air pollution in the Community.

The objectives of the Directive are fully in line with the provisions of Article 130R of the Treaty which fixed objectives including: preservation, protection and improvement of the quality of the environment and protection of human health. The introduction of a Community-wide approach for the assessment and management of air quality contributes to these aims.

In the area of health, the Community has not sought to legislate for every potentially detrimental substance, but only those commonly present in the environment and known to be in ambient air at levels which might be hazardous. The ambient air quality objectives to be proposed will be based on the recommendations of international, Community and national expert groups competent in this field.

The protection of health is one of the main motivations for action at all levels. For ambient air quality in particular, it is logical that common ambient air quality objectives should be established within the Community. There is no evidence to suggest that populations in different parts of the Community vary in their tolerance of air pollutants.

With regard to environmental protection, the proposal aims at ensuring the protection, and when necessary, improvement of environmental resources in the Community.

The present proposal is providing a Community-wide and harmonised framework for assessing and managing ambient air quality in the future.

In order to limit the impact of the actions resulting from the proposal, the requirements in terms of assessment obligations and of improvement measures are different according to the severity of the air pollution. The strategy proposed allows the identification of areas throughout the European Community where the concentrations of pollutants covered are high and where the efforts in terms of monitoring and of actions to be taken are more important.

Moreover, at the time of setting the objectives for air quality, the existing situation with regard to the concentrations will be taken into account and margins of exceedance will be allowed for limited period of time in order for the improvement actions to be implemented and to take effect.

Finally, this strategy will provide a direct way of measuring the impact of the measures implemented in order to reduce the emissions of atmospheric pollutants.

## The impact on business

2. Who will be affected by the proposal?

The Directive is primarily aiming at fixing quality objectives for the quality of the ambient air and at defining the rules for assessing the concentrations of air pollutants; it also imposes to Member states to take actions in order to improve the air quality when the objectives are not fulfilled.

No precise and direct requirements are foreseen for small and medium sized enterprises; these are not directly affected by the present proposal.

#### Sectors

Not relevant (see above)

Sizes

Not relevant (see above)

Geographical areas

Not relevant (see above)

3. What will businesses have to do to comply with the proposal?

Nothing directly

4. What economic effects is the proposal likely to have?

It is impossible to quantify the economic effects of the proposal which provides a framework for future action. It will be left to Member states to decide the most appropriate improvement measures.

Benefits are foreseen for health and the environment but it is not possible to assess them at the present stage as no precise objectives have yet been set.

The information which will be made available will allow optimisation of measures for reduction of emissions.

## 5. Specific measures for SMEs

None

## 6. Consultation

Consultation has taken place with Member States through meetings with National Experts and the need for a new, more coherent approach to improving air quality in the Community is acknowledged.

Different sectors on industry, in particular, the motor and oil industries are aware of the proposal through meetings with Commission officials and welcome the introduction of legislation providing clear and planned requirements for assessing and managing ambient air quality.

COM(94) 109 final

# **DOCUMENTS**

EN

14

Catalogue number: CB-CO-94-118-EN-C

ISBN 92-77-67018-5

Office for Official Publications of the European Communities
1-2985 Luxembourg