Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe

CHAPTER I

GENERAL PROVISIONS

Article 1

Subject matter

This Directive lays down measures aimed at the following:

- 1. defining and establishing objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole;
- 2. assessing the ambient air quality in Member States on the basis of common methods and criteria;
- 3. obtaining information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and Community measures;
- 4. ensuring that such information on ambient air quality is made available to the public;
- 5. maintaining air quality where it is good and improving it in other cases;
- 6. promoting increased cooperation between the Member States in reducing air pollution.

Article 2

Definitions

For the purposes of this Directive:

- 1. 'ambient air' shall mean outdoor air in the troposphere, excluding workplaces as defined by Directive 89/654/EEC⁽¹⁾ where provisions concerning health and safety at work apply and to which members of the public do not have regular access;
- 2. 'pollutant' shall mean any substance present in ambient air and likely to have harmful effects on human health and/or the environment as a whole;
- 3. 'level' shall mean the concentration of a pollutant in ambient air or the deposition thereof on surfaces in a given time;
- 4. 'assessment' shall mean any method used to measure, calculate, predict or estimate levels;
- 5. 'limit value' shall mean a level fixed on the basis of scientific knowledge, with the aim of avoiding, preventing or reducing harmful effects on human health and/or the environment as a whole, to be attained within a given period and not to be exceeded once attained;

- 6. 'critical level' shall mean a level fixed on the basis of scientific knowledge, above which direct adverse effects may occur on some receptors, such as trees, other plants or natural ecosystems but not on humans;
- 7. 'margin of tolerance' shall mean the percentage of the limit value by which that value may be exceeded subject to the conditions laid down in this Directive;
- 8. 'air quality plans' shall mean plans that set out measures in order to attain the limit values or target values;
- 9. 'target value' shall mean a level fixed with the aim of avoiding, preventing or reducing harmful effects on human health and/or the environment as a whole, to be attained where possible over a given period;
- 10. 'alert threshold' shall mean a level beyond which there is a risk to human health from brief exposure for the population as a whole and at which immediate steps are to be taken by the Member States;
- 11. 'information threshold' shall mean a level beyond which there is a risk to human health from brief exposure for particularly sensitive sections of the population and for which immediate and appropriate information is necessary;
- 12. 'upper assessment threshold' shall mean a level below which a combination of fixed measurements and modelling techniques and/or indicative measurements may be used to assess ambient air quality;
- 13. 'lower assessment threshold' shall mean a level below which modelling or objectiveestimation techniques alone may be used to assess ambient air quality;
- 14. 'long-term objective' shall mean a level to be attained in the long term, save where not achievable through proportionate measures, with the aim of providing effective protection of human health and the environment;
- 15. 'contributions from natural sources' shall mean emissions of pollutants not caused directly or indirectly by human activities, including natural events such as volcanic eruptions, seismic activities, geothermal activities, wild-land fires, high-wind events, sea sprays or the atmospheric re-suspension or transport of natural particles from dry regions;
- 16. 'zone' shall mean part of the territory of a Member State, as delimited by that Member State for the purposes of air quality assessment and management;
- 17. 'agglomeration' shall mean a zone that is a conurbation with a population in excess of 250 000 inhabitants or, where the population is 250 000 inhabitants or less, with a given population density per km² to be established by the Member States;
- 18. ' PM_{10} ' shall mean particulate matter which passes through a size-selective inlet as defined in the reference method for the sampling and measurement of PM_{10} , EN 12341, with a 50 % efficiency cut-off at 10 μ m aerodynamic diameter;
- 19. ' $PM_{2,5}$ ' shall mean particulate matter which passes through a size-selective inlet as defined in the reference method for the sampling and measurement of $PM_{2,5}$, EN 14907, with a 50 % efficiency cut-off at 2,5 µm aerodynamic diameter;
- 20. 'average exposure indicator' shall mean an average level determined on the basis of measurements at urban background locations throughout the territory of a Member

State and which reflects population exposure. It is used to calculate the national exposure reduction target and the exposure concentration obligation;

- 21. 'exposure concentration obligation' shall mean a level fixed on the basis of the average exposure indicator with the aim of reducing harmful effects on human health, to be attained over a given period;
- 22. 'national exposure reduction target' shall mean a percentage reduction of the average exposure of the population of a Member State set for the reference year with the aim of reducing harmful effects on human health, to be attained where possible over a given period;
- 23. 'urban background locations' shall mean places in urban areas where levels are representative of the exposure of the general urban population;
- 24. 'oxides of nitrogen' shall mean the sum of the volume mixing ratio (ppbv) of nitrogen monoxide (nitric oxide) and nitrogen dioxide expressed in units of mass concentration of nitrogen dioxide (μ g/m³);
- 25. 'fixed measurements' shall mean measurements taken at fixed sites, either continuously or by random sampling, to determine the levels in accordance with the relevant data quality objectives;
- 26. 'indicative measurements' shall mean measurements which meet data quality objectives that are less strict than those required for fixed measurements;
- 27. 'volatile organic compounds' (VOC) shall mean organic compounds from anthropogenic and biogenic sources, other than methane, that are capable of producing photochemical oxidants by reactions with nitrogen oxides in the presence of sunlight;
- 28. 'ozone precursor substances' means substances which contribute to the formation of ground-level ozone, some of which are listed in Annex X.

Article 3

Responsibilities

Member States shall designate at the appropriate levels the competent authorities and bodies responsible for the following:

- (a) assessment of ambient air quality;
- (b) approval of measurement systems (methods, equipment, networks and laboratories);
- (c) ensuring the accuracy of measurements;
- (d) analysis of assessment methods;
- (e) coordination on their territory if Community-wide quality assurance programmes are being organised by the Commission;
- (f) cooperation with the other Member States and the Commission.

Where relevant, the competent authorities and bodies shall comply with Section C of Annex I.

Article 4

Establishment of zones and agglomerations

Member States shall establish zones and agglomerations throughout their territory. Air quality assessment and air quality management shall be carried out in all zones and agglomerations.

CHAPTER II

ASSESSMENT OF AMBIENT AIR QUALITY

SECTION 1

Assessment of ambient air quality in relation to sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter, lead, benzene and carbon monoxide

Article 5

Assessment regime

1 The upper and lower assessment thresholds specified in Section A of Annex II shall apply to sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter (PM_{10} and $PM_{2,5}$), lead, benzene and carbon monoxide.

Each zone and agglomeration shall be classified in relation to those assessment thresholds.

2 The classification referred to in paragraph 1 shall be reviewed at least every five years in accordance with the procedure laid down in Section B of Annex II.

However, classifications shall be reviewed more frequently in the event of significant changes in activities relevant to the ambient concentrations of sulphur dioxide, nitrogen dioxide or, where relevant, oxides of nitrogen, particulate matter (PM_{10} , $PM_{2,5}$), lead, benzene or carbon monoxide.

Article 6

Assessment criteria

1 Member States shall assess ambient air quality with respect to the pollutants referred to in Article 5 in all their zones and agglomerations, in accordance with the criteria laid down in paragraphs 2, 3 and 4 of this Article and in accordance with the criteria laid down in Annex III.

2 In all zones and agglomerations where the level of pollutants referred to in paragraph 1 exceeds the upper assessment threshold established for those pollutants, fixed measurements shall be used to assess the ambient air quality. Those fixed measurements may be supplemented by modelling techniques and/or indicative measurements to provide adequate information on the spatial distribution of the ambient air quality.

3 In all zones and agglomerations where the level of pollutants referred to in paragraph 1 is below the upper assessment threshold established for those pollutants, a combination of fixed measurements and modelling techniques and/or indicative measurements may be used to assess the ambient air quality.

4 In all zones and agglomerations where the level of pollutants referred to in paragraph 1 is below the lower assessment threshold established for those pollutants, modelling techniques or objective-estimation techniques or both shall be sufficient for the assessment of the ambient air quality.

5 In addition to the assessments referred to in paragraphs 2, 3 and 4, measurements shall be made, at rural background locations away from significant sources of air pollution, for the purposes of providing, as a minimum, information on the total mass concentration and the chemical speciation concentrations of fine particulate matter ($PM_{2,5}$) on an annual average basis and shall be conducted using the following criteria:

- a one sampling point shall be installed every 100 000 km²;
- b each Member State shall set up at least one measuring station or may, by agreement with adjoining Member States, set up one or several common measuring stations, covering the relevant neighbouring zones, to achieve the necessary spatial resolution;
- c where appropriate, monitoring shall be coordinated with the monitoring strategy and measurement programme of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP);
- d Sections A and C of Annex I shall apply in relation to the data quality objectives for mass concentration measurements of particulate matter and Annex IV shall apply in its entirety.

Member States shall inform the Commission of the measurement methods used in the measurement of the chemical composition of fine particulate matter (PM_{2,5}).

Article 7

Sampling points

1 The location of sampling points for the measurement of sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter $(PM_{10}, PM_{2,5})$, lead, benzene and carbon monoxide in ambient air shall be determined using the criteria listed in Annex III.

2 In each zone or agglomeration where fixed measurements are the sole source of information for assessing air quality, the number of sampling points for each relevant pollutant shall not be less than the minimum number of sampling points specified in Section A of Annex V.

3 For zones and agglomerations within which information from fixed measurement sampling points is supplemented by information from modelling and/or indicative measurement, the total number of sampling points specified in Section A of Annex V may be reduced by up to 50 %, provided that the following conditions are met:

- a the supplementary methods provide sufficient information for the assessment of air quality with regard to limit values or alert thresholds, as well as adequate information for the public;
- b the number of sampling points to be installed and the spatial resolution of other techniques are sufficient for the concentration of the relevant pollutant to be established in accordance with the data quality objectives specified in Section A of Annex I and enable assessment results to meet the criteria specified in Section B of Annex I.

The results of modelling and/or indicative measurement shall be taken into account for the assessment of air quality with respect to the limit values.

4 The application in Member States of the criteria for selecting sampling points shall be monitored by the Commission so as to facilitate the harmonised application of those criteria throughout the European Union.

Article 8

Reference measurement methods

1 Member States shall apply the reference measurement methods and criteria specified in Section A and Section C of Annex VI.

2 Other measurement methods may be used subject to the conditions set out in Section B of Annex VI.

SECTION 2

Assessment of ambient air quality in relation to ozone

Article 9

Assessment criteria

1 Where, in a zone or agglomeration, concentrations of ozone have exceeded the longterm objectives specified in Section C of Annex VII during any of the previous five years of measurement, fixed measurements shall be taken.

2 Where fewer than five years' data are available, Member States may, for the purposes of determining whether the long-term objectives referred to in paragraph 1 have been exceeded during those five years, combine the results from measurement campaigns of short duration carried out when and where levels are likely to be at their highest, with the results obtained from emission inventories and modelling.

Article 10

Sampling points

1 The siting of sampling points for the measurement of ozone shall be determined using the criteria set out in Annex VIII.

2 The sampling points for fixed measurements of ozone in each zone or agglomeration within which measurement is the sole source of information for assessing air quality shall not be less than the minimum number of sampling points specified in Section A of Annex IX.

3 For zones and agglomerations within which information from sampling points for fixed measurements is supplemented by information from modelling and/or indicative measurements, the number of sampling points specified in Section A of Annex IX may be reduced provided that the following conditions are met:

- a the supplementary methods provide sufficient information for the assessment of air quality with regard to target values, long-term objectives, information and alert thresholds;
- b the number of sampling points to be installed and the spatial resolution of other techniques are sufficient for the concentration of ozone to be established in accordance with the data quality objectives specified in Section A of Annex I and enable assessment results to meet the criteria specified in Section B of Annex I;
- c the number of sampling points in each zone or agglomeration amounts to at least one sampling point per two million inhabitants or one sampling point per 50 000 km², whichever produces the greater number of sampling points, but must not be less than one sampling point in each zone or agglomeration;
- d nitrogen dioxide is measured at all remaining sampling points except at rural background stations as referred to in Section A of Annex VIII.

The results of modelling and/or indicative measurement shall be taken into account for the assessment of air quality with respect to the target values.

4 Nitrogen dioxide shall be measured at a minimum of 50 % of the ozone sampling points required under Section A of Annex IX. That measurement shall be continuous except at rural background stations, as referred to in Section A of Annex VIII, where other measurement methods may be used.

5 In zones and agglomerations where, during each of the previous five years of measurement, concentrations are below the long-term objectives, the number of sampling points for fixed measurements shall be determined in accordance with Section B of Annex IX.

6 Each Member State shall ensure that at least one sampling point is installed and operated in its territory to supply data on concentrations of the ozone precursor substances listed in Annex X. Each Member State shall choose the number and siting of the stations at which ozone precursor substances are to be measured, taking into account the objectives and methods laid down in Annex X.

Article 11

Reference measurement methods

1 Member States shall apply the reference method for measurement of ozone, set out in point 8 of Section A of Annex VI. Other measuring methods may be used subject to the conditions set out in Section B of Annex VI.

2 Each Member State shall inform the Commission of the methods it uses to sample and measure VOC, as listed in Annex X.

CHAPTER III

AMBIENT AIR QUALITY MANAGEMENT

Article 12

Requirements where levels are lower than the limit values

In zones and agglomerations where the levels of sulphur dioxide, nitrogen dioxide, PM_{10} , $PM_{2,5}$, lead, benzene and carbon monoxide in ambient air are below the respective limit values specified in Annexes XI and XIV, Member States shall maintain the levels of those pollutants below the limit values and shall endeavour to preserve the best ambient air quality, compatible with sustainable development.

Article 13

Limit values and alert thresholds for the protection of human health

1 Member States shall ensure that, throughout their zones and agglomerations, levels of sulphur dioxide, PM_{10} , lead, and carbon monoxide in ambient air do not exceed the limit values laid down in Annex XI.

In respect of nitrogen dioxide and benzene, the limit values specified in Annex XI may not be exceeded from the dates specified therein.

Compliance with these requirements shall be assessed in accordance with Annex III.

The margins of tolerance laid down in Annex XI shall apply in accordance with Article 22(3) and Article 23(1).

2 The alert thresholds for concentrations of sulphur dioxide and nitrogen dioxide in ambient air shall be those laid down in Section A of Annex XII.

Article 14

Critical levels

1 Member States shall ensure compliance with the critical levels specified in Annex XIII as assessed in accordance with Section A of Annex III.

2 Where fixed measurements are the sole source of information for assessing air quality, the number of sampling points shall not be less than the minimum number specified in Section C of Annex V. Where that information is supplemented by indicative measurements or modelling, the minimum number of sampling points may be reduced by up to 50 % so long as the assessed concentrations of the relevant pollutant can be established in accordance with the data quality objectives specified in Section A of Annex I.

Article 15

National PM_{2.5} exposure reduction target for the protection of human health

1 Member States shall take all necessary measures not entailing disproportionate costs to reduce exposure to $PM_{2,5}$ with a view to attaining the national exposure reduction target laid down in Section B of Annex XIV by the year specified therein.

2 Member States shall ensure that the average exposure indicator for the year 2015 established in accordance with Section A of Annex XIV does not exceed the exposure concentration obligation laid down in Section C of that Annex.

3 The average exposure indicator for $PM_{2,5}$ shall be assessed in accordance with Section A of Annex XIV.

4 Each Member State shall, in accordance with Annex III, ensure that the distribution and the number of sampling points on which the average exposure indicator for $PM_{2,5}$ is based reflect the general population exposure adequately. The number of sampling points shall be no less than that determined by application of Section B of Annex V.

Article 16

PM_{2,5} target value and limit value for the protection of human health

1 Member States shall take all necessary measures not entailing disproportionate costs to ensure that concentrations of $PM_{2,5}$ in ambient air do not exceed the target value laid down in Section D of Annex XIV as from the date specified therein.

2 Member States shall ensure that concentrations of $PM_{2,5}$ in ambient air do not exceed the limit value laid down in Section E of Annex XIV throughout their zones and agglomerations as from the date specified therein. Compliance with this requirement shall be assessed in accordance with Annex III.

3 The margin of tolerance laid down in Section E of Annex XIV shall apply in accordance with Article 23(1).

Article 17

Requirements in zones and agglomerations where ozone concentrations exceed the target values and long-term objectives

1 Member States shall take all necessary measures not entailing disproportionate costs to ensure that the target values and long-term objectives are attained.

2 For zones and agglomerations in which a target value is exceeded, Member States shall ensure that the programme prepared pursuant to Article 6 of Directive 2001/81/EC and, if appropriate, an air quality plan is implemented in order to attain the target values, save where not achievable through measures not entailing disproportionate costs, as from the date specified in Section B of Annex VII to this Directive.

3 For zones and agglomerations in which the levels of ozone in ambient air are higher than the long-term objectives but below, or equal to, the target values, Member States shall prepare and implement cost-effective measures with the aim of achieving the long-term

objectives. Those measures shall, at least, be consistent with all the air quality plans and the programme referred to in paragraph 2.

Article 18

Requirements in zones and agglomerations where ozone concentrations meet the long-term objectives

In zones and agglomerations in which ozone levels meet the long-term objectives, Member States shall, in so far as factors including the transboundary nature of ozone pollution and meteorological conditions permit, maintain those levels below the longterm objectives and shall preserve through proportionate measures the best ambient air quality compatible with sustainable development and a high level of environmental and human health protection.

Article 19

Measures required in the event of information or alert thresholds being exceeded

Where the information threshold specified in Annex XII or any of the alert thresholds laid down therein is exceeded, Member States shall take the necessary steps to inform the public by means of radio, television, newspapers or the Internet.

Member States shall also forward to the Commission, on a provisional basis, information concerning the levels recorded and the duration of the periods during which the alert threshold or information threshold was exceeded.

Article 20

Contributions from natural sources

1 Member States shall transmit to the Commission, for a given year, lists of zones and agglomerations where exceedances of limit values for a given pollutant are attributable to natural sources. Member States shall provide information on concentrations and sources and the evidence demonstrating that the exceedances are attributable to natural sources.

2 Where the Commission has been informed of an exceedance attributable to natural sources in accordance with paragraph 1, that exceedance shall not be considered as an exceedance for the purposes of this Directive.

3 The Commission shall by 11 June 2010 publish guidelines for demonstration and subtraction of exceedances attributable to natural sources.

Article 21

Exceedances attributable to winter-sanding or -salting of roads

1 Member States may designate zones or agglomerations within which limit values for PM_{10} are exceeded in ambient air due to the re-suspension of particulates following wintersanding or -salting of roads.

2 Member States shall send the Commission lists of any such zones or agglomerations together with information on concentrations and sources of PM_{10} therein.

3 When informing the Commission in accordance with Article 27, Member States shall provide the necessary evidence to demonstrate that any exceedances are due to re-suspended particulates and that reasonable measures have been taken to lower the concentrations.

4 Without prejudice to Article 20, in the case of zones and agglomerations referred to in paragraph 1 of this Article, Member States need to establish the air quality plan provided for in Article 23 only in so far as exceedances are attributable to PM_{10} sources other than wintersanding or -salting of roads.

5 The Commission shall by 11 June 2010 publish guidelines for determination of contributions from the re-suspension of particulates following winter-sanding or -salting of roads.

Article 22

Postponement of attainment deadlines and exemption from the obligation to apply certain limit values

1 Where, in a given zone or agglomeration, conformity with the limit values for nitrogen dioxide or benzene cannot be achieved by the deadlines specified in Annex XI, a Member State may postpone those deadlines by a maximum of five years for that particular zone or agglomeration, on condition that an air quality plan is established in accordance with Article 23 for the zone or agglomeration to which the postponement would apply; such air quality plan shall be supplemented by the information listed in Section B of Annex XV related to the pollutants concerned and shall demonstrate how conformity will be achieved with the limit values before the new deadline.

Where, in a given zone or agglomeration, conformity with the limit values for PM_{10} as specified in Annex XI cannot be achieved because of site-specific dispersion characteristics, adverse climatic conditions or transboundary contributions, a Member State shall be exempt from the obligation to apply those limit values until 11 June 2011 provided that the conditions laid down in paragraph 1 are fulfilled and that the Member State shows that all appropriate measures have been taken at national, regional and local level to meet the deadlines.

3 Where a Member State applies paragraphs 1 or 2, it shall ensure that the limit value for each pollutant is not exceeded by more than the maximum margin of tolerance specified in Annex XI for each of the pollutants concerned.

4 Member States shall notify the Commission where, in their view, paragraphs 1 or 2 are applicable, and shall communicate the air quality plan referred to in paragraph 1 including all relevant information necessary for the Commission to assess whether or not the relevant conditions are satisfied. In its assessment, the Commission shall take into account estimated effects on ambient air quality in the Member States, at present and in the future, of measures that have been taken by the Member States as well as estimated effects on ambient air quality of current Community measures and planned Community measures to be proposed by the Commission.

Where the Commission has raised no objections within nine months of receipt of that notification, the relevant conditions for the application of paragraphs 1 or 2 shall be deemed to be satisfied.

If objections are raised, the Commission may require Member States to adjust or provide new air quality plans.

CHAPTER IV

PLANS

Article 23

Air quality plans

1 Where, in given zones or agglomerations, the levels of pollutants in ambient air exceed any limit value or target value, plus any relevant margin of tolerance in each case, Member States shall ensure that air quality plans are established for those zones and agglomerations in order to achieve the related limit value or target value specified in Annexes XI and XIV.

In the event of exceedances of those limit values for which the attainment deadline is already expired, the air quality plans shall set out appropriate measures, so that the exceedance period can be kept as short as possible. The air quality plans may additionally include specific measures aiming at the protection of sensitive population groups, including children.

Those air quality plans shall incorporate at least the information listed in Section A of Annex XV and may include measures pursuant to Article 24. Those plans shall be communicated to the Commission without delay, but no later than two years after the end of the year the first exceedance was observed.

Where air quality plans must be prepared or implemented in respect of several pollutants, Member States shall, where appropriate, prepare and implement integrated air quality plans covering all pollutants concerned.

2 Member States shall, to the extent feasible, ensure consistency with other plans required under Directive 2001/80/EC, Directive 2001/81/EC or Directive 2002/49/EC in order to achieve the relevant environmental objectives.

Article 24

Short-term action plans

1 Where, in a given zone or agglomeration, there is a risk that the levels of pollutants will exceed one or more of the alert thresholds specified in Annex XII, Member States shall draw up action plans indicating the measures to be taken in the short term in order to reduce the risk or duration of such an exceedance. Where this risk applies to one or more limit values or target values specified in Annexes VII, XI and XIV, Member States may, where appropriate, draw up such short-term action plans.

However, where there is a risk that the alert threshold for ozone specified in Section B of Annex XII will be exceeded, Member States shall only draw up such short-term action plans when in their opinion there is a significant potential, taking into account national geographical, meteorological and economic conditions, to reduce the risk, duration or severity of such an exceedance. When drawing up such a short-term action plan Member States shall take account of Decision 2004/279/EC.

2 The short-term action plans referred to in paragraph 1 may, depending on the individual case, provide for effective measures to control and, where necessary, suspend activities which contribute to the risk of the respective limit values or target values or alert threshold being exceeded. Those action plans may include measures in relation to motor-vehicle traffic, construction works, ships at berth, and the use of industrial plants or products and domestic heating. Specific actions aiming at the protection of sensitive population groups, including children, may also be considered in the framework of those plans.

3 When Member States have drawn up a short-term action plan, they shall make available to the public and to appropriate organisations such as environmental organisations, consumer organisations, organisations representing the interests of sensitive population groups, other relevant health-care bodies and the relevant industrial federations both the results of their investigations on the feasibility and the content of specific short-term action plans as well as information on the implementation of these plans.

4 For the first time before 11 June 2010 and at regular intervals thereafter, the Commission shall publish examples of best practices for the drawing-up of short-term action plans, including examples of best practices for the protection of sensitive population groups, including children.

Article 25

Transboundary air pollution

1 Where any alert threshold, limit value or target value plus any relevant margin of tolerance or long-term objective is exceeded due to significant transboundary transport of air pollutants or their precursors, the Member States concerned shall cooperate and, where appropriate, draw up joint activities, such as the preparation of joint or coordinated air quality plans pursuant to Article 23 in order to remove such exceedances through the application of appropriate but proportionate measures.

2 The Commission shall be invited to be present and to assist in any cooperation referred to in paragraph 1. Where appropriate, the Commission shall, taking into account the reports established pursuant to Article 9 of Directive 2001/81/EC, consider whether further action should be taken at Community level in order to reduce precursor emissions responsible for transboundary pollution.

3 Member States shall, if appropriate pursuant to Article 24, prepare and implement joint short-term action plans covering neighbouring zones in other Member States. Member States shall ensure that neighbouring zones in other Member States which have developed short-term action plans receive all appropriate information.

4 Where the information threshold or alert thresholds are exceeded in zones or agglomerations close to national borders, information shall be provided as soon as possible to the competent authorities in the neighbouring Member States concerned. That information shall also be made available to the public.

5 In drawing up plans as provided for in paragraphs 1 and 3 and in informing the public as referred to in paragraph 4, Member States shall, where appropriate, endeavour to pursue cooperation with third countries, and in particular with candidate countries.

CHAPTER V

INFORMATION AND REPORTING

Article 26

Public information

1 Member States shall ensure that the public as well as appropriate organisations such as environmental organisations, consumer organisations, organisations representing the interests of sensitive populations, other relevant health-care bodies and the relevant industrial federations are informed, adequately and in good time, of the following:

- a ambient air quality in accordance with Annex XVI;
- b any postponement decisions pursuant to Article 22(1);
- c any exemptions pursuant to Article 22(2);
- d air quality plans as provided for in Article 22(1) and Article 23 and programmes referred to in Article 17(2).

The information shall be made available free of charge by means of any easily accessible media including the Internet or any other appropriate means of telecommunication, and shall take into account the provisions laid down in Directive 2007/2/EC.

2 Member States shall make available to the public annual reports for all pollutants covered by this Directive.

Those reports shall summarise the levels exceeding limit values, target values, longterm objectives, information thresholds and alert thresholds, for the relevant averaging periods. That information shall be combined with a summary assessment of the effects of those exceedances. The reports may include, where appropriate, further information and assessments on forest protection as well as information on other pollutants for which monitoring provisions are specified in this Directive, such as, *inter alia*, selected nonregulated ozone precursor substances as listed in Section B of Annex X.

3 Member States shall inform the public of the competent authority or body designated in relation to the tasks referred to in Article 3.

Article 27

Transmission of information and reporting

1 Member States shall ensure that information on ambient air quality is made available to the Commission within the required timescale as determined by the implementing measures referred to in Article 28(2).

2 In any event, for the specific purpose of assessing compliance with the limit values and critical levels and the attainment of target values, such information shall be made available to the Commission no later than nine months after the end of each year and shall include:

- a the changes made in that year to the list and delimitation of zones and agglomerations established under Article 4;
- b the list of zones and agglomerations in which the levels of one or more pollutants are higher than the limit values plus the margin of tolerance where applicable or higher than target values or critical levels; and for these zones and agglomerations:

- (i) levels assessed and, if relevant, the dates and periods when such levels were observed;
- (ii) if appropriate, an assessment on contributions from natural sources and from re-suspension of particulates following winter-sanding or -salting of roads to the levels assessed, as declared to the Commission under Articles 20 and 21.

3 Paragraphs 1 and 2 shall apply to information collected as from the beginning of the second calendar year after the entry into force of the implementing measures referred to in Article 28(2).

Article 28

Implementing measures

1 Measures designed to amend the non-essential elements of this Directive, namely Annexes I to VI, Annexes VIII to X and Annex XV, shall be adopted in accordance with the regulatory procedure with scrutiny referred to in Article 29(3).

However, the amendments may not have the effect of directly or indirectly modifying either of the following:

- (a) the limit values, exposure reduction targets, critical levels, target values, information or alert thresholds or long-term objectives specified in Annex VII and Annexes XI to XIV;
- (b) the dates for compliance with any of the parameters referred to in point (a).

2 The Commission shall, in accordance with the regulatory procedure referred to in Article 29(2), determine the additional information to be made available by Member States pursuant to Article 27 as well as the timescales in which such information is to be communicated.

The Commission shall also identify ways of streamlining the way data are reported and the reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the Member States, in accordance with the regulatory procedure referred to in Article 29(2).

3 The Commission shall draw up guidelines for the agreements on setting up common measuring stations as referred to in Article 6(5).

4 The Commission shall publish guidance on the demonstration of equivalence referred to in Section B of Annex VI.

CHAPTER VI

COMMITTEE, TRANSITIONAL AND FINAL PROVISIONS

Article 29

Committee

1 The Commission shall be assisted by a committee, 'the Ambient Air Quality Committee'.

2 Where reference is made to this paragraph, Articles 5 and 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

The period laid down in Article 5(6) of Decision 1999/468/EC shall be set at three months.

3 Where reference is made to this paragraph, Article 5a(1) to (4) and Article 7 of Decision 1999/468/EC shall apply, having regard to the provisions of Article 8 thereof.

Article 30

Penalties

Member States shall lay down the rules on penalties applicable to infringements of the national provisions adopted pursuant to this Directive and shall take all measures necessary to ensure that they are implemented. The penalties provided for must be effective, proportionate and dissuasive.

Article 31

Repeal and transitional provisions

1 Directives 96/62/EC, 1999/30/EC, 2000/69/EC and 2002/3/EC shall be repealed as from 11 June 2010, without prejudice to the obligations on the Member States relating to timelimits for transposition or application of those Directives.

However, from 11 June 2008, the following shall apply:

- a in Directive 96/62/EC, paragraph 1 of Article 12 shall be replaced by the following:
- 1.
- The detailed arrangements for forwarding the information to be provided under Article 11 shall be adopted in accordance with the procedure referred to in paragraph 3.;
- b in Directive 1999/30/EC, Article 7(7), footnote 1 in point I of Annex VIII and point VI of Annex IX shall be deleted;
- c in Directive 2000/69/EC, Article 5(7) and point III in Annex VII shall be deleted;
- d in Directive 2002/3/EC, Article 9(5) and point II of Annex VIII shall be deleted.

2 Notwithstanding the first subparagraph of paragraph 1, the following Articles shall remain in force:

- a Article 5 of Directive 96/62/EC until 31 December 2010;
- b Article 11(1) of Directive 96/62/EC and Article 10(1), (2) and (3) of Directive 2002/3/ EC until the end of the second calendar year following the entry into force of the implementing measures referred to in Article 28(2) of this Directive;
- c Article 9(3) and (4) of Directive 1999/30/EC until 31 December 2009.

3 References made to the repealed Directives shall be construed as being made to this Directive and should be read in accordance with the correlation table in Annex XVII.

4 Decision 97/101/EC shall be repealed with effect from the end of the second calendar year following the entry into force of the implementing measures referred to in Article 28(2) of this Directive.

However, the third, fourth and fifth indents of Article 7 of Decision 97/101/EC shall be deleted with effect from 11 June 2008.

Article 32

Review

1 In 2013 the Commission shall review the provisions related to $PM_{2,5}$ and, as appropriate, other pollutants, and shall present a proposal to the European Parliament and the Council.

As regards $PM_{2,5}$, the review shall be undertaken with a view to establishing a legally binding national exposure reduction obligation in order to replace the national exposure reduction target and to review the exposure concentration obligation laid down in Article 15, taking into account, *inter alia*, the following elements:

- latest scientific information from WHO and other relevant organisations,
- air quality situations and reduction potentials in the Member States,
- the revision of Directive 2001/81/EC,
- progress made in implementing Community reduction measures for air pollutants,

2 The Commission shall take into account the feasibility of adopting a more ambitious limit value for $PM_{2,5}$, shall review the indicative limit value of the second stage for $PM_{2,5}$ and consider confirming or altering that value.

3 As part of the review, the Commission shall also prepare a report on the experience and on the necessity of monitoring of PM_{10} and $PM_{2,5}$, taking into account technical progress in automatic measuring techniques. If appropriate, new reference methods for the measurement of PM_{10} and $PM_{2,5}$ shall be proposed.

Article 33

Transposition

1 Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive before 11 June 2010. They shall forthwith communicate to the Commission the text of those measures.

When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.

2 However, Member States shall ensure that a sufficient number of urban background measurement stations of $PM_{2,5}$ necessary for the calculation of the Average Exposure Indicator, in accordance with Section B of Annex V, is established at the latest by 1 January 2009, in order to comply with the timeframe and the conditions indicated in Section A of Annex XIV.

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

Article 34

Entry into force

This Directive shall enter into force on the day of its publication in the *Official Journal* of the European Union.

Article 35

Addressees

This Directive is addressed to the Member States.

(1) Council Directive 89/654/EEC of 30 November 1989 concerning the minimum safety and health requirements for the workplace (OJ L 393, 30.12.1989, p. 1). Directive as amended by Directive 2007/30/EC of the European Parliament and of the Council (OJ L 165, 27.6.2007, p. 21).