

Bulletin
of the
EUROPEAN
COMMUNITIES

Supplement 6 / 76

Environment programme 1977-1981

Commission
of the European Communities

The draft programme for 1977-1981 extends, and in some ways intensifies, the Community's environment programme adopted by the Council on 22 November 1973.

After reaffirming the objectives and principles of a Community environment programme, the programme comprises four main parts:

- The first part is devoted to the reduction of pollution and nuisances.
- The second part deals with the non-damaging use and rational management of space, the environment and natural resources.
- The third part deals with general action to protect and improve the environment.
- The fourth part deals with Community action at international level, and in particular relations with non-member countries and Community participation in international conventions on the environment.

Bulletin
of the European Communities

Supplement 6/76

Continuation and implementation of a
European Community policy and action
programme on the environment

Draft resolution of the Council,
presented by the Commission on 24 March 1976

European Community action programme
on the environment (1977-1981)

COM (76) 80, 24 March 1976

Commission of the
EUROPEAN COMMUNITIES

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Draft Council Resolution
on the continuation and implementation
of a European Community policy and action
programme on the environment

The Council of the European Communities,

Having regard to the Treaty establishing the European Economic Community,

Having regard to the Treaty establishing the European Atomic Energy Community,

Having regard to the draft proposal from the Commission,

Having regard to the Opinion of the European Parliament,

Having regard to the Opinion of the Economic and Social Committee,

Whereas the Declaration of the Council of the European Communities and of the representatives of the Governments of the Member States meeting in the Council on 22 November 1973¹ calls for the implementation of an action programme;

Considering the tasks of the European Economic Community laid down in the Treaties establishing the Communities;

Whereas in particular, in accordance with Article 2 of the Treaty establishing the European Economic Community, the latter's task, *inter alia*, is to promote throughout the Community the harmonious development of economic activities and a continuous and balanced expansion, which cannot henceforth be conceived of without an effective campaign to combat pollution and nuisances or an improvement in the quality of life and the protection of the environment;

Whereas, consequently, improvement in the quality of life and the protection of the natural environment are among the fundamental tasks of the European Economic Community and whereas a Community environment policy would help accomplish this task;

Considering the objectives and principles of this policy have already been approved by the Council;

Whereas this action programme on the environment should be updated to ensure continuity with the projects already undertaken and whereas new tasks should be undertaken in the period 1977 to 1981;

Whereas in the matter of reducing pollution and nuisances in particular, priority must be given to water protection measures and whereas the campaign against noise must be further developed, and whereas it would be beneficial to strengthen the preventive nature of the environment policy and to pay particular attention to the non-damaging use and rational management of space, the environment and natural resources;

Approves the European Community action programme contained in the Annex;

Takes note that the Commission will submit suitable proposals for implementing this programme;

Undertakes to act on these proposals within nine months of the date on which they were presented by the Commission.

¹ OJ C 112 of 20.12.1973.

European Community
action programme
on the environment
(1977-1981)

Introduction

As early as November 1973 the Community adopted an environment policy whose purpose was to 'help to bring expansion into the service of man by procuring for him an environment¹ providing the best conditions of life and reconcile this expansion with the increasingly imperative need to preserve the natural environment'.²

This policy springs from the finding that the industrial and demographic growth which has enabled the western countries to meet their essential requirements within a few decades is now encountering two obstacles.

The first obstacle, prior to the whole process, is that natural resources are limited. Nature is paying heavily for man's economic expansion (pollution and nuisances, thoughtless exploitation of resources and open spaces, destruction of habitats and so on). As a result, production possibilities are reduced while production costs, with the added burden of the expenditure required for the reconstitution of natural resources (depollution and recycling), increase.

The figures given in the Meadows report,³ though they may be open to criticism, have alerted public opinion to a fundamental question which can no longer be side-stepped: material growth has physical limits; an effort should be made to shift them and at the same time to institute progressively and as expeditiously as possible a growth model based more firmly on considerations of quality.

Subsequent to the growth process, a second obstacle is that the pattern of consumption has changed. Growing sections of the population are rejecting the ideal and the scale of values implicitly suggested by the consumer society, and signs of saturation are appearing.

For these reasons, as stated in the Council Declaration of 22 November 1973,² the promotion throughout the Community of the harmonious development of economic activities and a continuous and balanced expansion — which constitute the paramount purpose of the EEC (Article 2 of the EEC Treaty) — 'cannot henceforth be conceived of without an effective campaign to combat pollution and nuisances or an improvement

in the quality of life and the protection of the environment'. The Declaration adds that these objectives 'are among the fundamental tasks of the Community' and 'it is therefore necessary to implement a Community environment policy'.

The programme approved by the Council on the same date, 22 November 1973, has been the source of many implementing texts (35 proposals transmitted by the Commission, of which 15 have been adopted by the Council). At the same time many environmental measures have been taken by the Member States: (111 draft regulations and nine international agreements have been notified to the Commission and to all the Member States under the 'information agreement' of 5 March 1973).⁴

This effort should be pursued in the coming years, despite the uncertainties of the current economic situation, some of which indeed spring from the phenomena referred to above.

Such is the conclusion of the debate on future Community action regarding the environment held by the Council on 16 October 1975,⁵ and it is the leitmotiv of this paper.

This paper advances five main arguments:

1. It seeks to ensure that the policy followed since November 1973 is continued. The objectives and principles defined then still hold good and are therefore reaffirmed. Work will continue on measures which have not yet been brought to fruition and they are referred to throughout this paper.
2. Special emphasis is laid on measures for setting up the machinery for preventive action, particularly as regards pollution, land use and the production of wastes. The programme provides for: a study of a procedure called 'environmental impact assessment', a series of ecological maps of the Community showing how economic demand can be matched to natural supplies, a study of

¹ The term 'environment' is used to cover all those elements which in their complex interrelationships form the framework, setting and living conditions for mankind, by their very existence or by virtue of their impact.

² OJ C 112 of 20.12.1973.

³ Meadows, Dennis L. (ed.), 'The Limits to Growth'. A Report for the Club of Rome's Project on the Predicament of Mankind, 1972.

⁴ OJ C 9 of 15.3.1973; Bull. EC 3-1973, point 2223.

⁵ Bull. EC 10-1975, points 1301 to 1309.

ways of avoiding the production of waste — which is sometimes very close to a real squandering of resources. In this way a more comprehensive environment policy is gradually taking shape — one which will be more closely tied in with economic planning and with whose framing and implementation the individual will have a greater part to play.

3. Special attention is given to the protection and rational management of space, the environment and natural resources; particular account is taken here of the suggestions put forward by the Italian and German authorities.

4. For the reduction of pollution and nuisances, priority is given to measures for the protection of fresh water and sea water, while new steps are proposed for noise abatement.

5. Finally, the international activity of the Community is confirmed, and it is proposed to add an 'environment' dimension to the policy of cooperation between the Community and the developing countries.

The following programme covers a period of five years (1977-81). It may be revised and added to on a proposal from the Commission in the course of implementation in response to changes in the situation and in the light of experience.

TITLE I

Restatement of the objectives and principles of Community environment policy

Objectives

The aim of an environmental policy in the Community is to improve the setting and quality of life, and the surroundings and living conditions of the peoples of the Community. It must help to bring expansion into the service of man by procuring for him an environment providing the best conditions of life and to reconcile this expansion with the increasingly imperative need to preserve the natural environment.

It should:

- prevent, reduce and as far as possible eliminate pollution and nuisances,
- maintain a satisfactory ecological balance and ensure the protection of the biosphere,
- ensure the sound management and avoid any exploitation of resources or of the natural environment which causes significant damage to the ecological balance,
- guide development in accordance with quality requirements, especially by improving working and living conditions,
- ensure that more account is taken of environmental aspects in structural and physical planning,
- seek common solutions to environment problems with States outside the Community, particularly in international organizations.

Principles

(1) The best environment policy consists in preventing the creation of pollution or nuisances at source, rather than subsequently trying to counteract their effects. To this end, technical progress must be conceived and directed so as to

take into account the concern for protection of the environment and for the improvement of the quality of life, at the lowest cost to the community. This environment policy can and must be compatible with economic and social development, and also with technical progress.

(2) The effects on the environment of all the technical planning and decision-making processes should be taken into account at the earliest possible stage.

The environment cannot be considered as an external medium which harasses and assails man; it must rather be considered as an essential factor in the organization and promotion of human progress. It is therefore necessary to evaluate the effects on the quality of life and on the natural environment of any measure that is adopted or contemplated at national or Community level and is liable to affect these factors.

(3) Any exploitation of natural resources or of the natural environment which causes significant damage to the ecological balance must be avoided.

The natural environment has only limited resources; it can absorb pollution and neutralize its harmful effects only to a limited extent. It represents an asset which may be used, but not abused, and which should be managed in the best possible way.

(4) The level of scientific and technological knowledge in the Community should be improved with a view to taking effective action to conserve and improve the environment and to combat pollution and nuisances. Research to this end should therefore be encouraged.

(5) The cost of preventing and eliminating nuisances must, as a matter of principle, be borne by the polluter. However, there may be certain exemptions and special arrangements, in particular for transitional periods, provided that they cause no significant distortion to international trade and investment. Without prejudice to the application of the provisions of the Treaties, this principle should be stated explicitly and the arrangements for its application, including the exceptions thereto, should be defined at Community level. Where exemptions are granted, the need for the progressive elimination of regional imbalances in

the Community should also be taken into account.

(6) In accordance with the Declaration of the United Nations Conference on the Human Environment¹ adopted in Stockholm, care should be taken to ensure that activities carried out in one State do not cause any deterioration of the environment in another State.

(7) The Community and its Member States must, in their environment policy, take into account the interests of the developing countries, and must in particular examine any repercussions of the measures contemplated under that policy on the economic development of such countries and on trade with them, with a view to preventing or reducing as far as possible any adverse consequences.

(8) The effectiveness of the efforts to promote international and worldwide environmental research and policy will be increased by a clearly defined long-term concept of a European environmental policy.

In the spirit of the Paris Declaration of Heads of State or Government,² the Community and the Member States must make their voices heard in the international organizations dealing with environmental matters and, making full use of the authority which a common point of view confers on them, must make an original contribution in these forums.

In accordance with the conclusions of the Stockholm Conference, regional cooperation, which often makes it easier to solve problems, must be intensified.

Cooperation on a worldwide basis should concentrate on the fields in which a universal effort is called for because of the nature of the environmental problems involved: it must be based on the specialized agencies of the United Nations, which have already accomplished much and whose activities must be continued and expanded.

An all-embracing environmental policy is possible only on the basis of new, more effective forms of

¹ Bull. EC 7-1972, 1st Part, Chapter IV.

² Point 8 of the final declaration, Bull. EC 10-1972, 1st Part, Chapter I.

international cooperation which take into account both ecological interrelationships on a world scale and the interdependence of the world economy.

(9) The protection of the environment is a matter for everyone in the Community, and public opinion should therefore be made aware of its importance. The success of an environment policy presupposes that all sections of the population and all the social forces of the Community contribute to the protection and improvement of the environment. This means that at all levels continuous and detailed educational activity should take place so that every person in the Community becomes aware of the problem and fully assumes his responsibilities towards future generations.

(10) In each category of pollution, it is necessary to establish the level of action (local, regional, national, Community, international) best suited to the type of pollution and to the geographical zone to be protected.

Actions which are likely to be most effective at Community level should be concentrated at that level; priorities should be determined with special care.

(11) Major aspects of environmental policy must no longer be planned and implemented in isolation in individual countries. On the basis of a common long-term plan, national programmes in these fields should be coordinated and national policies should be harmonized within the Community. Such policies should aim at improving the quality of life, and economic growth should not be viewed solely in its quantitative aspects.

Such coordination and harmonization should in particular make it possible to increase the effectiveness of action at the various levels to protect and improve the environment in the Community, taking into account its regional differences and the proper functioning of the common market.

This Community environment policy aims, as far as possible, at the coordinated and harmonized progress of national policies without hampering potential or actual progress at the national level; such progress should, however, be carried out in such a way as not to jeopardize the proper functioning of the common market.

Coordination and harmonization of this nature will be achieved in particular:

- by the application of the appropriate provisions of the Treaties,
- by the implementation of the action described in this programme,
- by the implementation of the environment information procedure.¹

¹ OJ C 9 of 15.3.1973.

TITLE II

The reduction of pollution and nuisances

Chapter 1

Objective evaluation of the risks to human health and to the environment from pollution

The Commission¹ will continue with the work described in Chapter 1, A, B and C (Part II, Title I) and in Chapter 2 of the action programme approved on 22 November 1973,² supplemented by the Council Resolution of 24 June 1975,³ concerning each of the first and second category pollutants listed in the abovementioned documents.

In carrying out this work, the following points will be borne in mind:

- (i) Many pollutants are present simultaneously in several media such as air and water, as well as in foodstuffs and certain manufactured products;
- (ii) Measurement of man's exposure to such pollutants will involve calculation of the overall exposure (determination of the pollutants present in the target);
- (iii) An investigation into synergism of:
 - various first- and second-category pollutants,
 - pollutants and pathogens,
 - pollutants and meteorological factors,
 - pollutants and the composition of foodstuffs,
 - pollutants and chemical and pharmaceutical products;
- (iv) Account will be taken of critical and sensitive groups of the population.

Chapter 2

Preventing and reducing the pollution of fresh and sea water

1. Of all natural resources, water is the only one renewed by the action of the meteorological cycle. This mechanism guarantees constant supplies for almost all the Community's regions.

However, particularly as a result of the density and concentration of the population and their standard of living, and of the large scale of Western Europe's economic activities, part of its potentially available resources is made partially, and sometimes totally, unusable by pollution.

It is unnecessary to point out that water is indispensable to human life and that it has numerous functions which are indispensable to man who uses it for many different purposes.

As indicated in the 1973 action programme (Part II, Title I, Chapter 6, Section 1), sea water in particular 'is an essential source of products — and especially of proteins — which are extremely valuable in a world which is becoming increasingly overpopulated. In addition, it plays a vital role in maintaining the natural ecological balance by supplying a large proportion of the oxygen upon which life depends. The sea and coastal areas are also of tremendous importance for recreation and leisure activities.

The pollution of the sea has already reached a high level. For example, a disturbing accumulation of certain pollutants can be detected in plankton, and in other living organisms and in sediments, and even now there is evidence of a considerable danger of eutrophication in certain estuaries and coastal areas.

'Marine pollution affects the whole Community, both because of the essential role played by the

¹ The Commission has already forwarded to the Council a proposal for a Directive on biological standards for lead and on monitoring lead hazards and a proposal for a Resolution on the criteria for sulphur dioxide and particles in suspension. Bull. EC 4-1975, point 2231 and 2-1976, points 2215 and 2223.

² OJ C 112 of 20.12.1973.

³ OJ C 168 of 25.7.1975.

sea in the preservation and development of species and on account of the importance of sea transport for the harmonious economic development of the Community.'

This is why the protection and purification of fresh water and sea water in order to meet economic and social needs and to guarantee the maintenance of vital ecological balances are given priority in the European Community action programme on the environment.

In this connection, a large number of provisions have already been adopted by the Community which, taken as a whole, now constitute a coherent policy designed to prevent and reduce this type of pollution. Action in this field during the coming years will therefore be directed towards the continued implementation of these provisions.

2. The Community will continue to implement the measures relating to water pollution provided for in Part II, Title I, of the action programme approved by the Council on 22 November 1973, i.e.:

— Objective evaluation of the risks to human health and to the environment from pollution (Chapter 1);

— Setting of standards (Chapter 2);^{1,2}

— Exchange of information between the surveillance and monitoring networks and setting of quality objectives (Chapter 3);

— Measures relating to certain products (Chapter 4);

— Action specific to certain industrial sectors and to energy production (Chapter 5);

— Action specific to certain areas of common interest:

- Marine pollution,
- Protection of the waters of the Rhine basin,
- Action relating to frontier zones (Chapter 6).

3. Furthermore, without prejudice to the application by the Member States of the directives adopted by the Council, the Commission will implement those measures for which it is responsible and which are provided for in the directives listed below (and in directives to be adopted at a

later date in accordance with the action programme):

(a) Council Directive of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States;²

(b) Council Directive of 8 December 1975 relating to the quality of bathing water;³

(c) Council Directive on the reduction of pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.⁴

Actions involved will be as follows:

(i) In the case of the Directive of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water,

— examination of national plans for the purification of surface water (Article 4(2));

— examination of the reasons for the utilization of water below A3 in quality (Article 4(3));

— the presentation of a draft directive on methods of measurement and the frequency of sampling and the analysis of each parameter laid down in the Directive (Article 5(2));

— an examination of the derogations provided for in Article 8;

— proposal(s) when required for the revision of the values and parameters laid down in the Directive (Article 9);

— the presentation of a proposal for a directive on percolating water;

— keeping a general watch on the application of the Directive.

(ii) In the case of the Directive of 8 December 1975 relating to the quality of bathing water:

— an examination of the grounds for any derogations allowed by a Member State and of the plans for water management within the areas concerned (Article 4(3));

¹ The Commission has already forwarded to the Council a proposal for a directive on the quality of water intended for human consumption, OJ C 214 of 18.9.1975.

² OJ L 194 of 25.7.1975.

³ OJ L 31 of 5.2.1976.

⁴ An agreement in principle was reached at the Council meeting of 8.12.1975, Bull. EC 12-1975, point 1502.

— participation in the joint action provided for in Article 4(4) to be implemented by the riparian States;

— an examination of the derogations provided for in Article 8;

— proposals concerning the amendments needed to adapt the Directive to technical progress (Articles 9, 10 and 11);

— the publication of a consolidated report on bathing water in the Member States and on its most important characteristics (Article 13);

— in general, monitoring the application of the Directive;

(iii) In the case of the Council Directive on the reduction of pollution caused by certain dangerous substances discharged into the aquatic environment of the Community:

— the presentation of proposals for rules governing the pollution of territorial waters by operational discharges from ships, bearing in mind the international conventions existing in this field (Article 1(e));

— the presentation of proposals concerning the protection of underground water. (Article 3(a)).

— the presentation of proposals on the limit values, maximum periods, quality objectives and the monitoring procedure for substances on List I (Article 5(1) and (2));

— if a Member State asserts that it has attained the quality objectives, an examination of the proof that the objectives have been attained and maintained in accordance with Article 5(3);

— reports to the Council on those cases in which the Commission accepts the application of the quality objectives method (Article 5(3));

— regular comparisons between programmes concerning the substances on List II to ensure that they are compatible;

— proposal(s) where necessary for the revision of Lists I and II in the light of experience gained and by transferring certain substances from List II to List I;

— keeping a general watch on the application of the Directive.

4. The Commission will also continue to apply the following Council Decisions on action by the European Economic Community within the framework of international conventions:

(a) Council Decision of 3 March 1975 concluding the convention for the prevention of marine pollution from land-based sources;¹

(b) Council Decision of 3 March 1975 concerning Community participation in the Interim Commission established on the basis of resolution No III of the convention for the prevention of marine pollution from land-based sources;¹

(c) Council Decision of 8 December 1975 concerning participation by the European Economic Community in negotiations for an outline convention accompanied by protocols for the protection of the Mediterranean against marine pollution;²

(d) Council Decision of 19 January 1976 concerning participation by the European Economic Community in the negotiations for the conclusion of a convention on the protection of the Rhine against chemical pollution.³

4.1 Following the negotiations on the conventions mentioned under (c) and (d) above, the Commission will present appropriate proposals relating to the conclusion and administration of these conventions. In addition, the Commission will in due course put forward a draft decision authorizing it to negotiate Community accession to the Helsinki Convention on the Baltic Sea.

4.2 The Commission has already presented a proposal for a directive on marine pollution due to the deliberate dumping of toxic substances.⁴ It will also present appropriate proposals relating to Community participation in various international conventions on this type of pollution.

4.3 In the case of marine pollution resulting from transport and navigation, the Commission will, in addition to a proposal on operational discharges from ships, if necessary, present appropriate proposals, concerning the implementation

¹ OJ L 194 of 27.7.1975.

² Bull. EC 12-1975, point 1504.

³ Bull. EC 12-1975, point 1503.

⁴ OJ C 40 of 20.2.1976.

of international conventions and the alignment — where this is necessary for the proper functioning of the common market and for the implementation of this programme — of the rules governing the application of such conventions.

4.4 In the case of marine pollution due to the discharge of effluents from land, the Commission is taking part, on behalf of the Community, in the work of the Interim Commission responsible for the implementation of the Paris Convention relating to the North-East Atlantic. The Commission will also present more general proposals for Community measures designed to prevent and reduce land-based pollution, pursuant to Chapter 6, Section 1 (Part II, Title I) of the action programme of 22 November 1973 and to the Council Directive on pollution caused by certain dangerous substances.¹

4.5 The Commission is taking part in work on marine pollution resulting from the exploration and exploitation of the seabed, within the framework of the Paris Convention. The Community has observer status at the London Conference,² which has a working party on civil liability arising from this type of pollution. Finally, the Commission is keeping a close watch on the work being carried out in this connection within the framework of the Third Conference on the Law of the Sea.

4.6 With more general regard to work in progress within the framework of the latter conference, i.e., on marine pollution, the Commission will ensure that the results of the conference are in conformity with the rules in the Treaties and with the measures taken at Community level on environmental protection. It will in due course present the proposals required to ensure such conformity.

4.7 The Commission will continue to assist in the work of the International Commission for the Protection of the Rhine against Pollution. It will present appropriate proposals for the conclusion by the Community of the Convention on the Protection of the Rhine against Chemical Pollution. It will also in general seek to ensure that measures to prevent and reduce the pollution of the Rhine take account of measures at Community level to combat water pollution, the special features of the water of the Rhine and of the pol-

lution to which it is subject and the fact that the source and a part of the course of that river are in a non-member country.

4.8 The Commission, which has already presented to the Council proposals for enabling the Community to participate in the European Convention on the protection of international watercourses against pollution (Strasbourg Convention), will ask the Council to adopt these proposals finally as soon as the negotiations within the Council of Europe are completed.

5. To conclude it can be said that the Community's work in the field of the prevention and reduction of the pollution of fresh and sea water will concentrate on the following topics:

- the protection of underground waters;
- the setting of quality objectives for water, which was commenced or planned in the action programme of 22 November 1973 and which has not been completed;
- the definition of generally-applicable methods to enable the measures required to attain and maintain present and future objectives;
- the establishment of the minimum quality requirements which would be satisfactory in the long term and which the Community's different environments must satisfy;
- the exchange of information between the surveillance and monitoring networks dealing with water pollution in the Community;
- the establishment of emission limit values, maximum periods and quality objectives for an initial group of substances on List I of the Council Directive on the reduction of pollution caused by certain dangerous substances discharged into the aquatic environment of the Community;
- the establishment of a monitoring procedure for the substances on List I of the Council Directive on the reduction of pollution caused by certain dangerous substances discharged into the aquatic environment of the Community

¹ Bull. EC 12-1975, point 1502.

² London Conferences of March 1973 and October 1975 on the problems of safety and the protection against pollution during prospecting for and the production of mineral resources in the sea in North-West Europe.

particularly for the sea water around the Community's coast;

— the application of the directives on quality objectives adopted by the Council;

— the prevention and reduction of marine pollution from land-based sources;

— the application of international conventions on fresh and sea water which the Community has signed or is to sign.

The Commission will also consider what steps should be taken to ensure that Community countries collaborate in programming the construction of water treatment plants and pollution monitoring and control stations over the next 15 years.

Chapter 3

Atmospheric pollution

Introduction

Atmospheric pollution differs from other types of pollution in the following ways:

1. It occurs most acutely in the large industrial complexes and conurbations in which over 60% of the Community's population live at present.

2. It is very much influenced by meteorological conditions (effects of wind, precipitation, temperature inversions, solar radiation, etc.).

3. Because pollutants can be carried long distances by the wind, the source of pollution may be remote (trans-frontier pollution).

4. Its sources may be stationary (household and industrial fires and furnaces) or mobile (motor vehicles).

5. The polluting substances released into the atmosphere are becoming more and more numerous as a result of the manufacture of new products. Furthermore, the introduction of new production techniques has given rise to changes in the composition of the emissions. The substances released in this way often find conditions which favour their transformation either in reactions

with each other or with the normal chemical constituents of the atmosphere (plus the physical components, such as solar radiation) to create new types of chemical which may be more harmful than the primary pollutants.

6. The sampling and analysis of pollutants, which are often present in low concentrations, present further difficulties which must be overcome if results from different regions are to be readily comparable.

7. The chemical complexity of atmospheric pollutants, and the possible simultaneous influence of weather conditions, often make it difficult to assess the effects of various atmospheric pollutants on health and the ecological balance.

These characteristics must be taken into account when deciding what types of measurement to use at the various decision-making levels — particularly at Community level.

Action to be initiated at Community level

In the first instance, action will consist in continuing to apply the measures the Council has already taken in this field:

The action programme of 22 November 1973

Work on the tasks envisaged in this field in the action programme of 22 November 1973 will continue, namely:

(1) Determination of criteria (cf. Part II, Title I, Chapter 1 of this programme — and Chapter 1 of Title I of this document).

(2) Formulating quality objectives (part II, Title I, Chapter 3, Section 2).

(3) Setting of standards (Part II, Title I, Chapter 2).

(4) Exchange of information between the surveillance and monitoring networks (Part II, Title I, Chapter 3, Section 1).

(5) Measures relating to certain products (Part II, Title I, Chapter 4).

(6) Action specific to certain industrial sectors

and to energy production (Part II, Title I, Chapter 5, Sections 1 and 2).

On (1) above: as indicated in the programme, the process of determining the criteria will be carried out at the same time as the standardization or harmonization of measuring methods and instruments, and the identification of gaps in knowledge in this field so as to select research subjects for inclusion, as appropriate, in the Community research and development programme.

On (2) above: this will be concerned chiefly with the following pollutants:

Pb (lead),
NO_x (oxides of nitrogen),
CO (carbon monoxide),
SO₂ (sulphur dioxide and particles in suspension),
photochemical oxidants,
asbestos,
hydrocarbons,
vanadium.

On (3) above: where necessary, for reasons connected with the protection of health or protection of the environment, the Commission will propose provisional common standards for adoption by the Council.¹

On (4) above: the Commission will pay particular attention to the implementation of the Council Decision of 24 June 1975 instituting a joint procedure for the exchange of information between the surveillance and monitoring networks on data concerning atmospheric pollution caused by certain sulphur compounds and particles in suspension² (cf. below). As appropriate, the Commission will submit further proposals on other pollutants, as described in Chapter 3, Section 1, Subsections A, B and C (Part II, Title I) of the action programme of 22 November 1973.

On (5) above: action provided for in this Chapter will relate to air pollutants. In particular, the directive on substances in the exhaust gases of motor vehicles,³ the sulphur content of gas oils⁴ will be amended or supplemented, as appropriate, to take account of the latest scientific and technical advances.

On (6) above: among the actions envisaged in this Chapter, priority will be given to those in respect of industries emitting dust, oxides of sul-

phur and nitrogen, hydrocarbons and solvents, and fluorine and heavy metals.

Council Resolution of 3 March 1975 on energy and the environment⁵

In addition to the above mentioned parts of the action programme (chiefly concerning the reduction of the sulphur content of fuels, development of methods of measurement, and research into nitrogen oxides), the above Resolution requires the Commission to examine problems arising from:

- (i) the supply of clean fuels, e.g., low-sulphur crude oil, in particular polluted areas and to users causing severe pollution;
- (ii) the promotion and development of desulphurization and other processes for selectively reducing the discharge of sulphur dioxide into the atmosphere.

Directives and Decisions on air pollution already adopted by the Council

The provisions of these Directives and Decisions will be implemented by the Member States and the Commission.

In particular, the Commission will monitor the steps taken by the Member States to determine zones in which the use of gas oils is permitted (Article 5 of the Council Directive of 24 November 1975⁶). If necessary the Commission will draft appropriate proposals to be presented to the Council in order to amend or supplement this

¹ The Commission has already submitted air quality standards for lead and health protection standards in respect of lead and particles in suspension in the urban atmosphere, Bull. EC 4-1975, point 2231 and 2-1976, points 2215 and 2231.

² OJ L 194 of 25.7.1975.

³ Council Directive of 28 May 1974 adapting to technical progress Council Directive No 70/220/EEC of 20 March 1970 on the approximation of the laws of the Member States relating to measures to be taken against air pollution by gases from spark-ignition engines fitted to motor vehicles (OJ L 159 of 15.6.1974).

⁴ Council Directive of 24 November 1975 on the approximation of the laws of the Member States relating to the sulphur content of certain liquid fuels (OJ L 307, of 27.11.1975).

⁵ OJ C 168 of 25.7.1975.

⁶ OJ L 307 of 27.11.1975.

Directive (cf. Article 6), particularly in view of the long-distance transport of sulphur compounds.

The Commission will also take the requisite measures to set up an information exchange procedure in connection with atmospheric pollution caused by certain sulphur compounds and particles in suspension,¹ particularly by selecting, with Member States, the sites to be used in the programme, by producing standard forms for data transmission, by preparing a data-processing program providing a simple and clear presentation of results, by consulting the Member States about the layout of reports and the improvement of the exchange procedure, by establishing programmes for comparing information and by standardizing methods of sampling and analysis in order to improve the comparability of the numerical data.

In addition to the activities listed above, the Commission will — through a panel of experts — organize an exchange of information on ways of combating atmospheric pollution, at national or regional level, particularly;

1. launching national or regional plans;
2. setting up specific structures;
3. use of economic measures;
4. listing sources of pollution;
5. organizing a procedure for the exchange of information between early warning networks;
6. use of mathematical models;
7. establishment of emission standards for certain pollutants regarded as dangerous; and
8. the monitoring of establishments causing pollution.

The Commission will also study:

- (a) the influence of fluorine and chlorine compounds and nitrogen oxides on the upper layers of the atmosphere;
- (b) pollution resulting from the increasing use of gas turbines;
- (c) pollution problems arising from the use of small installations (domestic heating equipment, incineration appliances, etc.).

Once the results of these exchanges of information and studies are available the Commission

will, if necessary, present the appropriate proposals to the Council.

Chapter 4

Measures against noise

Introduction

Noise is generally defined as a number of tonal components disagreeable to man and intolerable to him because of the discomfort, fatigue, agitation and, in some cases, pain it causes.

Depending on its intensity and nature, noise has various effects on a human being exposed to it; these range from discomfort to various psychological and pathological reactions. The discomfort felt varies, among other things, with the nature and intensity of the noise (noise with discrete tones, bursts of sound, fluctuating sounds), the information imparted by the noise signal (conscious or subconscious), and the nervous condition and current activity of the subject.

The measurable psychological and pathological effects include disturbances in:

verbal communication,
efficiency,
sleep, and
health,

as well as auditory damage.

Noise has greatly intensified with the growth of modern industrial society, particularly because of the increasing application of noisier and noisier machinery, extending gradually to all human activities — growth of rail, road and air traffic, mechanization of agriculture, industrial growth, increase in household appliances and communications equipment (radio, TV).

Added to the growth in the number of noisy appliances, the actual noise level of some appliances has increased.

¹ Cf. Council Decision of 24 June 1975 (OJ L 194 of 25.7.1975).

For several years the undesirable, disturbing and harmful effects of noise have been the subject of a large number of studies at both national and international level.

In order to reduce this type of nuisance, the Member States have drawn up a number of regulations covering particular sources of noise and/or, in some cases, outline laws.¹

It should be noted that the national measures introduced with a view to reducing the effects of noise will inevitably affect the functioning of the common market since they are likely either to create technical barriers to trade in products subject to anti-noise specifications or, in some cases, to cause distortions in investment and prices as regards noisy installations. Moreover, the diversity of the measures introduced and the different levels required create qualitative disparities between the Member States of the Community whose peoples (as stated in the preamble to the EEC Treaty) look forward to the constant improvement of living conditions in the Community as a whole.

In order to remove the economic distortions which are liable to be created by differences in specifications for certain products and noisy equipment, and at the same time to decrease the volume of noise which they emit, the Commission has submitted to the Council a number of proposals in the form of directives to limit noise emissions from pneumatic drills,² tower cranes,³ electrical power generators,³ electrical generating sets for welding,³ motor vehicles (revision of Council Directive No 70/157/EEC),⁴ motor cycles³ [and aircraft].³

However, the overall increase in noise has led to a search for solutions to this general problem by means of an overall anti-noise programme; the general outline of this programme has been established at Community level, whereas details have been worked out, and the measures implemented, at Community, national, regional or local level, as appropriate.

Defining and implementing a Community anti-noise policy

As soon as possible the Commission will submit a proposal setting out the measures needed at

various levels to combat noise, together with the timetable for these measures.

These measures must be defined and broken down according to the type of activity and whether it is to be protected from noise (non-vocational activities, education, medical care, relaxation, rest, leisure, etc.), or whether regulations are to be introduced to reduce the noise due to an activity (transport, industry, agriculture, noisy leisure activities, etc.). The measures should cover not only the sources of noise emission but should also take into account the conditions governing the propagation and reception of the noise (e.g., noise from vehicular traffic can be limited not only by reducing the noise level of the vehicles' engines, but also by better road surfacing materials and by siting roads with greater care).

As appropriate the proposed measures will include:

- fixing levels in accordance with medical and social criteria governing the main activities engaged in at a given time in a given area (see Part II, Title I, Chapter III, Section 2, Sub-Section C of the action programme of 22 November 1973: Quality objectives);
- continuing research into the little-known effects of noise on man (especially short-lasting or low-frequency noise) and epidemiological surveys;
- drawing up specifications for noisy products and equipment;
- regulating the use of noisy products and equipment;
- providing products with informative labelling on the noise level or affixing of 'low noise' stickers;
- procedures for classifying, and authorizing the building and operation of noisy installations;
- deciding on any taxes and/or levies on manufacturers or users of sources of noise;

¹ Cf. in particular the Dutch draft law for protecting the environment from acoustic nuisances.

² OJ C 82 of 14.4.1975.

³ OJ C 54 of 8.3.1976.

⁴ OJ 113 of 25.9.1974.

— establishing insulating standards (road surfacing materials; housing, industrial establishments, etc.);

— rules on the awarding of compensation for any damage caused.

This general proposal should bring into being national and regional programmes which will take account of any special economic and social features.

However, the following will be fixed at Community level by means of directives:

— levels (quality objectives) for zones depending on the main activity carried on in them — rest zones, residential areas, leisure areas, industrial estates, roads, railway lines, airports, international waterways, etc.;

— noise measurement methods;

— specifications,¹ regulations governing use, rules for labelling¹ and providing noisy products with the appropriate stickers;

— possibly the assessment base of taxes and levies and their level;

— noise-insulation standards.¹

To assist in drafting this document and the specific directives mentioned above, the Commission will establish a committee of national experts (notwithstanding the committees of experts already working on specific topics). The committee will also help the Commission to compare national noise abatement programmes.

Chapter 5

Action specific to certain industrial sectors and to energy production

SECTION 1

Action specific to certain industrial sectors

A number of measures relating to industrial activities are included in the chapters on air and water pollution, waste reduction and noise abatement.

The Commission will also continue with the tasks described in Chapter 5, Section 1 (Part II, Title I) of the action programme of 22 November 1973.²

SECTION 2

Action specific to energy production

A number of measures relating to air pollution from power stations and to radioactive wastes are included in Chapters 3 (Title II) and 3 (Title III) of this programme.

The Commission will also continue with the tasks specified in Chapter 5, Section 2 (Part II, Title I) of the action programme of 22 November 1973 and in the Council Resolution of 3 March 1975 on energy and the environment.

With particular regard to thermal discharges from power stations, the Commission will investigate

¹ The work on these topics will come under the general programme for the removal of technical barriers to trade.

² The Commission has already sent to the Council two draft directives on the reduction of discharges produced by the wood pulp and titanium dioxide manufacturing industries.

the following points with a view to putting proposals to the Council where necessary:

1. Collation of existing data on the effects of thermal discharges on the environment and further study in this field;
2. Exchange of information at Community level on planning the siting of new power plants, taking into account pollution and nuisance hazards;
3. The need, wherever environmental protection so requires, to equip new power stations with cooling towers and to improve as rapidly as possible the design and technology of dry cooling towers, so as to diminish the disadvantages which the latter still present with regard to certain aspects of the environment;
4. Utilization of waste heat.¹

The Commission will also consider the action to be taken on the Resolution of the European Parliament of 13 January 1976 on the 'conditions for a Community policy on the siting of nuclear power stations taking account of their acceptability for the population'.²

Chapter 6

Measures relating to certain products

A number of measures relating to polluting substances and products are included in earlier chapters.

In this field too, the Commission will continue with the tasks mentioned in Chapter 4 (Part II, Title I) of the action programme of 22 November 1973 relating either to harmonization of requirements for the relevant products under the general programme for the removal of technical barriers to trade in particular, or to the composition, design and utilization of these products.

With more particular regard to the testing of new chemicals likely to have an adverse effect on man and the environment, the Commission is currently looking at various ways of limiting these effects. The Commission also considers

necessary a standing review, at Community level, of the environmental impact of chemical compounds. In recent years the authorities have been faced increasingly with difficulties due to the use of existing chemicals (e.g., polychlorobiphenyl (PCB), vinyl chloride monomer (VCM), Freons and compounds of mercury), the environmental impact of which had not been — or not sufficiently been — highlighted previously.

Consequently, there should be a systematic review, against toxicity, biodegradability and persistence criteria, of the specifications for and manner of use of certain compounds meeting those criteria, and having regard to:

- the better scientific understanding of ecotoxicity acquired since they were first marketed;
- more accurate assessment of the exposure levels of targets;
- new uses to which the chemical compounds in question are put;
- their compatibility with recycling techniques.

The Commission will conduct this review, assisted by a Committee of national experts.

¹ Council Resolution of 3 March 1975 on energy and the environment (OJ C 168 of 25.7.1975).

² OJ C 28 of 9.2.1976.

TITLE III

Non-damaging use and rational management of space, the environment and natural resources

Chapter 1

Non-damaging use and rational management of space

Introduction

The establishment and operation of the common market lend greater acuteness to a number of problems in space management, which even before were appreciable at national and regional levels, namely:

- optimum spatial distribution of people and activities;
- the adverse or undesirable effects on man and the natural environment of the intensive use of space.

The free movement of persons, goods and capital, structural change (especially in farming), rapid technological, economic and sociological change and, particularly, the growth of industrial and agricultural production and rapid extension of transport infrastructures, have firstly caused imbalances between urban and rural areas, or intensified them, and secondly have led to intensive economic exploitation of space — rural and urban. Coastal areas, being multifunctional, pose particularly severe problems, as to a lesser degree do mountainous regions.

Chapters 1 and 3 (Part II, Title II) of the action programme called for a number of studies and other schemes in this field at Community level.

Furthermore, at its meeting of 7 November 1974, the Council called on the Commission to embark

upon a classification of the territory of the Community on the basis of its environmental characteristics so that the required objectives and measures could be identified and established.

All these activities will be pursued by the Community during the coming years. These activities relate to:

1. Development of a method of mapping combining environmental data with space management.
2. Endeavours to solve certain environmental problems arising from intensive farming.
3. Management of urban space, and coastal and mountainous regions.

SECTION 1

Development of a mapping system to present consolidated data on the natural environment as an aid to planning the use of space

The Commission undertook to carry out the instruction given by the Council at its meeting of 7 November 1974, as mentioned above, and began the necessary preparatory work immediately.

This work is aimed at developing a method, relying chiefly on cartography, with which it will be possible to introduce environment-related data and values into the physical organization of space usage, and a means of comparing the economic model of social demand with the ecological model of environmental supply.

The new method will be used to describe the environment rationally and express its very great diversity in levels of suitability for a range of uses by man, proceeding from scientific description of the basic characteristics of the environment to its significance in terms of physical planning.

This method, used at the appropriate level of administration, will make a vital contribution to the preventive consideration by the authorities of environment-related data in decision-making processes linked with physical planning (of environmental impact assessment — Title III, Chapter I).

It will aid in the planning of specific schemes of action at Community level for the benefit of certain regions, in particular those receiving Community aids (regional, sectoral and agricultural aids, etc.).

This project will be conducted under a programme taking a number of years and with close cooperation between Commission and Member States. The Commission will be assisted in executing the various stages of this programme by a panel of national experts which has already been set up.

The project will fall into four phases:

— In Phase One a provisional method will be devised, based particularly on previous work in this field in the Member States. The provisional method thus developed will then be used by the Commission, collaborating with the Member States concerned, to conduct case studies in a number of Member States. The provisional method — improved if necessary following its use in the case studies — will then be put to the Council for approval.

In Phase Two, procedures for the application of the resulting method by the Member States will be worked out, leading to the progressive coverage of the Member States' territory. The Commission will present a proposal for a decision on the subject to the Council.

— In Phase Three, national records will be built up, analysed comparatively at Community level and the results presented to the Council by the Commission.

— In Phase Four the Commission will present any proposals flowing from examination of the resulting maps and comparison between them and maps showing the present or planned use of space, particularly in certain sensitive areas.

SECTION 2

Measures relating to rural areas

Policy and principles

Although, as stated in the action programme of 22 November 1973, farmers through their activities perform useful functions in conserving the land and landscape, agriculture also has certain consequences for the natural environment owing in particular to modern production techniques. Consequently, endeavours in this field over the coming years under the environment programme will be directed in accordance with both the above statements, i.e., will be designed to accentuate the good effects of agriculture on the environment and reduce its adverse ones.

To bring this about:

(a) the Commission will act to improve understanding of the environmental impact of farming activities. This will be a continuation of earlier endeavours to identify the effects on the elements taken into account in environmental protection (such as soil, air, water, flora, fauna and landscape) and to determine their causes. A special effort will be directed to establishing the relative importance of the latter.

(b) The Commission, working on the basis of the results produced, will draft and propose those measures which, by their substance and the level of application, are best suited to changing certain effects in a manner which will result in the accentuation of farming's beneficial effects on the environment (e.g., prevention of soil erosion) or, conversely, to reduce adverse effects (e.g., reduction of leaching of nutrient elements from cultivated soil, or reduction of the secondary effects of pesticides on flora and fauna).

Under the action programme of 22 November 1973, the Commission has carried out a number of studies designed to provide a better insight into the effects on the natural environment of various production techniques. Special attention has been directed to two points, namely:

— use of pesticides and the feasibility of replacing conventional chemical control methods with

biological and integrated control methods of protecting growing crops;

— treatment of waste produced by intensive livestock units.

In the remainder of the programme these will be developed and amplified, having regard to results to date and taking into consideration papers on the subject from Member States. At the same time—and as part of its Common Agricultural Policy and Consumer Protection Policy—the Commission will continue the schemes mentioned in the programme of 22 November 1973 in connection with the quality of foodstuffs.

As regards the encouragement of afforestation schemes intended to improve agricultural structures, the Commission forwarded a proposal for a Directive on 21 February 1974. This proposal is still under discussion within the departments of the Council.¹

Measures relating to pesticides

With regard to pesticides, the nuisances occurring should be reduced by four kinds of measures in combination:

— prohibition of the use of the most hazardous substances;

— testing of pesticides before marketing;

— improvement of application methods and appliances in order to reduce application densities; and

— development of alternative methods, to replace attack on pests by chemical means.

To attain these objectives:

(a) The Commission will put forward a proposal for a directive forbidding the use for agricultural purposes of persistent organochlorine pesticides and of organomercury substances used for pesticide purposes.

(b) The Commission will put up a proposal for a directive on the EEC type approval and marketing of plant-protection products. EEC approval will be granted only to products which, when used appropriately to the ends in view, have no undesirable effects on plants or plant products, no noxious effects on human health or the health of domestic animals, and no unacceptable ad-

verse effect on the environment, including wildlife.

(c) The Commission is to order an investigation into the feasibility of reducing, through design improvements to applicators, wastage of active ingredients when plant-protection products are applied to fields. In the light of the findings, the Commission will take such action as may prove most appropriate (publication of a code of practice on the application of plant-protection products; incentives for the development of new application equipment) with a view to reducing excess usage.

(d) The Commission will submit to the Council proposals for promoting the development of biological control and integrated control for the protection of growing fruit crops.

(e) The Commission will make a proposal for Community action in research to extend the use of these techniques to the remaining sectors of crop production.

Measures relating to high-density stockraising

With regard to high-density stockraising, investigation of the ecological effects of modern techniques in agriculture identified three sources of pollution and nuisance: those due to the smells, those due to bulk wastes (chiefly the droppings) and those due to noise.

The Commission found that a new body of knowledge was needed for solving these problems, and was thus led to propose a research programme on waste from intensive livestock units² (since adopted) under which the Commission and Member States will be associated for a period of four years from 1975.

The droppings of large numbers of animals on small areas are such a problem that the Commission had research conducted under the first programme to establish whether spreading could be a satisfactory solution; it can be regarded as recycling of the organic matter and minerals to cultivated ground.

¹ OJ C 44 of 19.4.1974, Bull. EC 2-1974, point 2228.

² Council Decision of 22 July 1975, OJ L 199 of 30.7.1975.

In this connection it should be possible to reduce nuisances and pollution through the combined effect of measures of two kinds namely, prevention or restriction of loss of effluent by seepage and infiltration, together with the use of techniques designed to reduce the emission of foul smells both during collection and storage of wastes and their spreading.

To attain these objectives:

(a) The Commission will put up a proposal for a directive relating to the treatment of wastes from stockraising, and:

— laying down mandatory technical requirements for waste collection and storage equipment;

— laying down limits on the spreading of wastes on cultivated land.

(b) The Commission will formulate health requirements and permissible maximum levels for undesirable substances in stockraising wastes intended for spreading, as well as those relating to other forms of organic wastes given the same treatment. From the results the Commission will frame and put up appropriate proposals.

Measures relating to mineral fertilizers

As regards the use of mineral fertilizers, the study on the ecological consequences of modern production techniques yielded no more than conclusions of limited significance regarding the eutrophication of surface waters and nitrate enrichment of underground waters. Note, however, that in substance the problem arising is not unlike that of waste from stockraising. In both cases the point is to prevent carry-over into water of certain substances which may prove ecologically noxious, particularly nitrogen and phosphorus. In this sense, a clear-cut distinction cannot be drawn between the spreading of stockraising wastes as manure and the use of mineral fertilizers; the setting of maximum levels for manure and waste spreading with a view to limiting leaching of fertilizing elements would be partly inoperative unless like measures were taken regarding the intensive use of mineral fertilizers.

However, an in-depth analysis of this matter is necessary for several reasons; the diversity of ways in which surface and underground waters are replenished, on the one hand, and, on the other, the general intensive use of mineral fertilizers and its decisive importance for crop yields.

The Commission will therefore study:

(a) in what conditions certain surface waters can tolerate only a limited input of fertilizing elements so that the quality objectives relating to their use can be observed.

(b) under what conditions certain underground waters can tolerate only a limited input of fertilizing elements, so that the quality objectives relating to their use can be observed.

The Commission will also investigate:

(c) the impact on land use (nature of crops; methods of cultivation; intensity of production) of measures designed to limit leaching of fertilizing elements.

(d) any compensation system that might prove necessary. Attention will be directed to the possibility of applying existing measures¹ and the institution of measures specifically relating to this matter.

Following these studies the Commission will put forward proposals.

Measures relating to modern methods of cultivation

Owing to the large number of interactions in ecosystems where agricultural activities are conducted, special attention must be directed to the ecological consequences of using modern methods of cultivation and the establishment of new crop systems.

This approach has, in regard to the substance of the matter, the advantage of supplying an overall assessment of the consequences of space being occupied by certain types of agricultural activity, but it has the corresponding drawback of a study embracing a large number of factors.

¹ Directive on mountain and hill farming and farming in less-favoured regions (OJ L 128 of 19.5.1975).

Without dropping the idea of a comprehensive study, the Commission observed a need to draw up a balance-sheet of the changes to the natural environment which go hand-in-hand with the introduction of modern methods of cultivation.

The Commission will study:

- (a) the ecological consequences of land-use changes and development operations: reparation, alteration of woodland structures, draining of wet areas, straightening of watercourses; and
- (b) will have a number of small regions of the Community analysed in more detail.

In the light of the findings the Commission will take such action as it deems most appropriate.

SECTION 3

Urban areas, coastal and mountain regions

The action programme of 22 November 1973 calls upon the Commission to investigate a number of environmental problems connected with the development of certain urbanized areas: problems arising from development of a megalopolis in North-Western Europe, environmental problems peculiar to city centres and coastal areas. The Commission has conducted studies on these matters with a view to identifying where solutions at Community level would be advisable. The Commission will continue with these tasks and—after consulting a panel of national experts—will put appropriate proposals to the Council.

Measures and schemes referred to in Title III, Chapter 1 (Environmental impact assessment) and Title II, Chapter 1, Section 1 (Development of a mapping system to present consolidated data on the natural environment as an aid to planning the use of space) will have considerable influence on the policies and decisions of bodies dealing with urban planning and space management.

The Commission will also carry out the schemes and take the measures described below.

Conference on urban problems: In 1977 the Commission is to hold—in cooperation with the Con-

seil des Communes d'Europe and the International Union of Local Authorities—a conference which will serve as a gathering point for elective officers and appointive officials of the local and regional authorities from all member countries.

The chief subject will be urban growth and urban decline. Papers and discussions will be based on the studies mentioned in the foregoing and on three studies—now in progress—dealing with concentration in space in the European Community countries; the development of methodology for reviewing and evaluating the absorptive capacity and development potential of a region; and environmental impact assessment procedure.

Community research programme on urbanism (town planning): The Commission—with the aid of a Study Group of the Scientific and Technical Research Committee (CREST)—has presented to the Council a proposal for a decision concerning a research programme relating to the development of large conurbations. This programme will be implemented as a 'concerted action', with coordination of a number of research activities in the field of urban development conducted by the Member States. The aim of the programme is to produce a comparative analysis of the causes, dynamics and consequences of the development of large conurbations in the Community.

Priority will be given to three subjects:

- identification of the forces governing urbanization and concentration;
- analysis of the dynamics of the process of concentration and elucidation of its consequences; and
- assessment of policies in this field (consequences of the unconstrained operation of the relevant factors or of purposive action).

Conservation of ancient monuments and areas of special natural interest: Our architectural and natural heritage is a 'non-renewable' resource of the Community, an important element in its environment and the major physical manifestation of the cultural and historical identity of Europe. Owing to change, particularly in the way we live and despite great efforts by the authorities in all Member States, our heritage is at present ser-

iously threatened with deterioration, and even destruction. This applies quite as much to the urban as to the rural environment.

On 13 May 1974 the European Parliament passed a Resolution¹ on the safeguarding of Europe's cultural heritage and recommended Community action in this field, in particular the establishment of a European Fund for ancient monuments and historic architecture and natural sites of special interest.

Useful first steps could be taken by the Community in two fields, namely:

1. New techniques of conservation and restoration have to be developed. Work has begun in a small number of institutes in certain Member States. The specialists concerned could profit from exchange of information and experience at Community level in order to develop new techniques optimally—as regards both technology and finance.

2. Shortage of qualified personnel in this field obtains in all Member States. Consequently, training programmes for specialists are needed although not always justified on a purely national basis. Coordination and stimulation of such programmes at Community level could make for better results.

The Commission will review the feasibility and advisability of such contributions to the conservation of the Community's architectural and natural heritage and will put proposals to the Council when the time comes.

Mountain regions: The rapid growth of tourism in many of the Community's mountain regions poses a number of problems with environmental protection. These matters are of concern to an increasing proportion of the Community's people. To avoid irreversible damage to these areas and their environment, a balance must be sought between the forms taken by these developments—both winter and summer tourism—and in a more general way between the natural use of these areas (agriculture in particular) and their use for and by tourists.

The Commission will look at the many facets of this matter and if necessary lay appropriate proposals before the Council.

Coastal regions: Work on the development and ecological management of European coastal regions carried out by the Commission under the action programme of 22 November 1973 and similar work by various international organizations, particularly the OECD and the Council of Europe, has identified problems specific to coastal areas and underlined the urgent need for international solutions.

These problems derive mainly from the rapid development of industry and tourism over the last few years and are made more acute by the frequent lack of any overall, long-term planning. This leads to many conflict situations involving different activities and to clashes of interest.

The abovementioned work has resulted in the formulation of basic principles for the integrated development of coastal regions which were given prominence in the OECD² and Council of Europe³ recommendations. Every effort should now be made to ensure that these principles are implemented at Community level.

The Commission will send appropriate proposals to the Council.

Chapter 2

Protection of flora and fauna

Introduction

The wild flora and fauna are part of mankind's common heritage. Their importance derives from the fact that they constitute reservoirs of non-renewable genetic material and that they are elements in an overall ecological balance the stability of which is linked to the complex nature of the numerous functions performed and to the diversity of the organisms involved.

The steady decline in the number of wild species is not only in itself an impoverishment of our

¹ OJ C 62 of 30.5.1974.

² Resolution (73)29 adopted by the Council of Ministers on 26 October 1973.

³ Doc. ENV(75)34.

natural heritage, but it lessens the diversity of non-renewable genetic resources whilst at the same time affecting the ecological balance with various degrees of severity.

The wild flora and fauna perform a number of functions for the benefit of man, including:

- (a) protection against parasites and crop pests;
- (b) protection of the soil against erosion, and regulation of aquatic systems;
- (c) genetic reserve for the improvement of species of cultivated plants and domestic animals (resistance to disease; productivity);
- (d) early warning of certain types of pollution (bioindicators);
- (e) laboratory for scientific research and the teaching of the natural sciences (biology, ecology, ethology, etc.);
- (f) source of recreation and outdoor leisure activities.

Given the variety and importance of these functions it is vital that wildlife be given effective protection. This can be done by taking action on endangered species of flora and fauna and by safeguarding their habitat.

The activities described in this chapter concern these two ways of protecting the wild flora and fauna.

A third means, namely reducing pollution of their habitat and food, is one of the anticipated results of the action described in Title II.

To implement these projects the Commission will draw largely on the work carried out at international level, particularly by the Council of Europe.

Protection of the wild fauna

Over the last two years the Commission has investigated a number of questions concerning the protection of migratory birds and certain animal species threatened with extinction. These studies have shown that the problems transcend national frontiers and that any solution requires initiatives at both international and Community level.

One such measure is the proposal for a Directive forwarded by the Commission to the Council

which will be concerning the approximation of the laws of the Member States on bird protection.

This measure particularly meets the wishes of the European Parliament as expressed in its Resolution of 21 February 1975.¹

International trade in wild plant and animal species threatened with extinction

An effective way of protecting wild plant and animal species threatened with extinction is to restrict and stringently control international trade in specimens of them and in the products derived therefrom.

The Washington Convention on International Trade in Endangered Species of Wild Flora and Fauna meets this objective.

Given the international nature and the repercussions on trade of this protection measure, it is fitting that the Community, as an international body, should accede to this Convention. Accordingly, the Commission will take the necessary steps to bring this about.

Furthermore, if this Convention (which entered into force on 1 July 1975) is to have maximum effect and not cause economic distortion within the common market, it must be uniformly applied throughout the Community. The Commission will therefore forward suitable proposals to the Council at the earliest possible opportunity.

Protection of marine fauna

The continuing decline in the populations of salt-water fish and mammals is a serious threat to the ecological balance of the sea. It is also likely to pose serious problems for the fishing industry both from the point of view of catch and the security of market supplies.

Accordingly, it was expressly provided in the Regulation laying down a common structural policy for the fishing industry,² that the Council,

¹ OJ C 53 of 8.3.1976.

² Council Regulation of 20 October 1970 — Article 5; OJ L 236 of 27.10.1970.

acting on a proposal from the Commission, could take the requisite measures for the conservation of marine resources if the circumstances so demanded.

In implementation of this measure, the Commission forwarded to the Council at the end of 1975 a proposal for a regulation¹ for restructuring the non-industrial inshore fishing industry in terms of the scientifically recommended level of catch and for avoiding over-exploitation.

Furthermore, in anticipation of the difficulties which will doubtless arise from the new international maritime law, currently under review by the Third United Nations Conference on the Law of the Sea, the Commission has sent two Communications to the Council.

In these Communications² the Commission recommended the implementation of a regulation to ensure that the resources in question are conserved and the establishment of a Community system of catch quotas in waters likely to come under the jurisdiction of Member States.

The procedure for applying these principles, which will be the subject of a Commission proposal, should take into account the internationally-agreed limits concerning the various maritime zones (territorial zones, economic zones, international zones).

The Commission will investigate ways of improving the protection of marine mammals, particularly the endangered species.

The Commission will also investigate the advisability of approximating national laws on underwater fishing.

Hunting laws

Whereas hunting can play a positive role in maintaining the ecological balance, the conservation of species of game animals—and in particular the maintenance of their numbers at an ecologically satisfactory level—goes far beyond the limited convention of rules governing hunting and their observance.

The Commission will investigate the various hunting laws in respect of which it might be ne-

cessary to take Community action in order to attain the objectives on the conservation of animal species and will forward suitable proposals to the Council.

Protection of wetlands of international importance

The principal reason for protecting these special ecosystems is the need to safeguard the particular forms of life whose existence depends on such ecosystems.

The problem of protecting wetlands has often been raised at international level.

The possibility of setting up international machinery for the administration and conservation of these biotypes was first examined in 1962 at the International Conference on Marshlands (MAR Conference). Nine years later, the International Conference at Ramsar in Iran adopted a convention on the conservation of wetlands of international importance, especially the zones which are waterfowl habitats and staging-points for migratory birds.

The accession of Member States to the Ramsar Convention is the first prerequisite for the protection of wetlands.³ Nevertheless, this must be backed up by other initiatives at both Community and national level.

The Commission will draw up an inventory of Community wetlands which it thinks need protection either because their intrinsic characteristics make them important to the Community or internationally or because their geographical location is such that they provide vital staging areas for certain species of migratory birds.

The Commission will submit the results of this work to the Council and, where appropriate, will make suitable proposals particularly as regards the protection and management of certain wetlands and contiguous zones.

¹ OJ C 6 of 10.1.1976.

² Bull. EC 2-1976, points 2226 to 2229.

³ The Commission sent a Recommendation to Member States to this effect on 20 December 1974 (OJ L 21 of 28.5.1975). As at 1 February 1976, six Member States had signed this Convention and one had ratified it.

Protection of the wild flora

Under the action programme on the environment adopted on 22 November 1973, the Commission carried out studies on wildlife protection but these were confined to endangered or declining animal species. The situation regarding many plant species is, if less noteworthy, none the less very worrying.

An important stage in their protection will be marked by the joint accession of Member States and the Community to the Washington Convention and to the Wetlands Convention referred to above. The Commission will also investigate other types of action which, if implemented on a Community-wide basis, could contribute to the protection of the wild flora.

Conservation of genetic resources

The genetic reservoir represented by all the existing plant and animal species constitutes a non-renewable resource of scientific and economic importance (using the genes of wild species to improve cultivated plants or breeds of animal).

The various projects described in the Chapter on 'Protection of species' are all designed to preserve the integrity of genetic resources.

Apart from general conservation specific action is needed as regards domestic animals, cultivated plants and related species.

Some Member States and some non-member countries have already built up collections of species and set up gene banks. The development and rational management of these projects require a special coordination effort.

In this respect, international cooperation is now developing under the aegis of the FAO.

Given the ecological and economic importance of conserving genetic resources of domestic animal species and cultivated plants, particularly in connection with long-term objectives of the Common Agricultural Policy, the Commission will give its support to the various projects undertaken in this field and in particular:

- inventory of all the collections of species and gene banks in the Member States,
- drafting of standards for documentation and exchanges of information,
- Community participation in the creation of a world network of gene banks (FAO-IBPGR).¹

The Commission will take any initiative which proves necessary at Community level, particularly under the Common Agricultural Policy.

Chapter 3

Protection and management of natural resources

SECTION 1

Protection of water resources

1. The physical interdependency of the various media which make up the aquatic ecosystem such as fresh surface waters, underground water and sea water and, of equal and related importance, the interdependency between the quality and quantity of water resources play a vital role in any overall management policy for these resources.

Each year the hydrological cycle supplies a variable amount of fresh water. Until recently, the availability and distribution of this water posed no problems other in arid zones. Nowadays, however, with economic growth, urban concentration and the degradation in quality of the available resources, much stricter planning and control is now needed throughout the Community.

The scope of such resources planning and management has broadened and demands not only a consideration of numerous objectives such as regularization and maintenance of a minimum rate of flow and the successive re-uses of water but also a deeper study of the various solutions

¹ International Board for Plant Genetic Resources.

for achieving specific economic, social and environmental objectives.

The Commission feels that something more than an economic and monetary approach is required in this field, since some of the major consequences of planning are of an ecological nature and have repercussions on the social well-being of the people and on regional economic development.

2. The problems caused by the attrition of water resources have already been tackled in the environment programme approved by the Council on 22 November 1973 (Part Two, Title II, Chapter 2). These problems were also the subject of a Council decision taken at its 311th session held in Brussels on 7 November 1974. On this occasion the Council, having taken note of an Italian report and of a communication from the Commission, called upon the latter to 'begin work on the examination of water requirements and the identification of a minimum of available water resources and on the classification of territory on the basis of its environmental characteristics so as to permit the identification and the definition of aims to be pursued and action to be undertaken'.

3. In the light of these decisions the Commission has begun a number of studies on the availability of water resources in the Community. These studies have revealed that, taken overall, the Community's water resources are adequate to meet the foreseeable requirements for a number of years. Nevertheless, available resources vary considerably from one area and from one season to another, and water supply problems are regional in nature. The studies also revealed the close link between the quality and quantity of resources.

4. Under the environmental action programme to be carried out over the coming years, measures should be taken at the appropriate level in connection with water resources management.

These measures should be so formulated that they:

(a) satisfy economic growth and environmental quality standards;

(b) take account of the physical interdependency of the various media which cannot be independently managed;

(c) do not dissociate the problems of quantity and quality.

Some Member States have already set up machinery, which takes account of the homogeneity of water catchment areas, to ensure the optimum management of freshwater resources from both a qualitative and quantitative point of view.

5. The principal objectives of the projects to be carried out by the Commission and of any proposals which it may make to the Council are to:

(a) improve the use of available and potentially available resources with a view to guaranteeing minimum water resources in those areas of the Community where there is a permanent shortfall and in tourist areas where the shortfall is seasonal.

To this end the Commission will:

(i) collect information on noteworthy instances where optimum use has been made of natural or partially-regulated flows for a variety of purposes such as drinking-water supply, irrigation, transport and energy production;

(ii) study what methods can be employed to create multi-purpose hydraulic schemes to redirect the flow of water within the catchment area so as to guarantee supplies for abstraction, repeated uses, flood control, prevention of fluctuations between flood and low-water levels and the improvement of water quality;

(iii) analyse available information and possible projects regarding a possible redistribution of water resources between water catchment areas;

(iv) examine the possibilities opened up by the desalination of sea water and brackish water, taking account of energy consumption and the capital and operating costs of the requisite plant;

(v) investigate ways of reducing evapotranspiration (particularly through the wider use of certain crops) especially in those areas where there is high demand during periods of low seasonal rainfall;

(vi) carry out a comparison of the economic, legal and technical means which can be used to

combat the wastage of water and to increase the recycling and re-use thereof;

(vii) mount a campaign to promote greater consumer awareness in this field;

(b) protect high-quality resources, which involves:

(i) gradually restricting the use of certain underground waters to human consumption only;

(ii) protecting groundwater and abstraction points against pollution and against any change in the groundwater system;

(iii) building up groundwater levels by artificial or natural means to increase its capacity;

(iv) combating water pollution in general (cf. Chapter 2, Title II);

(c) improving the presentation and comparability of the statements of available water resources and foreseeable water requirements.

The Commission will, through a group of experts, also organize exchanges of information on methods of national or regional water management and in particular on the:

1. implementation of national or regional plans;
2. creation of special structures;
3. use of economic instruments;
4. use of management models.

The Commission will, in the light of the results of these information exchanges, submit suitable proposals to the Council.

SECTION 2

Anti-wastage measures: waste management by a comprehensive policy of prevention, reclamation and disposal

The quantity of wastes of every type produced each year in the Community is estimated at about 1 500 million tonnes: household refuse at

about 90 million tonnes, industrial waste at about 115 million tonnes, sewage sludge at about 200 million tonnes, agricultural wastes at about 950 million tonnes and wastes from the extractive industries at about 150 million tonnes. The annual increase in the quantity of waste is estimated at about 5%. The accumulation of these wastes is often accompanied by air and water pollution and they can cause substantial nuisances.

'Dumping', which is still one of the most widely used means of disposal, involves serious risks to human beings owing to the presence in many wastes of toxic and dangerous substances; moreover—and paradoxically—these may well increase in quantity as a result of anti-pollution measures already taken to prevent their being discharged into running streams.

Whether discharged as effluent or gaseous emissions, or accumulated in dumps or rubbish tips, these mixed and unevenly distributed wastes are steadily growing in volume.

The existence of so much waste and the problem of its disposal, apart from the concomitant problems of pollution, are of course an incentive to seeking means of obviating or reducing what in the long run may be regarded as a squandering of resources.

Most wastes contain substances with a potential value which is difficult to calculate but is certainly large, such substances including metals, glass, rubber, textiles, oil and plastics.¹

For many years, and notably since 1973, both industry and local authorities have made a substantial effort to recover such substances. However, for reasons which will be analysed in detail in this chapter, only a proportion of these substances is now being recovered.

The Community, of course, depends heavily on external supplies for many essential raw materials.²

¹ This value is the greater in that it includes the cost of the energy required to produce the substances contained in the wastes.

² See in this connection the Commission's Communication to the Council of 5 February 1975 on the Community's supply of raw material; Supplement 1/75 — Bull. EC.

60 % for	{ paper pulp paper
80 to 90 % for	{ non-ferrous metals iron tin zinc

The protection of the environment against pollution, sound economic management of resources, the effort to reduce the Community's dependence on external raw material producers, a rational long-term management of natural resources which either are non-renewable or can be renewed only at a certain immutable rate—all these considerations together argue in favour of an immediate and hard-hitting campaign against waste.

This campaign must be directed:

- at the consumer, a major producer of waste whose attitude and behaviour can be decisive;
- at industry, which is anxious to reclaim costly raw materials used in the production processes and interested in the possibility of developing new recovery systems, but at the same time, by reason of the volume and range of its products, is responsible for a large proportion of the wastes produced;
- at local authorities, which are responsible for the collection and sometimes the sorting of waste;
- at the national authorities controlling the firms which carry, collect and process certain dangerous wastes, which can, by means of public procurement contracts, play an important role in increasing outlets for certain reclaimed substances and, more generally, can introduce overall policies to combat wastage.

All the Member States are aware of the need for action to improve the reclamation of substances contained in wastes.

In all the member countries bodies have been set up to study reclamation and to define priorities. In some cases specialized bodies have been established to carry out a number of practical projects; mention should be made of the institution in the United Kingdom of a Waste Management Advi-

sory Council in December 1974 after the publication of a Green Paper, 'War on Waste', in September 1974, the creation in France of a waste management agency under the law No 75-633 of 15 July 1975, the adoption in October 1975 by the Government of the Federal Republic of Germany of a waste-saving programme (Abfallwirtschaftsprogramm), the tabling in Parliament in March 1975 by the Danish Ministry of the Environment of a statement on the reclaiming of materials and the creation of two working parties (packaging materials and the recycling of paper).

The Community is intimately concerned with these problems and ought for many reasons to promote an active anti-waste policy:

1. To reduce pollution arising from the accumulation and processing of wastes;
2. To contribute to the harmonious development of the economic activities entrusted to it by the EEC Treaty; such development cannot avoid the negative impact of the increase in the cost of raw materials, of the dependence of the Community and the Member States on external sources of supply and, in the long run, of the foreseeable depletion and resulting predictable rise in the cost of certain materials;
3. To obviate distortions to competition and obstacles to trade, which would inevitably occur if measures are taken to deal with waste solely at national level (for example aids, dues and taxes, transfer of toxic wastes from one State to another, or prohibition of transport of such wastes);
4. To disseminate knowledge of the problems concerned and of action taken at the various decision-making levels, and so to put into effect as efficiently as possible and at the appropriate levels the most suitable legal, technical and economic solutions.

The Community has already taken a number of decisions on the reclamation and disposal of waste: the action programme on the environment of 22 November 1973 provides (Part II, Title I, Chapter 7) that the Commission will initiate a number of studies and meetings in this field with a view to presenting proposals to the Council. Acting on this mandate, the Commission has carried out a number of preliminary studies and has presented to the Council an outline directive

on waste¹ and a Directive on the disposal of waste oils,¹ both of which the Council has adopted.

The Council Directive of 15 July 1975¹ on waste, states in Article 3: 'The Member States shall take appropriate steps to encourage the prevention, recycling and processing of wastes, the extraction of raw materials and possibly of energy therefrom and any other process for the re-use of waste.' The Directive goes on: 'They shall inform the Commission in good time of any draft rules to such effect and, in particular, of any draft rule concerning:

(a) the use of products which might give rise to technical difficulties as regards disposal or involve excessive disposal costs;

(b) the encouragement of:

— the reduction in the quantities of certain wastes,

— the treatment of wastes for recycling and re-use,

— the recovery of raw materials and/or the production of energy from certain wastes;

(c) the use of certain natural resources, including energy resources, in applications where they may be replaced by recycled materials.'

Further, the minutes of the Council meeting at which this Directive was adopted include the following statement by the Commission: 'The Commission considers that the procedure provided for in the second paragraph of Article 3 is merely a preliminary measure to the implementation of Community action to avoid the spread of products which are difficult to dispose of, to promote the recovery and re-use of wastes and more generally to combat wastage of certain natural resources and energy.'

'The Commission proposes in good time to submit suitable proposals on this subject to the Council in the light of developments in this field and experiments carried out by the Member States.'

The Commission will continue to put into effect all the Council decisions referred to. More generally, the Community's waste programme will include measures to encourage and improve waste

recycling and re-use operations and the study and adoption of measures to prevent the generation of waste and to ensure the disposal of non-recoverable residual waste in ways which do not hold dangers for man and the environment.

Recycling and re-use of wastes

The difficulties encountered in recycling and re-using wastes arise from the combined effect of several factors:

Instability of the market for secondary raw materials:

The demand for recycled substances is subject to short-term fluctuations according to the availability of raw materials and their cost, leading to substantial fluctuations in the prices of secondary raw materials, which make it difficult for the reclamation industries to launch investment and technological development programmes, and discourages local initiatives and good intentions. The local authorities need relatively constant prices and long-term contracts if they are to organize the collection and sorting of these recoverable substances.

Shortage of exact economic data, especially the results of cost-benefit analyses and optimization models showing the most efficient processes (recycling, recovery of energy, disposal) for the use of materials, taking account of the economic viability of such processes, the organizational costs involved, the social cost of any deleterious effects on the environment and the assessment of the social consequences of an excessive use of rare resources.

Technical inadequacy of reclamation processes from the angle of economic profitability.

The difficulty of making reclamation processes pay for themselves, owing to the fact that there are many operators concerned, their activities are different and they are widely scattered. Recovery processes involve coordination and cooperation among a large number of operators for collection, sorting, transport, processing and re-use proper. The recovery of materials from household refuse is particularly difficult to organize.

¹ OJ L 194 of 25.7.1975.

Inadequate and unreliable market outlets: Secondary raw materials often contain impurities which necessitate costly prior processing and the use of additional techniques and investments, and this sometimes means that industries prefer to use primary raw materials.

Furthermore, the standards used for defining the specifications of products often make it difficult to use secondary raw materials.

Structural inertia and apathy in industry: While many industrialists and private persons are indeed already aware of the need to combat wastage and conserve resources, the structure of investments and their very cumbrousness, the design of products and consumer habits together often militate against a wider understanding of this need.

In the face of all these difficulties the public authorities should launch studies and take measures at the appropriate levels.

On the basis of opinions delivered by a Waste Management Committee, and the work of a CREST planning subcommittee 'R & D raw materials' for research and development, the Commission:

- will launch the measures within its purview provided for in the directives on waste¹ and on waste oils;
- will study ways and means of making the market for secondary raw materials more stable;
- will carry out optimization studies and cost-benefit analyses as a means of arriving at a more accurate assessment of the types of processing to be used on wastes;
- will consider which research and development sectors require support and coordination at Community level;
- will compare the various organizational systems which achieve the most efficient recovery of wastes;
- will consider what measures the public authorities could take to improve, by means of public procurement contracts, outlets for certain secondary raw materials;
- will add its efforts to those of the Member States, through its information activities and its policy of consumer information and protection, to

arouse public awareness of and encourage cooperation with the actions launched (for example, by information campaigns and model initiatives taken by certain industries and local authorities, by awarding Community prizes, etc.);

— will study means of improving by Community action the flow of information to industrialists on supply and demand for wastes (waste exchange), on research carried out in this field in the Member States (cf. Chapter 3, Title IV, of this paper on the dissemination of knowledge), on the risks connected with chemical products used in industry which sometimes reappear in waste (Data Bank ECDIN²) and more generally on all information relating to wastes and dangerous substances.

In the Commission's work priority will be given to the following materials:

- ferrous metals,
- non-ferrous metals,
- paper,
- glass,
- plastics,
- rubber,
- textiles,
- waste oils.

The Commission will present to the Council suitable proposals in the light of its findings, and of the opinion of the Waste Management Committee.

Prevention of waste generation

The aim of a waste management policy must be, with due allowance for economic and technical constraints, to obviate the generation of waste and to ensure that materials are used as efficiently as possible at every stage in the life of the products. This will mean studying the possibility of using alternative substances instead of materials which are very rare or likely to become so within a reasonable period, and encouraging industry to design and manufacture products with

¹ OJ L 194 of 25.7.1975.

² Environmental Chemical Data and Information Network.

an eye both to avoiding wastage and to facilitating the recovery of raw materials (planning of specifications, standardization, lengthening the useful life of products and so on).

The Commission will study these possibilities with the help of the Waste Management Committee in respect of the substances referred to in the previous paragraph.

Another approach aimed at the consumer could be to develop a system of environment labels awarded by an independent body for products complying with certain criteria. The aim would be to encourage the consumer to buy products which occasion minimum pollution and wastage in production and use (i.e., less polluting, consuming less energy and embodying less non-renewable raw material, and causing the least disposal problem), and to bring on to the market, in response to consumer demand, a large number of products complying with these criteria. This is not a task exclusively for the Community, but the scale of the work to be done, the greater impact of a multinational system and the obstacles which the existence of different national systems could put in the way of the smooth operation of the common market together mean that a Community approach to this problem should be adopted.

If such information is made available to the consumer, he will have objective criteria on which to base his choice of goods. The difficulty of such an operation, however, must be fully understood. First, an accurate assessment is required of each individual criterion (such as the energy required to manufacture one or another product), then their interactions must be studied (for example the mutual effects of the quantity of rare raw materials, energy consumption, durability of the finished product, possibilities of recycling, substitution possibilities, cost of the operations and so on). Finally, a value scale must be established encompassing all these elements and worked out on the basis of political, economic and commercial options which may pull in different directions: for example, if out of three possible courses of action the first means a high consumption of energy, the second a high consumption of non-renewable raw materials and the third the produc-

tion of wastes difficult to dispose of, which should be chosen?

With the assistance of the Waste Management Committee and the Consumers' Consultative Committee, the Commission will study all the problems inherent in the introduction of a system of environment labels. It will first of all draw up an inventory of the systems, measures, projects etc. already in being within and outside the Community; it will then analyse these data from the angles of technical feasibility, economic and social usefulness, feasibility and the value of introducing such a system for certain groups of products. The Commission will forward the results of this work to the Council together with, where appropriate, suitable proposals.

Safe disposal of non-recoverable residues

The Commission will put forward a draft directive on toxic wastes. As regards the disposal of wastes, the Commission will continue the work referred to in Chapter 7 (Part II, Title I) of the action programme of 22 November 1973 and the action instituted by the directives on waste and on waste oils.

It will also consider how to tackle the problems caused by the production of certain residues by the primary sector (residues from the production of titanium dioxide, phosphorus-containing gypsum, mining wastes and so on).

Finally, it will study the problems of surveillance of the storing of toxic products and insurance problems connected with the processing of such products.

Radioactive wastes — a special case

The programme on management and storage of radioactive wastes which was approved by the Council on 26 June 1975 is being carried out.¹

The Commission will also study the problems which arise when nuclear installations, particu-

¹ OJ L 178 of 9.7.1975.

larly reactors and fuel reprocessing plants, are permanently closed down.

For the most part the wastes produced consist of large elements and concrete structures, calling for specialized techniques for dismantling, decontamination, breaking-up, transport etc. Special installations which can take large elements should be established for final storage, so that the greatest precautions are taken against any escape of the radioactivity contained by these large elements.

The population density in the Community is such that the sites of decommissioned nuclear power stations must be cleaned up, for reasons of visual amenity and so that they can be put to other purposes.

Certain solutions, at least provisional, are already being studied or are even being put into effect in certain Member States. They are restricted to short-term problems such as the decommissioning of prototype plant or defective elements which contain relatively little radioactivity. The problems of decommissioning will be much greater in the next few decades when a growing number of commercial installations come to the end of their useful life.

Owing to the cost of the operations, any decommissioning methods adopted will have consequences for the development of nuclear energy; whatever the technical solutions adopted, they should guarantee equal protection for mankind and for the environment.

As these problems are *sui generis*, earlier study and experience should be pooled so that we can draw up a technical and economic inventory of actions which could be taken firstly in the short, and then in a longer term; this inventory can then serve as the basis for deciding on Community action to be launched.

The work to be carried out is as follows:

1. Estimation of the quantities of radioactive waste of different categories likely to be produced by the decommissioning of nuclear installations.
2. Comparison of current specialized techniques, or those now under development, for decommissioning operations, so as to evaluate them both from the point of view of the protection of mankind and of the environment, and from that of

the economy. The action to be taken will be identified on the basis of this study.

3. Comparison of available studies and past experience relating to decommissioning operations and the various possible methods for the final storage of radioactive wastes.
4. Identification of certain guiding principles in the design and operation of nuclear plant with a view to simplifying their subsequent decommissioning.
5. Isolation of guiding principles in the decommissioning of nuclear plant which could form the initial elements of a Community policy in this field.

On the basis of the results of this work, the Commission will present suitable proposals to the Council.

SECTION 3

Environmental problems caused by the depletion of certain natural resources

Over and above the work referred to in Section 1 of this Chapter, the Commission will continue the work referred to in Part II, Title I, Chapter 2, of the action programme of 22 November 1973.¹

¹ The Commission has already launched studies on metals of the platinum group, mercury, fluorine, phosphates and chromium.

TITLE IV

General action to protect and improve the environment

Chapter I

Environmental impact assessment

One of the essential principles of the Community environment policy laid down in the action programme of November 1973 is the need for a preventive policy. 'The best environmental policy' says the programme 'consists of preventing the creation of pollution or nuisances at source rather than subsequently trying to counteract their effects.' It continues: 'Effects on the environment of all the technical planning and decision-making processes should be taken into account at the earliest possible stage. The environment... must be considered as an essential factor in the organization and promotion of human progress. It is therefore necessary to evaluate the effects on the quality of life and on the natural environment of any measure that is adopted or contemplated at national or Community level'.

One of the objectives of a Community environment policy adopted by the Council which follows similar lines is to ensure 'that more account is taken of environmental aspects in structural planning and land use'.

A so-called 'environmental impact statement' has been used for several years in the United States under the National Environmental Policy Act (1969).¹ The introduction of such a procedure has caused great interest in numerous industrialized countries. Four Member States of the Community have launched studies into this procedure or have already taken a number of steps to apply it.

In the Federal Republic of Germany, a ministerial decree of 22 August 1975 makes it obligatory

for measures taken by Federal authorities, and by the local authorities, public organizations and foundations which are directly responsible to the State to be examined to see if they are compatible with environmental protection.

In France a draft Law on the protection of nature which was submitted in April 1975 provides that work and projects carried out by a public authority, which require a permit or some other form of administrative authorization, must comply with specifications relating to environmental protection.

At the end of 1974 the Netherlands Minister for Health and the Environment and Minister for Economic Affairs asked the Central Advisory Committee on the Environment to study how the 'environmental impact statement' (EIS)² worked in the USA and to advise them on a possible application of such a procedure in the Netherlands. The Committee submitted a draft interim report in June 1975 which came out in favour of the introduction of such an EIS system into the permit issuing procedure and town and country planning policy.

Two studies into the possible use of EIS procedures were launched in 1974 in the United Kingdom. The first study which is being carried out by the Department of the Environment is looking into the techniques of environmental impact assessment, possible instances in which development plans could warrant such an assessment, the areas which need to be covered, the need to apply a standard method and who should prepare the impact assessments, finance them, etc.

¹ By the provisions of the National Environmental Policy Act (1969), each US federal agency is required to 'include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official covering:

(a) the environmental impact of the proposed action;
(b) any adverse environmental effects which cannot be avoided should the proposal be implemented;
(c) alternatives to the proposed action;
(d) the relationship between local and short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.'

² Environmental Impact Statement.

The second study which lasts for two years was entrusted to the Scottish Development Department and the Department of the Environment at the University of Aberdeen. This study is aimed at developing techniques to measure objectively the possible effects of industrial development on the natural environment (taking into account the economic and social effects) on sites where such development might conflict with present land use. The results of this study will be submitted in the form of an 'impact manual' to be used by government bodies and local authorities.

The introduction of Community procedures at the appropriate levels for assessing environmental impact is therefore justified:

(a) in view of the need to implement the objectives and principles of the Community environment policy adopted in November 1973;

(b) in view of the need to integrate national legislation into an overall policy at Community level, taking into account the ever closer economic and social ties between the Member States, while, however, preventing such procedures from becoming a source of economic distortion.

For this reason, the Commission will study how appropriate Community environmental impact assessment procedures might be introduced. It will concentrate on:

(a) *the scope of such procedures*: the nature, type and size of project for which such a procedure should be used (for example, projects financed by public authorities or requiring the authorization of these authorities), the level of public authority affected by the procedure, etc.

(b) *the content of the assessments*: the environmental effects which should be considered, the criteria to be used, the need—if any—for alternative solutions.

(c) *organizational aspects*: those responsible for preparing the assessment files, the institutions which would be required to give their opinion on them, the authorities which would be associated, the deadlines which should be kept, how the results of the assessment would be published, the extent and form of public participation in the procedure, etc.

(d) *the cost and financing of the procedures*: it would be appropriate to examine whether it is de-

sirable and practical to finance such procedures from dues collected from those requesting authorization for their projects, or whether the cost should be borne by the public authorities since the procedure would be introduced in the public interest.

The Commission will study the possible alternatives in each of the areas of work mentioned above and weigh up the advantages and disadvantages by each category of alternatives.

The proposed procedures should contain, in particular, appropriate provisions to protect commercial operators from serious delays in their investment programmes, and to ensure that public authorities are not gradually overwhelmed by planning procedures and authorizations.

The Commission will undertake the requisite preliminary studies and consult the responsible national authorities with a view to implementing the planned action.

The Commission will draw up appropriate proposals on the basis of the results of the studies carried out and submit them to the Council.

Chapter 2

Economic aspects

Introduction

The protection and improvement of the environment (open space, surroundings and natural resources considered as integral parts of the entire living environment) must be considered as an essential factor in the organization and promotion of human progress.¹ An environmental policy is not opposed to economic development, but constantly reminds us that such development cannot be made at the expense of Man's environment which shapes his destiny, whether we think of his natural surroundings or the living conditions he creates for himself.

¹ See the principles set out in Title 1.

An environmental policy does therefore influence economic development by imposing certain limits on it and making certain reasonable and consistent structural changes. The need to ensure renewal of depleted natural resources will also mean the creation of new economic activities. Such a policy can therefore be used by the authorities within the framework of their economic policies.

Conversely, the economic implications of an environmental policy must be studied carefully before it is implemented.

The cost of the measures to protect and improve the environment must be assessed. Such an assessment should, however, take into account the long-term effects of these measures; it also introduces data of a social nature which are often difficult to quantify.

The Commission will pursue the work mentioned in Chapter 9 of the action programme of 22 November 1973 (Part II, Title I), and will give priority to the following projects, which will be conducted in collaboration with a group of national experts.

Evaluation of the costs of anti-pollution measures and the benefits resulting from improvement of the environment

Even though the cost of measures to protect and improve the environment may be fairly limited at the macroeconomic level, they may be high at a sectoral level, i.e., for a particular industry or firm. The Commission will continue—as it has done in the past—to take account of the impact of the various measures contemplated at the microeconomic level by costing the proposed measures in relation to the prices of the products concerned, taking into account the required objectives, and assessing the results of anti-pollution measures and the capacity of the firms concerned to bear their costs.

However, it will rarely be possible to use the classic techniques of cost-benefit analysis without their being given some particular interpretation and weighting when these proposals are drawn up, for two reasons. Firstly, improvement of the quality of the environment, which represents the

benefit of the measures taken, often cannot be assessed in monetary terms; this means that it is impossible to compare their benefits directly with the costs involved in implementing the measure. Secondly, it is to be expected that the implementation of environmental measures will generally encourage industry to perfect less expensive anti-pollution techniques. This results in the cost of anti-pollution measures—which is measured on the basis of the present state of the art—is usually over-estimated as compared to the long-term costs.

The methodological work launched under the action programme of 22 November 1973 must be continued so that a quantitative evaluation of the microeconomic and macroeconomic effects of the environment policy can be undertaken. The costing of anti-pollution measures and the evaluation of the benefits to society from the improved quality of the environment will form the basis of this work.

The Commission will try to find a method of costing anti-pollution measures which will ensure comparability of the data supplied by industry and public authorities.

The benefits of an environmental policy are a reduction in the social costs of pollution and an improvement in the quality of the environment. Their evaluation in monetary terms poses very complex and difficult problems, primarily because of the inevitably subjective nature of a large number of the factors involved. It is therefore unlikely that satisfactory methods of evaluation in monetary terms can be found quickly. However, efforts should be continued to integrate as many representative environmental factors into new social statistics in the national accounting systems.

Other methods than those of evaluation in monetary terms can, however, be used to obtain quantitative data on the quality of the environment on which policy decisions can be based or against which results can be compared. Indicators of the quality of the environment which measure objectively certain physical, chemical or biological characteristics of the environment may provide this kind of information without having to be evaluated in monetary terms. The Commission will therefore study the indicators which are al-

ready being used or being prepared by the Member States, and will examine the possibility of defining a common system of indicators on the quality of the environment.

The Commission will also examine the expediency of a permanent Community programme of regular statistics on the environment. Such a programme might also ensure that the environmental statistics systems worked out by the Member States are compatible with each other and with the system of the United Nations.

The Commission will propose appropriate measures in various sectors on the basis of the results of these studies.

The 'polluter pays' principle

On 3 March 1975 the Council adopted a recommendation within the framework of the first action programme regarding cost allocation and action by public authorities on environmental matters¹ which describes the rules of practical application of the 'polluter pays' principle.

Certain aspects regarding the strict application of this principle require further thought and study by the Commission in collaboration with a group of economic experts. This mainly concerns the application of the principle to commercial operators causing pollution in a territorial zone situated in one or several States.

Promotion of measures to improve the environment

The first action programme of 22 November 1973 laid particular stress on the reduction of pollution and nuisances. The 'polluter pays' principle was adopted within the framework of this programme and detailed studies made of the means available to attain the objectives laid down in the fight against pollution.

The requisite means to improve the environment should also be studied in addition to anti-pollution measures and general principles defined, if necessary, in this field.

Chapter 3

Dissemination of information relating to environmental protection

The Community and the Member States are currently making a big effort to set up structures capable of providing scientific, technical and economic information necessary for the environmental protection programme. The fact that these initiatives are relatively recent and that it has been noted that similar information is required in all the various countries, and that the methods planned for providing the information are also similar, makes it desirable and relatively easy to coordinate action on a wider Community plane.

This type of coordination will make it possible to gather and process at minimum cost a body of information all or part of which could also constitute the Community's contribution to the information system planned under the United Nations Environment Programme (UNEP) and other similar international systems. In this connection the Council Decision of 8 December 1975² instituting a joint procedure for establishing and of an inventory of information sources on environmental affairs in the Community is the first important stage. Implementing this Decision will be one of the more important duties of the Member States and the Commission in this field over the next few years.

In consultation with the Committee for Scientific and Technical Information and Documentation (CIDST) and the group of experts representing the interests of the users of information on environmental affairs, whose terms of reference have been established in accordance with this programme, the Commission will continue with the studies and activities discussed in Chapter II, Title I, Part II of the 1973 action programme.

The Commission will give priority to the following tasks:

Inventory of information sources: Pursuant to the Council Decision of 8 December 1975 referred to above, a preliminary version, on magnetic tape, of the inventory of sources of information on the

¹ OJ L 194 of 25.7.1975.

² OJ L 31 of 5.2.1976.

environment in the Community (documentation, specialist centres, research projects) will be made available as soon as possible. The Commission and the Member States will collaborate to take the fullest possible measures in order to:

- create a decentralized, effective reference system which directs the user to the range of sources of the information he requires;
- publish part or, if appropriate, all of the abovementioned inventory;
- ensure that the Community makes a common contribution to the International Referral System (IRS).

The Commission will then submit to the Council any proposals concerning participation by the Community, in the role of regional or sectoral focal point, in the functioning of the International Referral System.

Establishment of a coordinated body of information services: Pursuant to the Council Decision of 18 March 1975¹ adopting an initial three-year plan of action in the field of scientific and technical information and documentation, the EURONET network will make available to users a varied body of automated data bases produced by the chief world abstracting services (Chemical Abstracts, Biological Abstracts, etc) or of those in the Community.

These automated data bases record a large number of important documents dealing with the various disciplines concerned with the environment.

In addition to these automated services the user should be able to call on numerical or documentary information gathered by national, Community and other existing services, or services due to be set up, which is not computerized and hence cannot be in EURONET.

The Commission will carry out whatever studies and pilot projects are necessary to ensure that the authorities responsible for controlling, managing and improving the environment can make the best possible use of sources of information, whether computerized or not.

The studies will chiefly cover:

- the exact identification of the requirements of the various categories of user;

- the structure and content of the different sources of information to which users have access;

- new functions, and functions for which provision should be made or which should be promoted, such as analysis and information;

- deciding which structures should be decentralized in order to facilitate access to the various services through the relevant national centres.

Information system on environmental legislation: On the basis of the results of the current pilot project, the Commission will forward relevant proposals to the Council for the completion of a system of information on national and Community environmental legislation. This system should be integrated into the wider system planned to cover all Community law (CELEX) as well as the international system now being set up by the International Union for the Conservation of Nature and Natural Resources in collaboration with UNEP.

Analysis of the technology available to combat pollution: A study financed by the Commission has highlighted the difficulties involved in gathering and analysing the most recent information on the various processes and equipment used in combating or reducing the threat of environmental pollution at minimum cost.

It would seem best to drop the idea of creating a European centre for analysing and providing information on this technology and, instead, to set up a system based on exchanges of information between the various services dispersed throughout the Member States. The Commission will examine the creation and operation of such a specialized network, which should be centred on the activity of the national authorities responsible for the nationwide coordination of activities connected with providing information on the environment. The Commission will submit proposals to the Council setting out practical arrangements for implementing such a specialized network.

System of information on conferences: Based on the results of current pilot studies, the Commission will submit proposals to the Council concerning the possible establishment of a specialized infor-

¹ OJ L 100 of 21.4.1975.

mation network covering congresses and conferences on the environment, including such services now available in the Member States and linked with other similar services in some non-Community countries and at international level.

Data bank on chemicals likely to contaminate the environment: The Commission will make an assessment, in collaboration with national experts, of the ECDIN pilot project, now in progress as part of the first research programme. On the basis of this assessment, it will consider how such a data bank can be set up and operated and will put a proposal to the Council concerning the eventual introduction of such a system.

Chapter 4

Research projects concerning the protection of the environment

The Community action programme on the environment is supported by a research programme consisting of direct and indirect activities.

The direct research activities pursued at the Ispra Joint Research Centre are part of the programme adopted by the Council on 5 February¹ and 14 May 1973² and include the following subjects:

- analysis and monitoring of pollutants (including the development of a multi-detection unit, the remote sensing of atmospheric pollution and a pilot project for a data bank on chemical products likely to contaminate the environment;
- the transport of pollutants in the environment and their effects;
- models and systems analysis studies of the eutrophication of a lake and the dispersion of atmospheric pollutants;
- theoretical study of thermal pollution and the catalytic oxidation of water pollutants.

In accordance with the Council decision these projects will be continued until 31 December 1976. In 1976 the Commission submitted a detailed proposal for direct research projects on environmental subjects and it hopes that these will

be completed by the JRC during the period 1977-80.

The Commission has already forwarded to the Council a communication setting out the overall concepts for the next multiannual JRC programme.³ In this document, research into protecting the environment constitutes one of the two major topics which the Commission considers should receive the JRC's main research effort during the next four years.

The indirect actions included in the first research programme were completed on 31 December 1975. They included jointly-financed research contracts on the following subjects:

- epidemiological surveys on the effects of air and water pollution;
- nocivity of lead;
- the effects of micropollutants on humans;
- evaluation of the ecological effects of water pollutants;
- remote sensing of atmospheric pollution;
- establishing a data bank on chemical products likely to contaminate the environment.

The Council, on 24 February 1976, adopted a new pluriannual environmental research and development programme (indirect action)⁴ for a total amount of 16 million u.a. for the period 1976-80, which is centred on four main fields:

- *Research aimed at the establishment of criteria (exposure-effect relationships):* heavy metals, organic micropollutants, fibrous materials; new chemical products, air and water (fresh and sea) pollutants, thermal discharges and noise nuisances.

¹ Bull. EC 2-1973, point 2231.

² OJ L 153 of 9.6.1973.

³ Bull. EC 10-1975, points 1501 to 1503.

⁴ The Council also adopted on 24 February a five-year research programme on radiation protection, the aim of which is 'to supplement, broaden and deepen the information necessary to guarantee an objective evaluation of the effects of and dangers arising from ionizing radiations with regard to individuals and to plant, animal and human populations'. This programme thus includes certain aspects of research relevant to environmental protection. It sets out in particular to determine cases where unacceptable changes might be imposed on the environment and its component elements by radioactive contaminants or by irradiation and to develop techniques to prevent the occurrence of such changes; OJ L 74 of 20.3.1976.

— *Research and development on environmental management and information:* the effort will centre on the problems of new chemicals likely to hazard health or the environment. The ECDIN pilot project will be extended and the findings analysed.

— *Research and development on the prevention and reduction of pollution and nuisances:* special attention will be given to treatment of waste water, sewage, sludge, industrial effluent and waste processing.

— *Improvement of the environment:* the planned research will concern the structure and function of ecosystems, biogeochemical cycles, reclamation of spoiled or waste land, remote sensing of environmental disturbances and the ecological implications of land development and modern methods of farming.

Chapter 5

Promotion of public awareness of environment problems and education

‘The protection of the environment is a matter for everyone in the Community, and public opinion should therefore be made aware of its importance. The success of an environmental policy presupposes that all sections of the population and all the social forces of the Community contribute to the protection and improvement of the environment. This means that at all levels continuous and detailed educational activity should take place so that every person in the Community becomes aware of the problem and fully assumes his responsibilities towards the generations to come.’¹

The Commission will continue with the effort it has been making since 1973 to establish this important principle of the Community action programme on the environment. It will therefore continue with the activities provided for in Chapter 6 (Part II, Title II) of the action pro-

gramme of 22 November 1973 following the guidelines laid down in that chapter, particularly:

— regularly publishing reports on the state of the environment in the Community;

— preparing educational brochures for lecturers and primary and secondary school teachers and a school textbook for use in primary school teaching;

— managing a network for the exchange of information on experiences gained in pilot primary schools;

— Community support for university activities;

— cooperating with non-governmental organizations, particularly the European Environmental Bureau.

The Commission will also be taking up the new activities listed below:

Popularized editions of reports: Every year the Commission makes a number of studies connected with the protection and improvement of the environment, or has studies carried out by other parties. Some of these studies are highly technical and therefore of interest only to a limited public.²

On the other hand, some of the studies are of general interest to a public far wider than the specialist circles concerned. In order to ensure that the results of these studies are disseminated as widely as possible, and in order to comply with the large number of requests received, the Commission will henceforth publish popularized versions of these reports.

Encouraging active participation in the protection of nature and the environment: If the general public is to be made aware of the environmental problems, a complete and objective body of information is absolutely essential.

By means of Community aid towards the establishment of certain activities, the Community wishes to contribute to the efforts of the Member States to encourage the active interest of their populations in the problems connected with pro-

¹ See the principles referred to in Title I.

² The final reports on these studies are generally published by the Commission in the series ‘Environment and the quality of life’.

tecting and improving the environment. Such activities would include:

- projects involving the active participation of the population in recovery, recycling and other measures to save certain natural resources (e.g., water), particularly as the Community's contribution to the objective of World Environment Day (5 June);

- competitions of all types organized with a view to bringing about greater understanding of the problems and promoting personal involvement in the struggle for a better environment—photographic competitions, painting competitions, competitions for original approaches to solving technical, economic or political problems in the environmental field, etc.

Specific information projects: Wherever Community action appears appropriate, the Community will set up specific activities in addition to its general activities in disseminating information, and arousing public awareness of the problems. During the period covered by the programme these specific activities will be connected with the following projects:

- by agreement with the postal authorities of the Member States, a series of 'Europa' stamps representing various aspects of the problems connected with the quality of life will be issued;

- contributions towards a mobile European exhibition on environmental problems and the solutions the Community might, and plans to, introduce. In the first instance the exhibits could be used in the Member States and then as a Community contribution to similar exhibitions outside the Community;

- making farmers more aware, particularly of the harmful effects, and more efficient methods, of applying certain products used in agriculture, the effects of certain farming techniques on the environment and, more generally, of the activities a farmer can undertake to prevent certain types of damage to the environment or even to improve it while at the same time achieving the same yield or even a higher yield.

Chapter 6

European Foundation for the Improvement of Living and Working Conditions

Part II, Title II, Chapter 5 of the 1973 environment programme provides for the creation of a European Foundation for the Improvement of Living and Working Conditions. This Foundation was created by a Council Regulation adopted on 26 May 1975.¹ In the meantime it has begun its practical activities in Dublin.

The object of the Foundation is to record all the factors which combine to influence the living and working environment and to make a long-term projection of the factors which might threaten conditions of existence as well as those which might improve those conditions.

The Commission will do all in its power to ensure that this research and other activities undertaken by the Foundation are complementary to the programmes on the environment and on social affairs undertaken at national and Community level.

Chapter 7

Improvement of the working environment

Part II, Title II, Chapter 4 of the 1973 environment programme contains certain measures designed to improve the working environment. A number of those actions are also contained in the Community's social action programme adopted by the Council on 21 January 1974.²

The Commission will continue to implement those actions which it has already begun and will also adopt new measures on the basis of the gen-

¹ OJ L 139 of 30.5.1975.

² Supplement 2/74 — Bull. EC.

eral guidelines contained in the abovementioned chapter of the 1973 environment programme, particularly as regards 'humanizing work'.

Chapter 8

Measures to ensure compliance with environmental protection regulations

In the first action programme stress was laid on the extent to which the effectiveness of joint action on the environment depended on both the adequate application of Community measures and the implementation of effective and coordinated checks on the measures taken.

During the last three years the Commission has continued its task of comparing the national laws and their application in practice with a view to ascertaining the cases where laws should be aligned.

The Commission will continue to implement the measures described in the first action programme (Part II, Title I, Chapter 8) concerning the organization at Community level of exchanges of information on the checks made and measures taken by each Member State to ensure compliance with the rules concerning:

- the specifications for and use of polluting or other products which are liable to harm the environment;
- plant, with particular regard to plant situated in areas for which identical or similar quality objectives have been adopted;
- substances, the discharge or dumping of which will be prohibited or restricted.

TITLE V

Community action at international level

One of the objectives of the 1973 action programme is to 'seek common solutions to environmental problems together with States outside the Community, particularly in international organizations'.

Furthermore, the eighth principle of this policy states: 'The effectiveness of efforts aimed at promoting global environmental research and policy will be increased by a clearly defined long-term concept of a European environmental policy. In the spirit of the Declaration of Heads of State or Government at Paris, the Community and the Member States must make their voices heard in the international organizations dealing with aspects of the environment and must make an original contribution in these organizations, with the authority which a common point of view confers on them', and that 'an all-embracing environmental policy is possibly only on the basis of new, more effective forms of international co-operation which take into account both ecological relationships on a world scale and the interdependence of the economies of the world'.

Finally, in Part II, Title III of the action programme of 22 November 1973, stress is laid on the need for Community action at international level, within the framework of the Community's competences, and, where appropriate, for joint action by the Member States within international organizations.

Action by the Community and its Member States in international bodies and organizations, and cooperation with non-member countries

The Community and its Member States will continue with the international action provided for in Title III (Part II) of the action programme of 22 November 1973, and in particular with its action in international bodies and organizations such as the UNEP, the CSCE, the Euro-Arab Dialogue, the ECE in Geneva, the OECD, the Council of Europe, WHO, Unesco, FAO, etc. The Community will also continue with its efforts to combat fresh and sea water pollution (see Chapter 2, Title I, of this document).

It must also be pointed out that, pursuant to the information agreement in the environment field concluded on 5 March 1973, the Commission and the Member States are kept informed of agreements concluded or to be concluded between certain Member States and non-member countries.

Finally, the Commission will continue with its technical cooperation with the authorities in certain non-member countries, and especially with those which have to cope with pollution problems similar to those encountered in the Community.

In addition to the actions described above, the Community activities in the environment field at international level must from now on concentrate more on the protection and improvement of the environment within the framework of the cooperation initiated between the Community and the developing countries. Chapter 2 below discusses the action in this field.

The special case of cooperation with developing countries

Action required and its justification

The social and economic aspects of the environmental problem, i.e. the introduction of qualitative elements into the development process, are evident at world level. This is particularly true with regard to the depletion of certain natural resources, human settlements, the protection of the natural environment (impoverishment of the soil, spread of the desert, protection of wild flora and fauna, effects on the climate), the long-distance carriage of pollutants, and the effects of environment policies on the location of investment and international trade.

The Community must concentrate on those aspects, particularly in its relations with the developing countries, especially those which have concluded the Lomé Convention. The European Development Fund can give its support to projects designed to create and improve human settlements, to protect the natural environment or to develop new technologies enabling natural resources to be worked more economically. A watch must be kept to ensure that the projects financed by the European Development Fund take these factors into account as far as possible.

A number of specific points must be raised in connection with pollution:

(i) The overcrowding of the available space and the present state of natural environment in large parts of the Member States of the Community is causing the authorities to set requirements designed to protect and improve the environment; the pressure to do so will increase with time. Such measures could encourage certain industries to redeploy into the developing countries where there is more space and the natural environment has a greater absorptive capacity than in Europe. This trend is bound to be encouraged, in certain cases, by the desire to establish plants near the sources of raw materials.

It is quite understandable that the developing countries do not see any need to be bound by environmental protection standards which are as strict as those required in the highly industrialized countries, for as long as—and if—the natural absorptive capacity of the environment in the developing countries is adequate.

This attitude is acceptable, but with certain limits:

— in cases where there occurs persistent pollution which could endanger the environment, the developing countries should also take the necessary measures to combat pollution; the developed countries could help them in their efforts. Certain anti-pollution measures could even be financed by such countries and, in the case of the Community, by the European Development Fund. An exception to the 'polluter pays' principle could be justified in such cases;

— production methods causing less pollution could be adopted more easily by the developing countries if they were not more expensive and if, in addition, they could solve other problems at the same time. 'Intermediate technologies', using more labour and/or space and less capital and know-how, often have such characteristics.

In the agricultural sector, for example, the application of methods involving biological techniques and integrated measures to ensure plant protection could have considerable effects on the environment by reducing the pollution resulting from the application of the large quantities of pesticides which otherwise have to be used in tropical countries and on the balance of payments of developing countries, who would thus be able to reduce their imports of pesticides considerably. Studies would have to be made to ascertain what additional value such technologies have from the environmental viewpoint; they would have to be promoted within the framework of the assistance given by the European Development Fund.

(ii) It is important to know whether, and to what extent, the constraints on the environmental policies of the Member States and of the Community and the redeployment of industry referred to above could affect trade between the Community and the developing countries, especially those which have signed the Lomé Convention. This point will have to be studied care-

fully, for the mutual benefit of the Community and the developing countries and with a view to strengthening trade relations between them.

(iii) As far as agricultural development is concerned, every effort must be made to take adequate precautions to ensure that the achievement of certain objectives, e.g. increased production of existing crops, the use of new land or the introduction of new cultivation or stock-rearing methods, does not lead to the return or appearance of degenerative phenomena liable to jeopardize the soil's production capacity or the protection of the environment. Development projects should therefore take these aspects into account so that the dangers inherent in certain processes, e.g. erosion, overgrazing or deterioration of forests and salting of irrigated land—which are generally very considerable because of the climate in those countries—can be forestalled.

(iv) In June 1976 the United Nations are holding a conference on human settlements. This conference will be identifying the most serious problems and asking all States to make an enormous effort and provide the necessary financial means to solve them, stressing the importance of international cooperation, especially between the industrialized and developing countries. The Commission will, against the background of the agreements concluded with the developing countries, take account of the recommendations adopted by the conference when devising cooperation schemes to the execution of which the Community makes a financial and technical contribution.

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