

Official Journal

of the
European Communities

Volume 20 · No C 139

13 June 1977

English Edition

Information and Notices

Contents

I *Information*

Council

Resolution of the Council of the European Communities and of the Representatives of the Governments of the Member States meeting within the Council of 17 May 1977 on the continuation and implementation of a European Community policy and action programme on the environment 1

I

*(Information)***COUNCIL****RESOLUTION OF THE COUNCIL OF THE EUROPEAN COMMUNITIES
AND OF THE REPRESENTATIVES OF THE GOVERNMENTS
OF THE MEMBER STATES MEETING WITHIN THE COUNCIL**

of 17 May 1977

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

The Council of the European Communities and the Representatives of the Governments of the Member States meeting within the Council note that the projects to which the appended programme will give rise should in some cases be carried out at Community level, and in others be carried out by the Member States.

With regard to the projects to be carried out by the Member States, the latter will supervise their proper execution, it being understood that for these projects the Council will exercise the coordinating powers laid down in the Treaties.

With regard to the projects in the programme to be carried out by the institutions of the European Communities,

**THE COUNCIL OF THE EUROPEAN
COMMUNITIES,**

Having regard to the Treaty establishing the European Coal and Steel Community,

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 from the Commission,

Having regard to the opinion of the European Parliament ⁽¹⁾,

Having regard to the opinion of the Economic and Social Committee ⁽²⁾,

Whereas the Declaration of the Council of the European Communities and of the representatives of the Governments of the Member States meeting within the Council of 22 November 1973 ⁽³⁾, calls for the implementation of a European Communities programme of action on the environment;

Whereas the tasks of the European Communities are laid down in the Treaties establishing the Communities;

Whereas in particular, in accordance with Article 2 of the Treaty establishing the European Economic Community, part of the latter's task is to promote throughout the Community a harmonious development of economic activities and a continuous and balanced expansion, which cannot now be imagined in the absence of an effective campaign to combat pollution and nuisances or of 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;

⁽¹⁾ OJ No C 178, 2. 8. 1976, p. 44.

⁽²⁾ OJ No C 281, 27. 11. 1976, p. 21.

⁽³⁾ OJ No C 112, 20. 12. 1973, p. 1.

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

Whereas the programme of action on the environment of 22 November 1973 should be updated to ensure the continuity of the projects already undertaken and whereas new tasks should be undertaken in the period 1977 to 1981;

Whereas with regard to reducing pollution and nuisances priority must be given to water protection measures and to measures on air pollution, and whereas the campaign against noise must be further developed; whereas, moreover, 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 land, the environment and natural resources;

APPROVES the general approach laid down in the action programme contained in the Annex;

TAKES NOTE that the Commission will submit appropriate proposals for the implementation of this programme;

UNDERTAKES to act on these proposals within nine months of the date on which they were presented by the Commission or, as the case may be, of the date on which the opinions of the European Parliament and of the Economic and Social Committee were presented.

ANNEX

EUROPEAN COMMUNITY ACTION PROGRAMME
ON THE ENVIRONMENT

(1977 to 1981)

CONTENTS

	Page
INTRODUCTION	5
TITLE I: RESTATEMENT OF THE OBJECTIVES AND PRINCIPLES OF A COMMUNITY ENVIRONMENT POLICY	6
TITLE II: REDUCTION OF POLLUTION AND NUISANCES	8
Chapter 1: Objective evaluation of the risks to human health and to the environment from pollution	8
Chapter 2: Prevention and reduction of pollution of fresh and sea water ..	9
Chapter 3: Atmospheric pollution	13
Chapter 4: Measures against noise	15
Chapter 5: Action specific to certain industrial sectors and to energy production	17
Section 1: Action specific to certain industrial sectors	17
Section 2: Action specific to energy production	17
Chapter 6: Measures relating to certain products	18
Chapter 7: Monitoring and assessment	18
TITLE III: NON-DAMAGING USE AND RATIONAL MANAGEMENT OF LAND, THE ENVIRONMENT AND NATURAL RESOURCES	19
Chapter 1: Non-damaging use and rational management of land	19
Section 1: Development of an ecological mapping system ...	19
Section 2: Measures relating to rural areas and forestry	20
Section 3: Urban and rural areas, and coastal and mountain regions	23
Chapter 2: Protection of flora and fauna	25
Chapter 3: Protection and management of natural resources — campaign against wastage	29
Section 1: Water resources	29
Section 2: Waste management by a comprehensive policy of prevention, reclamation and disposal	31
Section 3: Environmental problems caused by the depletion of certain natural resources	35
TITLE IV: GENERAL ACTION TO PROTECT AND IMPROVE THE ENVIRON- MENT	35
Chapter 1: Environmental impact assessment	35
Chapter 2: Economic aspects	36
Chapter 3: Dissemination of information relating to environmental pro- tection	38
Chapter 4: Research projects concerning the protection of the environment	40

	Page
Chapter 5: Promotion of awareness of environmental problems and education	41
Chapter 6: European Foundation for the Improvement of Living and Working Conditions	43
Chapter 7: Improvement of the working environment	44
Chapter 8: Measures to ensure compliance with environmental protection regulations	44
 TITLE V: COMMUNITY ACTION AT INTERNATIONAL LEVEL	 44
Chapter 1: Action by the Community and its Member States in international bodies and organizations, and cooperation with non-member countries	45
Chapter 2: Cooperation with developing countries on environmental matters	45

INTRODUCTION

1. As early as the adoption, on 22 November 1973, of the programme of action of the European Communities on the environment ⁽¹⁾, hereinafter referred to as 'the 1973 action programme', the Community adopted an environment policy, the purpose of which was to 'help to bring expansion into the service of man by procuring for him an environment providing the best conditions of life and reconcile this expansion with the increasingly imperative need to preserve the natural environment'.

2. This policy arises, in particular, from the observation that the unprecedented economic progress which has enabled western countries to fulfil their essential needs within a few decades is now encountering obstacles. Amongst such obstacles is the limit on natural resources. Nature pays a considerable price for economic expansion and as a result, some production possibilities are reduced while their production costs, with the added burden of the expenditure required for the reconstitution of natural resources, are sometimes increased.

3. The figures given in some recent reports, though perhaps 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 organize as quickly as possible the gradual institution of a growth model based more firmly on considerations of quality.

4. Furthermore, the pattern of consumption is changing. Sections of the population are concerned about some aspects of economic development and some signs of saturation are appearing.

5. For these among other reasons, as stated in the Declaration of the Council of the European Communities and of the Representatives of the Member States meeting within the Council, of 22 November 1973 ⁽²⁾, the promotion throughout the Community of a harmonious development of economic activities and a continuous and balanced expansion which constitute the paramount purpose of the Community (Article 2 of the EEC Treaty), cannot now be imagined in the absence of an effective campaign to combat pollution and nuisances or of an im-

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

6. The Member States are determined to ensure that the present quality of the various environmental areas, taking into account the Community regions as a whole, will not deteriorate, particularly in view of the often irreversible or practically irreversible nature of some pollution.

7. The 1973 action programme has been the source of many implementing texts prior to 31 December 1976 (36 proposals transmitted by the Commission, of which 17 have been adopted by the Council). At the same time many environmental measures have been taken by the Member States: (148 draft Regulations and 12 international agreements have been notified to the Commission and to all the Member States under the Information Agreement of 5 March 1973 ⁽³⁾).

8. This effort should be pursued in future 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; and it is the leitmotif of this action programme.

9. This action programme covers five main areas:

9.1. It seeks to ensure that the policy followed since November 1973 ⁽⁴⁾ is continued. The objectives and principles defined at that time still hold good

⁽³⁾ Agreement of the Representatives of the Governments of the Member States of the European Communities, meeting within the Council, of 5 March 1973 on information for the Commission and the Member States with a view to possible harmonization throughout the Communities of urgent measures concerning the protection of the environment (OJ No C 9, 15. 3. 1973, p. 1), as supplemented by the Agreement of 15 July 1974 (OJ No C 86, 20. 7. 1974, p. 2).

⁽⁴⁾ See the Commission communication to the Council concerning the state of progress of the European Community's environment programme as at 15 November 1976.

⁽¹⁾ OJ No C 112, 20. 12. 1973, p. 3.

⁽²⁾ OJ No C 112, 20. 12. 1973, p. 1.

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.

9.2. Special emphasis is laid on measures for setting up the machinery for preventive action, particularly as regards pollution, land use and the generation of waste. The programme provides for: a study of a procedure called 'environmental impact assessment', the development of a system of ecological maps of the Community to show how economic demand can be matched to natural supplies, and a study of ways of avoiding the generation 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 in the framing and implementation of which the individual will have a greater part to play.

9.3. 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.

9.4. With regard to the reduction of pollution and nuisances, priority is given to measures for the protection of fresh water and sea water, and to those on atmospheric pollution, while new measures are proposed to combat noise.

9.5. Finally, the Community's international activity is confirmed, and it is proposed to take account as far as possible of environmental aspects in the policy of cooperation between the Community and the developing countries.

10. This action programme covers a period of five years (1977 to 1981). On a proposal from the Commission, it may be revised and added to in the course of implementation, to take account of changes in the situation and experience.

TITLE I

RESTATEMENT OF THE OBJECTIVES AND PRINCIPLES OF A COMMUNITY ENVIRONMENT POLICY

Objectives

11. 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 possible conditions of life, and to reconcile this expansion with the increasingly imperative need to preserve the natural environment.

12. 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 sound management of resources and of the natural environment, and avoid any exploi-

tation of them 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 planning and regional development,
- seek common solutions to environment problems with States outside the Community, particularly in international organizations.

Principles

13. 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 go hand in hand with economic and social development, and also with technical progress.

14. 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.

15. 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.

16. 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.

17. 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.

18. In accordance with the Declaration of the United Nations Conference on the human environment, 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.

19. 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.

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

21. 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.

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

23. 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 made in such a way as not to jeopardize the proper functioning of the common market.

Coordination and harmonization of this nature shall 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 No C 9, 15. 3. 1973, p. 1.

TITLE II

REDUCTION OF POLLUTION AND NUISANCES

CHAPTER 1

OBJECTIVE EVALUATION OF THE RISKS TO HUMAN HEALTH AND TO THE ENVIRONMENT FROM POLLUTION

24. The Commission ⁽¹⁾ will continue with the work described in Part I, Title III, Chapter 1 and Part II, Title I, Chapters 1 and 2 of the 1973 action programme, supplemented by the Council resolution of 24 June 1975 ⁽²⁾, concerning each of the first- and second-category pollutants listed in the above-mentioned documents.

25. With regard to first-category pollutants, priority will be given to a study of the pollutants on List I in the Annex to Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain

dangerous substances discharged into the aquatic environment of the Community ⁽³⁾. With regard to second-category pollutants, the Commission will consult a working party of national specialists and will take due account of Lists I and II in the Annex to Directive 76/464/EEC.

26. In carrying out this work:

- it will be borne in mind that many pollutants are present simultaneously in several media such as air and water, as well as in foodstuffs and certain manufactured products;

⁽¹⁾ On 9 December 1976, the Council approved the substance of a Directive on monitoring lead hazards; the Commission has already forwarded to the Council a proposal for a resolution on the criteria for sulphur dioxide and suspended particulates.

⁽²⁾ OJ No C 168, 25. 7. 1975, p. 4.

⁽³⁾ OJ No L 129, 18. 5. 1976, p. 23.

- measurement of man's exposure to such pollutants will be made by calculating the overall exposure (determination of the pollutants present in the target);
- an investigation will be made into synergisms of:
 - various first- and second-category pollutants,
 - pollutants and pathogens,
 - pollutants and meteorological factors,
 - pollutants and composition of diets,
 - pollutants and chemical and pharmaceutical products;
- an account will be taken of the effects, including the long-term effects, of pollutants on the various population groups and on the environment, in particular on crops and on foodstuffs of animal origin.

CHAPTER 2

PREVENTION AND REDUCTION OF POLLUTION OF FRESH AND SEA WATER

27. Of all natural resources, water is one of the most important to be renewed by the action of the meteorological cycle. This renewal guarantees constant supplies for almost all the Community's regions.

28. However, particularly as a result of the density and concentration of the population and its 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 coupled, in some cases, with a lack of suitable arrangements for water supplies.

29. Water is essential for human life and has numerous functions which are indispensable to man, who uses it for many different purposes.

30. In carrying out the 1973 action programme considerable effort was devoted, as a matter of priority, to combating fresh water pollution. However, the action initiated must be continued if the quality of fresh water is to be improved and if the pollution caused by certain dangerous substances discharged into the aquatic environment of the Community is to be eliminated.

31. The 1973 action programme (Part II, Title I, Chapter 6, Section 1) describes sea water as

'an essential source of products and proteins, which are extremely valuable in a world which is becoming increasingly overpopulated. In addition, the sea 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.

The pollution of the sea has already reached a high level. For example, a disturbing accumulation of certain pollutants can be detected in plankton, other living organisms and sediments, and even now there is evidence of a not insignificant danger of eutrophication in certain estuaries and coastal areas.

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

32. 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 this action programme.

33. In this connection, a number of important provisions already adopted or contemplated constitute the basis for a coherent policy designed to prevent and reduce this type of pollution at Community level. Action in this field during the coming years will therefore be directed towards the continued implementation of these provisions.

34. The Community will continue to implement the measures relating to water pollution referred to in Part II, Title I, of the 1973 action programme, namely:

- objective evaluation of the risks to human health and to the environment from pollution (see Chapter 1);
- setting of standards (see Chapter 2);
- exchange of information between the surveillance and monitoring networks (see Chapter 3);
- quality objectives (see Chapter 3);
- measures relating to certain products (see Chapter 4);
- action specific to certain industrial sectors and to energy production (see Chapter 5);
- action specific to certain areas of common interest:
 - marine pollution;
 - protection of the waters of the Rhine basin against pollution;
 - action for the protection of the environment in frontier zones (see Chapter 6).

35. 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 under this action programme):

- Council Directive 75/440/EEC of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States ⁽¹⁾;
- Council Directive 76/160/EEC of 8 December 1975 concerning the quality of bathing water ⁽²⁾;
- Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community ⁽³⁾.

⁽¹⁾ OJ No L 194, 25. 7. 1975, p. 26.

⁽²⁾ OJ No L 31, 5. 2. 1976, p. 1.

⁽³⁾ OJ No L 129, 18. 5. 1976, p. 23.

The measures involved will be as follows:

36. In the case of Directive 75/440/EEC:

- an examination of national plans for the improvement of surface water (see Article 4 (2));
- an examination of the reasons for the utilization of water falling short of A 3 quality (see Article 4 (3));
- the submission of a draft Directive on methods of measurement and the frequency of sampling and analysis of the parameters laid down in the Directive (see Article 5 (2));
- an examination of the exceptions provided for in Article 8;
- proposal(s) for the revision of the values and parameters laid down in the Directive (see Article 9);
- the submission of a proposal for a Directive on seepage water;
- keeping a general watch on the application of the Directive.

37. In the case of Directive 76/160/EEC:

- an examination of the justification for any derogation allowed by a Member State and of the plans for the management of water within the areas concerned (see Article 4 (3));
- participation in the collaboration by the riparian States provided for in Article 4 (4);
- an examination of the exceptions provided for in Article 8;
- proposals concerning the amendments necessary for adapting the Directive to technical progress (see Articles 9, 10 and 11);
- the publication of a summary report on bathing water in the Member States and the most significant characteristics thereof (see Article 13);
- keeping a general watch on the application of the Directive.

38. In the case of Directive 76/464/EEC:

- the submission of proposals for rules governing *inter alia* the pollution of territorial waters by operational discharges from ships, bearing in mind the international conventions existing in this field;
- the submission of a proposal for a Directive concerning the protection of ground water (see Article 4);

- the submission of proposals on the limit values, maximum deadlines, quality objectives and the monitoring procedure for substances on List I (see Article 6);
- if a Member State wishes to have recourse to quality objectives, an examination of the evidence that the objectives have been attained and maintained in accordance with Article 6 (3);
- reports to the Council on those cases in which the Commission agrees to the application of the quality objectives method (see Article 6 (3));
- regular comparisons of programmes concerning the substances on List II in order to ensure adequate coordination in their implementation;
- proposal(s) where necessary for the revision of Lists I and II on the basis of experience, if appropriate by transferring certain substances from List II to List I;
- keeping a general watch on the application of the Directive.

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

- Council Decision 75/437/EEC of 3 March 1975 concluding the Convention for the prevention of marine pollution from land-based sources ⁽¹⁾, hereinafter referred to as the 'Paris Convention';
- Council Decision 75/438/EEC 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 ⁽²⁾;
- 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 ⁽³⁾;

⁽¹⁾ OJ No L 194, 25. 7. 1975, p. 5.

⁽²⁾ OJ No L 194, 25. 7. 1975, p. 22.

⁽³⁾ On 9 December 1976, the Council approved, in substance, the conclusion of the Convention for the protection of the Mediterranean Sea against pollution and the Protocol for the prevention of the pollution of the Mediterranean Sea by dumping from ships and aircraft, signed on behalf of the Community on 13 September 1976.

- 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 ⁽⁴⁾.

40. On 14 March 1977, the Commission forwarded to the Council a recommendation for a Decision concerning the opening of negotiations with a view to the accession of the Community to the Convention of 22 March 1974 on the protection of the marine environment of the Baltic Sea area. In its work on marine pollution, the Commission will submit proposals for the alignment of the implementing rules of international conventions when necessary for the proper functioning of the common market and for the implementation of action programmes of the European Communities on the environment. In doing so it will take into account the fact that the provisions of the various conventions may differ.

41. The Commission has already submitted a proposal on 12 January 1976 for a Directive ⁽⁵⁾ on marine pollution arising from the dumping of waste. It will also submit appropriate proposals relating to Community participation in various international conventions on this type of pollution.

42. In the case of marine pollution resulting from transport and navigation, the Commission will, in addition to the proposals referred to in the first indent of paragraph 38, carry out appropriate studies and if necessary submit appropriate proposals concerning the effective implementation 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.

43. 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

⁽⁴⁾ On 9 September 1976, the Council approved, in substance, the conclusion of this Convention and the Additional Agreement to the Agreement signed in Berne on 29 April 1963 concerning the International Commission for the Protection of the Rhine against Pollution, signed, on behalf of the Community, on 3 December 1976.

⁽⁵⁾ OJ No C 40, 20. 2. 1976, p. 3.

work of the Interim Commission of the Paris Convention. The Commission will also present more general proposals for Community measures designed to prevent and reduce land based pollution, pursuant to Part II, Title I, Chapter 6, Section 1 of the 1973 action programme and to Directive 76/464/EEC.

44. The Community is taking part in work being done on marine pollution resulting from the exploration and exploitation of the seabed, in particular within the framework of the Paris Convention. The Community has observer status at the London Conference ⁽¹⁾, which has a working party dealing with the problems of 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.

45. With more general regard to work in progress within the framework of the latter Conference, i.e., on marine pollution, the Commission will seek to ensure that the results of the Conference are in conformity with the rules in the Treaties and with the environmental protection measures taken at Community level. If necessary, it will submit at the appropriate time the proposals required to ensure such conformity.

46. The Community, represented by the Commission, will take part in the work of the International Commission for the Protection of the Rhine against Pollution. In the framework of the Convention on the protection of the Rhine against chemical pollution, it will seek to ensure that this Convention is implemented as quickly and effectively as possible, so as to solve the particular problems of the pollution of the Rhine, taking account of Community regulations.

47. The Commission, which has already submitted proposals to the Council to enable 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.

48. In view of the preceding paragraphs, the Community's work in the field of prevention and reduction of pollution of fresh and sea water will concentrate in particular on the following priority topics:

- the Directive on the protection of ground water;
- the setting of quality objectives for water, work on which was initiated or planned in the 1973 action programme and which has not been completed;
- the definition of methods of measurement and frequency of sampling;
- the definition of common methods for laying down the measures required to attain and maintain present and future quality objectives;
- the joint investigation and definition of satisfactory minimum long-term quality requirements to which the waters of the Community should conform;
- the exchange of information between the surveillance and monitoring networks dealing with water pollution in the Community;
- the establishment of emission limit values, maximum deadlines and quality objectives for an initial group of substances on List I of Directive 76/464/EEC;
- the establishment of a surveillance and monitoring procedure for the substances on List I of Directive 76/464/EEC;
- the application of the Directives adopted by the Council, on the subject of quality objectives;
- the prevention and reduction of marine pollution from land-based sources, in the framework of the Paris Convention and Directive 76/464/EEC;
- the application of international conventions on fresh and sea water to which the Community is or will be a contracting party.

49. The Commission will also consider what steps should be taken to encourage the exchange of information concerning the construction in the Community of water treatment plants and pollution surveillance and monitoring stations over the next 15 years.

⁽¹⁾ London Conferences of March 1973 and October 1975 on the problems of safety and protection against pollution during prospecting for and the production of mineral resources in the sea in North-West Europe.

CHAPTER 3
ATMOSPHERIC POLLUTION

Introduction

50. The following features are among the characteristics of atmospheric pollution:

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

It is very much influenced by meteorological and climatic conditions (effects of wind, precipitations, temperature inversions, solar radiation, etc.) and may in turn influence such conditions.

The source of pollution may be remote since some pollutants can be carried long distances by the wind, which may cause trans-frontier pollution. Consequently, activities in one State may cause harm to the environment in another State, inside or outside the Community, necessitating appropriate action.

Its sources may be stationary or mobile.

51. The polluting substances released into the atmosphere are becoming more and more numerous as a result of the manufacture and use of new products. Furthermore, the introduction of new production techniques causes changes in the composition of emissions. Some substances released into the atmosphere may find conditions favourable to their transformation either in reaction with each other or with the normal chemical constituents of the atmosphere, often under the influence of solar radiation, to create new types of chemical which may be more harmful than the primary pollutants. It is possible that the natural level of ozone in the stratosphere is influenced by pollutants emitted by man.

52. 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.

53. The chemical complexity of some atmospheric pollutants and of the products of their transformation together with the variability in exposure caused by changing weather and atmospheric conditions make it difficult to assess the effects of

pollutants on human health, ecological balance, the soil, vegetation and materials. Research on this matter should be continued.

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

Action to be taken at Community level

55. In the first instance, action will consist in continuing to implement the provisions already adopted by the Council in this field.

The 1973 action programme

56. Work on the tasks envisaged in this field in the 1973 action programme will continue, namely:

- (a) determination of criteria (see Part II, Title I, Chapter 1 of the 1973 action programme — and Title II, Chapter 1 of the present action programme).

As indicated in the 1973 action programme, the process of determining criteria will be carried out at the same time as the standardization and harmonization of measuring methods and instruments, and by identifying gaps in knowledge in this field will enable research subjects to be selected for inclusion, if appropriate, in the Community research and development programme;

- (b) formulation of quality objectives (Part II, Title I, Chapter 3, Section 2 of the 1973 action programme).

This operation will be concerned particularly with the following pollutants:

- lead,
- oxides of nitrogen,
- carbon monoxide,
- sulphur dioxide and suspended particulates,
- photochemical oxidants,
- asbestos,
- hydrocarbons,
- vanadium;

- (c) setting of standards (Part II, Title I, Chapter 2 of the 1973 action programme).

In certain cases, urgent reasons based on the protection of human health or protection of the environment may require that provisional common standards be laid down before criteria and quality objectives have already been established at Community level, where the relevant criteria already existing on an international or national level are considered to be adequate;

- (d) exchange of information between the surveillance and monitoring networks (Part II, Title I, Chapter 3, Section 1 of the 1973 action programme).

The Commission will pay particular attention to the implementation of Council Decision 75/441/EEC of 24 June 1975 instituting a common procedure for the exchange of information between the surveillance and monitoring networks on data concerning atmospheric pollution caused by certain sulphur compounds and suspended particulates ⁽¹⁾. As appropriate, The Commission will submit further proposals on other pollutants, under the conditions set out in Part II, Title I, Chapter 3, Section 1, Subsections A, B and C of the 1973 action programme;

- (e) measures relating to certain products (Part II, Title I, Chapter 4 of the 1973 action programme).

The action provided for in this chapter will be continued with regard to air pollutants. In particular, the Directives on substances contained in the exhaust gases of motor vehicles ⁽²⁾ and the sulphur content of gas oils ⁽³⁾ will be

⁽¹⁾ OJ No L 194, 25. 7. 1975, p. 32.

⁽²⁾ Council Directive 74/290/EEC of 28 May 1974 and Commission Directive 77/102/EEC of 30 November 1976 adapting to technical progress the Directive 70/220/EEC on the approximation of the laws of the Member States relating to measures to be taken against air pollution by gases from positive ignition engines of motor vehicles (OJ No L 159, 15. 6. 1974, p. 61 and OJ No L 32, 3. 2. 1977, p. 32 respectively). Council Directive 72/306/EEC of 2 August 1972 on the approximation of the laws of the Member States relating to the measures to be taken against the emission of pollutants from diesel engines for use in vehicles (OJ No L 190, 20. 8. 1972, p. 1).

⁽³⁾ Council Directive 75/716/EEC of 24 November 1975 on the approximation of the laws of the Member States relating to the sulphur content of certain liquid fuels (OJ No L 307, 27. 11. 1975, p. 22).

amended or supplemented, if necessary, to take account of the latest scientific and technical advances;

- (f) action specific to certain industrial sectors and to energy production (Part II, Title I, Chapter 5, Sections 1 and 2 of the 1973 action programme).

The action envisaged in this Chapter will be continued, giving priority to industries emitting dust, oxides of sulphur and nitrogen, hydrocarbons and solvents, fluorine and heavy metals;

- (g) action for the protection of the environment in frontier zones (Part II, Title I, Chapter 6, Section 3 of the 1973 action programme).

The Council resolution of 3 March 1975 on energy and the environment

57. In its resolution of 3 March 1975 on energy and the environment ⁽⁴⁾, the Council invited the Commission, bearing in mind the most recent forecasts of future oil consumption patterns as well as cost levels, to submit proposals on, *inter alia*:

- (a) greater rationalization of the supply of low-pollution fuels, such as crude oil with a low sulphur content; to users of heavily polluting fuels in polluted areas;
- (b) promotion of the development of desulphurization and other processes for selectively reducing the discharge of sulphur dioxide into the atmosphere and encouragement, in particular, of the setting up of pilot plants as soon as they have become technically feasible;
- (c) promotion of efficient use of fuels;
- (d) intensification of research relating to the effects of nitrogen oxides on man and the environment;
- (e) the development of appropriate methods for measuring nitrogen oxides;
- (f) implementation of preventive measures to reduce sources of pollution by oxides of nitrogen pending advances in our knowledge of this field.

⁽⁴⁾ OJ No C 168, 25. 7. 1975, p. 2.

The Directives and Decisions on air pollution already adopted by the Council

58. 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 the zones in which the use of gas oils is permitted (Article 5 of Council Directive 75/716/EEC). If necessary the Commission will draw up suitable proposals to be submitted to the Council in order to amend or supplement this Directive (see Article 6).

The Commission will also continue working towards the setting up of a common procedure laid down in Council Decision 75/441/EEC, particularly by consulting the Member States over the sites to be used in the programme, and by producing standard forms for data transmission. The Commission will also prepare a data-processing programme 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 harmonizing methods of sampling and analysis in order to improve the comparability of the numerical data. The Commission will submit appropriate proposals to the Council in these fields.

59. In addition to the activities mentioned in this chapter, the Commission will — through a panel of national experts — organize exchanges of information on ways of combating atmospheric pollution at national or regional level, particularly :

- implementation of national or regional plans;
- establishment of administrative and scientific bodies responsible for air management;

- use of economic measures;
- listing of sources of pollution;
- organization of a procedure for the exchange of information between early-warning networks;
- use of mathematical models;
- establishment of standards for certain pollutants regarded as dangerous;
- monitoring of establishments causing pollution.

60. The Commission will also examine problems relating to:

- the influence of fluorine and chlorine compounds and nitrogen oxides on the upper layers of the stratosphere;
- pollution resulting from the increasing use of gas turbines ⁽¹⁾;
- pollution problems arising from the use of small installations (domestic heating equipment, incineration appliances, etc.);
- the possible effects of transfrontier atmospheric pollution.

61. In the light of the results of these exchanges of information and studies, and on the basis of work done by other international organizations, the Commission will, if necessary, submit appropriate proposals to the Council.

⁽¹⁾ The Commission pointed out that its communication to the Council of 3 October 1975 on an action programme for the European aeronautical sector provides for specific action relating to nuisances.

CHAPTER 4

MEASURES AGAINST NOISE

Introduction

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

Depending on its intensity and nature, noise has various effects on human beings exposed to it, ranging from discomfort to various psychological and pathological reactions.

63. The discomfort felt varies, among other things, with the nature and intensity of the noise (sound with discrete components, bursts of sound, fluctuating sound), the information imparted by the noise signal (conscious or subconscious), and the nervous state and activity of the subject (e.g. manual work, intellectual and recreational activities).

The measurable effects include, in particular, disturbance of:

- verbal communication,

- performance,
- sleep, and
- health, particularly damage to hearing.

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

For several years the undesirable, disturbing and harmful effects of noise have been the subject of a very 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, framework legislation.

65. It should be noted that the national measures introduced with a view to reducing the effects of noise may affect the functioning of the common market since they might either create technical barriers to trade in products subject to anti-noise specifications or in some cases, cause distortions in investment and prices as regards noisy installations. Moreover, the diversity of the measures introduced and the different levels required may create qualitative disparities between the Member States of the Community.

66. In order to remove the economic distortions which might be created by differences in specifications for certain noisy products and equipment, and at the same time to decrease the volume of noise which they emit, the Commission has submitted to the Council a set of proposals in the form of Directives to limit noise emissions from pneumatic drills, tower cranes, electric power generators, electrical generating sets for welding, motor vehicles, motor cycles and aircraft.

Defining and implementing a Community anti-noise policy

67. A consequence of the overall increase in noise is the need in future for solutions to this general problem to be sought through the implementation

of an overall anti-noise programme, initiated in general outline at Community level, and worked out in detail and implemented at Community, national, regional or local level, according to the type of measure intended.

68. The Commission will propose a programme as soon as possible setting out the general framework for a body of measures which should be taken at these different levels to combat noise. The measures concerned must be specified and varied according to the types of activity that it would be desirable either to protect from noise (activities such as education, medical care, relaxation, rest, leisure, etc.), or to regulate in order to reduce the noise they cause (transport, industry, agriculture, noisy leisure activities, etc.). The measures should not only cover the sources of noise emission but should also take into account the conditions governing noise propagation and reception (e.g. traffic noise can be limited not only by reducing engine noise levels, but also by the use of better road surfacing materials and by siting roads with greater care).

This general proposal could give rise, depending on circumstances, to Community action or to national or regional programmes, taking into account any special economic and social features.

69. With regard to Community action, the Commission will make appropriate proposals concerning:

- the guidelines which the competent authorities may take into consideration when determining the levels (quality objectives) appropriate to zones, where a particular activity predominates: rest zones, residential areas, leisure areas, industrial estates, roads, railways, airports, international waterways, etc.;
- noise measurement methods;
- specifications for noisy products ⁽¹⁾, possible measures dealing with the monitoring of the utilization of these products, rules for labelling and the affixing of stickers; with the assistance of national experts the Commission will draw up a list of priorities with a view to tabling proposals on these matters. Such a list should

⁽¹⁾ The Commission pointed out that its communication to the Council of 3 October 1975 on an action programme for the European aeronautical sector provides for specific action relating to nuisances.

be based on an assessment of the contribution of such apparatus to the overall impact of noise on the environment;

- noise-insulation standards;
- permissible noise levels at the place of work, in conjunction with the European Foundation for the Improvement of Living and Working Conditions and with the Social Action Programme of the European Communities.

The Commission will also carry out research into the little-known effects of noise on man (especially

short-lasting and low-frequency noise) and epidemiological surveys.

70. The Commission will establish a Committee of national experts (without prejudice to the existence of Committees of experts already working on specific topics) which will assist it in drawing up the proposal laying down the general framework for the measures and the specific proposals mentioned above. This Committee will assist the Commission in its task of comparing national noise abatement programmes.

CHAPTER 5

ACTION SPECIFIC TO CERTAIN INDUSTRIAL SECTORS AND TO ENERGY PRODUCTION

Section 1

ACTION SPECIFIC TO CERTAIN INDUSTRIAL SECTORS

71. 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 continue with the tasks described in Part II, Title I, Chapter 5, Section 1 of the 1973 action programme ⁽¹⁾.

Section 2

ACTION SPECIFIC TO ENERGY PRODUCTION

72. A number of measures relating to air pollution from power stations and to radioactive wastes are included in Title II, Chapter 3 and Title III, Chapter 3 of this action programme.

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

⁽¹⁾ The Commission has already sent to the Council on 20 January 1975 and 18 July 1975 proposals for two Directives on the reduction of waste from the wood pulp and titanium dioxide manufacturing industries (OJ No C 99, 2. 5. 1975, p. 2 and OJ No C 222, 29. 9. 1975, p. 110).

73. With particular regard to thermal discharges from power stations, the Commission will continue in accordance with the abovementioned resolution to study the following points, with a view possibly to putting proposals to the Council:

1. collation of existing data on the effects of thermal discharges on the environment and the improvement of knowledge in this field;
2. exchange of information at Community level on planning the siting of new power stations, 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 protection of the environment;
4. utilization of waste heat.

74. Pursuant to point 6 of the above resolution, the Commission will study the particular problems connected with the development of nuclear energy.

75. The Council has taken note of the resolution of the European Parliament of 13 January 1976 ⁽²⁾.

The siting, construction and operation of nuclear power stations in the various Member States have features in common and may give rise to problems beyond the national level. These problems should be studied in the appropriate framework.

⁽²⁾ OJ No C 28, 9. 2. 1976, p. 12.

CHAPTER 6

MEASURES RELATING TO CERTAIN PRODUCTS

76. As stated in the 1973 action programme, 'the protection of man and his environment calls for special attention to be paid to products the use of which may lead to harmful consequences for man or the environment'.

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

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

78. With more particular regard to the monitoring of new chemical compounds likely to have an adverse effect on man and the environment, the Commission has submitted a proposal for a Directive on this subject to the Council on 21 September 1976 ⁽¹⁾.

⁽¹⁾ Proposal for a Council Directive making a sixth amendment to the Directive of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances (OJ No C 260, 5. 11. 1976, p. 4).

79. A close scrutiny, at Community level, of the impact of chemical compounds on the environment is also necessary. In recent years, the authorities have indeed been increasingly faced with difficulties due to the use of existing chemical compounds (e.g. PCBs, VCMs, fluorocarbons and mercury compounds), the environmental impact of which had not been, or had not been sufficiently, highlighted previously.

80. Consequently, there should be a systematic review, on the basis of toxicity, bio-accumulation and persistence criteria, of the specifications and manner of use of certain chemical compounds meeting those criteria, having regard to:

- the better scientific understanding of ecotoxicity acquired since they were first put on the market;
- 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 with the assistance of a committee of national experts.

CHAPTER 7

MONITORING AND ASSESSMENT

81. A large number of Community environment Directives provide for the exchange of monitoring data or lay down requirements with regard to the monitoring of the levels of pollution in various situations. Future proposals will no doubt contain further such requirements. While each Directive normally sets out its own procedures for monitoring and adaptation to technical progress, the Commission believes that it is also necessary to develop a coherent, overall approach, which will enable them to assess the totality of monitoring requirements and data exchanges laid down in all Directives.

82. Such an approach to monitoring and assessment would have several objectives, in particular to ensure as far as possible that:

- the requirements set out in one Directive do

not conflict in any way with those deriving from other Directives;

- the knowledge collected under different Directives is combined to form a consistent whole;
- the data to be supplied by the Member States are comparable, taking due account of the diversity and complexity of the various administrative structures and information networks;
- monitoring requirements laid down in future environment Directives are consistent with and complement those already existing.

83. The Commission will initiate the development of this overall approach to monitoring and assessment in consultation as appropriate with national experts.

TITLE III

NON-DAMAGING USE AND RATIONAL MANAGEMENT OF LAND,
THE ENVIRONMENT AND NATURAL RESOURCES

CHAPTER 1

NON-DAMAGING USE AND RATIONAL MANAGEMENT OF LAND

Introduction

84. The establishment and operation of the common market bring into sharper focus a number of problems in land management, which are already making themselves felt at national and regional level, namely:

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

85. Free movement of people, products and capital, structural change (especially in farming), rapid technological, economic or sociological change, and particularly the industrial and agricultural production, and rapid extension of transport infrastructures have firstly caused or intensified regional imbalances between urban and rural areas, and secondly have led to intensive economic exploitation of land — both rural and urban. In certain areas of the Community unused land and agricultural and forestry land, which may be considered to be a natural resource, are becoming increasingly scarce.

86. These questions are extremely complex since they are at the hub of policies for the siting of industries, for the development of the least prosperous regions and for the control of urban development, and of transport and agricultural policies, to mention only the most important of them. In these fields public action remains to a greater or lesser extent the responsibility of the relevant national authorities. Nevertheless there seems to be good reason to examine at Community level the aspects which directly concern the environment and to plan certain measures at that level.

87. Part II, Title II, Chapters 1 and 3 of the 1973 action programme called for a number of studies and other schemes in this field at Community level.

Furthermore, the Council on 7 November 1974 requested 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 determined.

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

- the development of an ecological mapping system combining environmental data with land management;
- endeavours to solve certain environmental problems arising either from intensive farming, or from the abandonment or increasing scarcity of agricultural and forestry land;
- the management of urban areas, and coastal and mountainous regions.

Section 1

DEVELOPMENT OF AN ECOLOGICAL
MAPPING SYSTEM

89. The Commission undertook to comply with the request made by the Council on 7 November 1974, as referred to in paragraph 87, and began the necessary preparatory work immediately.

90. This work is aimed at developing a method, relying chiefly on cartography, which will enable environment-related data and values to be introduced into the physical organization of space usage and provide a means of matching economic and social demand to ecological supplies.

91. The new method should enable the environment to be described rationally and its very great diversity to be expressed in terms of levels of suit-

ability for a range of uses, proceeding from scientific description of the basic characteristics of the environment to its significance in terms of physical planning and to environmental policy.

This method, used at the appropriate level, should make an important contribution to the preventive action by the authorities of environment-related data, including pollution, in decision-making processes linked with physical planning and environmental policy (see environmental impact assessment — Title IV, Chapter 1).

It should assist in the planning of specific schemes of action at Community level regarding certain regions, in particular those receiving Community aid (regional, sectoral and agricultural aid, etc.).

92. This project must be conducted under a programme spread over a number of years and be based on close cooperation between the 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 be carried out in four phases:

- In phase one, one or more pilot methods will be devised, based particularly on previous work in this field in the Member States. The pilot method thus developed will then be used by the Commission, in collaboration with the Member States concerned, in case studies to be carried out in a number of Member States. The pilot method — improved as necessary following its use in the case studies — will then be put to the Council for approval.
- If the Council approves the proposed method, in phase two procedures for the application of the resulting method by the Member States should be worked out, to enable the territory of those States to be progressively covered. The Commission will present a proposal on the subject to the Council.
- In phase three, national records will be built up and analyzed comparatively at Community level and the results will be submitted to the Council by the Commission.
- In phase four, the Commission will, if necessary, submit to the Council appropriate proposals emerging from examination of the resulting

maps, with the aim of applying the mapping method as effectively as possible in the Community and in the Member States.

Section 2

MEASURES RELATING TO RURAL AREAS AND FORESTRY

A. Policy guidelines and principles

93. 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 and forestry also have 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 both the directions implied by the above statements, i.e. will be designed on the one hand to accentuate the good effects of agriculture and forestry on the environment and on the other to reduce its adverse ones.

94. To bring this about:

- the Commission will act to improve understanding of the environmental impact of farming and forestry. This will be a continuation of earlier endeavours to identify the effects on the various 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 towards establishing their relative importance;
- the Commission, working on the basis of the results produced, will draft and propose those measures which are best suited to accentuating the beneficial effects of farming and forestry on the environment (e.g. methods of preventing soil erosion) or, conversely, to reducing adverse effects (e.g. reduction of leaching of fertilizers from cultivated soil, or reduction of the secondary effects of the use of pesticides on flora and fauna).

95. Under the 1973 action programme 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:

- the use of pesticides and the feasibility of replacing conventional chemical controls with biological and integrated controls in the protection of growing crops and timber;
- the treatment of effluents from intensive stock rearing.

96. In the remainder of the programme these studies 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 1973 action programme in connection with the quality of foodstuffs, with particular reference to projects on the contamination of foodstuffs by dangerous substances.

B. Measures relating to pesticides

97. With regard to pesticides, it should be possible to reduce nuisances by the following measures:

- prohibition or restriction of the use of dangerous substances;
- testing of pesticides before marketing;
- improvement of application methods and appliances in order to reduce application densities;
- development of alternative methods, to replace chemical pest control;
- monitoring residues of pesticides in foodstuffs.

98. In this connection:

- (a) The Commission submitted to the Council a proposal for a Directive on 5 August 1976, prohibiting the placing on the market and the use of plant protection products containing certain active substances ⁽¹⁾;

⁽¹⁾ OJ No C 200, 26. 8. 1976, p. 10.

- (b) the Commission submitted to the Council a proposal for a Directive on 4 August 1976, concerning the placing of EEC-accepted plant-protection products on the market ⁽²⁾. If the Council approves this proposal for a Directive, 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 adverse effect on the environment, including wildlife;

- (c) the Commission will have an investigation made into the feasibility of reducing, through design improvements to applicators, wastage of active ingredients in the use of plant-protection products. 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 health products, incentives for the development of new equipment and treatment apparatus, especially spraying equipment) with a view to reducing excess usage;

- (d) the Commission will submit to the Council proposals for promoting the development of biological and integrated controls for the protection of 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, including forestry.

C. Measures relating to intensive stock-rearing

99. With regard to intensive stock-rearing, investigation of the ecological effects of modern techniques in agriculture identified three sources of nuisance: wastes (chiefly droppings), smells and noise.

100. The Commission found that a new body of knowledge was needed for solving these problems, and was thus led to adopt Council Decision 75/460/EEC of 22 July 1975 adopting common research programmes and programmes for the coordination of research in the field of animal leucosis, livestock effluents, beef production and

⁽²⁾ OJ No C 212, 9. 9. 1976, p. 3.

plant protein production ⁽¹⁾; under the research proposal on livestock effluents the Commission and Member States are linked for a period of four years from 1975.

101. The droppings of large numbers of animals on small areas are such an important problem that the Commission had research conducted under the 1973 action programme to establish whether spreading, which can be regarded as recycling of the organic matter and minerals to cultivated ground, could constitute a satisfactory solution.

102. In this connection it should be possible to reduce nuisances 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 during their spreading.

103. The Commission will take the following steps in order to attain these objectives:

- (a) it will submit to the Council appropriate proposals relating to the reduction of nuisances arising from intensive stock-rearing (see Part II, Title II, Chapter 1, B (d) of the 1973 action programme):
- regarding *inter alia* mandatory technical requirements for waste collection and storage equipment, and
 - regarding limits on the spreading of wastes on cultivated land;
- (b) it will study health requirements and permissible maximum levels for undesirable substances in stock-raising wastes intended for spreading, as well as those relating to other forms of organic wastes given the same treatment. Depending on the results, the Commission will submit to the Council appropriate proposals where this is necessary.

D. Measures relating to mineral fertilizers

104. As regards the use of mineral fertilizers, the study of 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. It should be noted however, that basically the problem arising is not unlike that of effluents from stock-rearing. In both cases the point is to prevent carry-over into water of certain substances which may prove ecologically noxious, particularly nitrogen and phosphorus. Consequently, the effects of spreading stock-rearing effluents as manure and of using mineral fertilizers are different aspects of the same problem.

105. 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 intensive use of mineral fertilizers and the part it plays in crop yield; this analysis will also cover certain potential effects on soil and food-stuffs of the intensive use of fertilizers.

106. The Commission will therefore study the following points:

- in what conditions certain surface waters can tolerate only a limited input of fertilizing elements if the quality objectives relating to their use are to be observed;
- under what conditions certain underground waters can tolerate only a limited input of fertilizing elements, if the quality objectives relating to their use are to be observed;
- the impact on land use (nature of crops, methods of cultivation, intensity of production) of measures designed to limit leaching of substances from fertilizers.

107. Following these studies, the Commission will submit proposals to the Council.

E. Measures relating to rural land use

108. Owing to the large number of interactions in ecosystems where agricultural and forestry activities are carried on, special attention must be directed to the ecological consequences of the use of current methods of cultivation and the establishment of new crop systems.

109. Basically this approach has the advantage of supplying an overall assessment of the consequences of land being occupied by certain types of agricultural and forestry activity, but it has the corresponding drawback of a study embracing a large number of factors.

⁽¹⁾ OJ No L 199, 30. 7. 1975, p. 37.

110. Without abandoning the idea of a comprehensive study, the Commission observed a need to draw up an ecological balance-sheet of the changes to the natural environment resulting from the introduction of current methods of cultivation.

111. The Commission:

- will study the ecological consequences of land-use development ⁽¹⁾: re-parcelling, alteration of land structures, draining wet areas, straightening watercourses;
- will have a number of small regions of the Community analyzed in more detail;
- will study the various possible alternative uses for less-favoured agricultural areas and areas no longer used for agricultural production, with due consideration for the ecological importance of such areas.

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

F. Forests

113. Forests are of particular importance in the purpose they serve in the ecological balance, a fact which society is coming to recognize more and more.

Taking the Commission's study 'on forestry problems and their implications for the environment' as a starting point, further research should be done on the size and composition of forests. The chief functions of forests in the various types of region should be studied, together with the best ways of reconciling them.

More specifically as regards the environmental functions, particular attention should be paid to the following:

- the biological wealth of forests and their balancing function in the environment;

⁽¹⁾ The Commission will take due account in its studies of the work of other international organizations, especially the Council of Europe.

- identification of forest areas which have remained closest to the natural state and which should, therefore, be given particular protection;

- the impact of economic and social (tourist and recreational) development on forest areas, in particular on their natural and aesthetic characteristics.

114. As regards the encouragement of afforestation schemes intended to improve agricultural structures, the Commission forwarded a proposal for a Directive on 26 February 1974 ⁽²⁾. This proposal is still under discussion within the departments of the Council.

Section 3

URBAN AND RURAL AREAS, AND COASTAL AND MOUNTAIN REGIONS

115. 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 the development of a megalopolis in North-Western Europe, and environmental problems peculiar to city centres and coastal areas. The Commission has conducted studies on these matters and on the urban planning policies of Member States with a view to identifying aspects in the case of which solutions at Community level would be advisable; it has also conducted regional development studies.

116. The Commission will continue with these tasks and — after consulting a panel of national experts — will put appropriate proposals to the Council.

117. The measures and schemes referred to in Title IV, Chapter 1 and Title III, Chapter 1, Section 1 of this action programme will greatly influence the policies and decisions of bodies dealing with urban planning and land management.

118. The Commission will also undertake the schemes and take the measures described in this section, taking due account of the work of international organizations, especially the Council of Europe.

⁽²⁾ OJ No C 44, 19. 4. 1974, p. 14.

A. Conference on urban problems

119. In 1978 the Commission, in cooperation with the Conseil des Communes d'Europe and the International Union of Local Authorities, is to hold a conference of elected officers and appointed officials of local and regional authorities from all Member States. Papers and discussions will be based on the studies referred to in paragraph 115.

B. Community research programme on urbanism (town planning)

120. The Commission — with the aid of a study group of the Scientific and Technical Research Committee (CREST) — will present to the Council a proposal for a Decision concerning a research programme relating to the environmental implications of the development of large conurbations. This programme will be implemented as a concerted action, involving the coordination of a number of research activities in the field of urban development conducted by the Member States. The aim of this two-year programme is to produce a comparative analysis of the causes, dynamics and consequences of the development of large conurbations in the Community.

121. 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,
- assessment of policies in this field (consequences of allowing the factors involved to operate unchecked or of deliberate measures), for example the conservation of open spaces to maintain an ecological balance and the creation or conservation of recreation areas in large conurbations.

C. Conservation of our natural and cultural heritage

122. 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. As a result of change, particularly in the way we live and despite great efforts by the authorities in all Member States,

this heritage is at present seriously threatened with deterioration, and even destruction. This applies quite as much to the urban as to the rural environment.

123. On 13 May 1974 the European Parliament passed a resolution on measures to protect the European cultural heritage ⁽¹⁾ and recommended Community action in this field, in particular the establishment of a European Fund for monuments and sites.

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

- (a) 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 under optimum technological and financial conditions;
- (b) a 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 improve results.

124. With due regard for work carried out elsewhere, and with the help of national experts, the Commission will review the feasibility and advisability of such contributions to the conservation of the Community's architectural and natural heritage. If this review indicates the need, the Commission will put appropriate proposals to the Council.

125. The open spaces and landscapes of the Community are continuously subject to pressures arising from urban growth, road construction, modern farming methods and recreational use. The intensification of these activities seriously threatens certain types of rural landscape and certain biotopes which are characteristic of Europe.

126. The measures relating to rural areas described in Section 2 of this chapter, particularly those relating to current methods of cultivation, will help to conserve the rural heritage. In addition, a study of the protection of characteristic types of landscape and biotopes in the Community has been completed. The Commission will use

⁽¹⁾ OJ No C 62, 30. 5. 1974, p. 5.

its findings for different actions related to the subject and also to participate in the work of the international organizations, particularly that of the Council of Europe.

D. Mountain regions

127. Council Directive 75/268/EEC of 28 April 1975 on mountain and hill farming and farming in certain less-favoured areas ⁽¹⁾ determined *inter alia* the mountain regions of the Community, and at the same time specified certain social and economic prerequisites for the conservation of the natural environment of those regions.

128. It is possible that the measures provided for in Directive 75/268/EEC will not directly solve the problems involved in conserving the natural environment of mountain regions. These problems require a more detailed and specific analysis which will take particular account of the following:

- physical fragility (soil and climate) which makes these regions particularly subject to erosion and various natural disasters (avalanches, flooding of streams, landslides, rock falls, etc.); such erosion can be caused by careless use of these regions;
- ecological complexity and fragility of the ecosystems, which ought to receive general protection as a matter of principle;
- need to preserve the countryside and the natural, semi-natural and cultivated environments;

⁽¹⁾ OJ No L 128, 19. 5. 1975, p. 1.

- the balance to be sought between the natural uses of these regions and their use for tourism.

129. The Commission will consider the numerous aspects of the problems connected with mountain regions and will if necessary submit proposals to the Council.

E. Coastal regions

130. Work on the development and ecological management of European coastal regions carried out by the Commission under the 1973 action programme 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.

131. 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 conflicts involving different activities and to clashes of interest.

132. The work referred to in paragraph 130 has resulted in the formulation of principles for the integrated development of coastal regions which were given prominence in the Council of Europe recommendation of 26 October 1973, and the OECD recommendation of 12 October 1976. Every effort should now be made to ensure that these principles are suitably implemented at Community level.

133. The Commission will submit appropriate proposals to the Council.

CHAPTER 2

PROTECTION OF FLORA AND FAUNA

Introduction

134. 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 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 protection and conservation of

our natural heritage must therefore deal with all aspects and not solely individual species of plants and animals.

There are also ethical reasons for protecting as much flora and fauna as possible.

135. The wild flora and fauna perform many functions including:

- biological control of the development of undesirable organisms;
- protection of the soil against erosion, and regulation of aquatic systems;
- genetic reserve for future evolution and adaptation;
- early warning of certain types of pollution (bio-indicators);
- laboratory for scientific research and the teaching of the natural sciences (biology, ecology, ethology, etc.);
- sources of recreation and leisure activities;
- source of economic benefits.

136. 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.

137. The activities described in this chapter concern these two ways of protecting wild flora and fauna and form part of an integrated approach ⁽¹⁾.

138. To implement these projects, the Commission will draw largely on the work of international organizations, especially the Council of Europe.

It should be remembered that a result of the Second Conference of Ministers of the Environment of the Council of Europe held in Brussels on 23 and 24 March 1976 was that the Council of Europe

⁽¹⁾ The activities described in this chapter are to be examined in close conjunction with certain activities referred to in Chapter I, and concern the ecological mapping system (Section 1), the ecological consequences of draining wet areas and straightening watercourses (Section 2, first indent of paragraph 111), the conservation of our natural and cultural heritage (Section 3, C) and the coastal regions (Section 3, E).

would examine the possibility of creating a legal instrument to protect wildlife and to preserve biotopes. The Commission is participating in the preparation of such an instrument. And in so far as action is necessary at Community level in order to ensure that the instrument is satisfactorily applied, the Commission will submit appropriate proposals to the Council.

A. Protection of wild fauna

139. 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 or becoming extinct. These studies have shown that the problems transcend national frontiers and that any solution requires initiatives at both international and Community level.

140. One such measure is the proposal for a Council Directive on bird conservation which the Commission submitted to the Council on 20 December 1976 ⁽²⁾. This measure is in particular response to the wishes of the European Parliament as expressed in its resolution of 21 February 1975 ⁽³⁾.

(a) *International trade in endangered species of wild flora and fauna*

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

142. The Washington Convention on international trade in endangered species of wild flora and fauna meets this objective ⁽⁴⁾.

Because of the commercial nature of the Convention and the obstacles to the free movement of goods within the Community which it may well cause by being applied in different ways in the Member States, the Commission will submit appropriate proposals to the Council.

⁽²⁾ OJ No C 24, 1. 2. 1977, p. 3.

⁽³⁾ OJ No C 60, 13. 3. 1975, p. 51.

⁽⁴⁾ As at 1 February 1977, all the Member States had signed this Convention and two of them had ratified it.

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 appropriate proposals to the Council as soon as possible.

(b) *Protection of migratory species*

143. A second field where measures are under way at international level and in which the Commission is participating concerns the preservation of migratory species, for which a draft Convention is being prepared in the context of the United Nations Environment Programme (UNEP). This project is based on the principle that States sharing migratory species should take joint preservation and administrative measures appropriate to the situation of these species, depending on whether they are species becoming extinct, species threatened with extinction or species falling into neither category.

144. When specific agreements for each species or group of species are concluded the Commission will in due course submit measures to the Council on those migratory species of concern to the Community enabling the agreements to be satisfactorily applied at Community level.

(c) *Protection of marine and freshwater fauna*

Marine species

145. The continuing decline in the populations of certain species of salt-water fish and mammals, largely due to overfishing, 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 of security of market supplies.

146. Accordingly, it was expressly provided in Article 5 of Council Regulation (EEC) No 2141/70 of 20 October 1970 laying down a common structural policy for the fishing industry⁽¹⁾ that the Council, acting on a proposal from the Commission, could take requisite measures for the conservation of marine resources if the circumstances so demanded.

147. In implementation of this measure, the Commission forwarded to the Council at the end of

1975 a proposal for a Regulation⁽²⁾ for restructuring the non-industrial inshore fishing industry in terms of the scientifically recommended level of catch and for avoiding over-exploitation.

148. Furthermore, in anticipation of the difficulties which will doubtless arise from the new international maritime law currently being discussed by the Third United Nations Conference on the law of the sea, the Commission has submitted three communications to the Council on 4 December 1974, 18 February 1976 and 23 September 1976.

In these communications 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 waters, economic zones, international zones).

149. The Commission will investigate ways of improving the protection of marine mammals, particularly species threatened with extermination.

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

Freshwater species

151. In this sector, the Commission will concentrate on three items:

- the protection of biotopes against pollution;
- questions connected with the health aspects of procedures for re-introducing or maintaining some species of fish;
- problems concerning the re-introduction and preservation of migratory species, particularly salmon.

(d) *Hunting laws*

152. Although hunting can play a positive role in maintaining the ecological balance, requirements relating to the conservation of game animal

⁽¹⁾ OJ No L 236, 27. 10. 1970, p. 1.

⁽²⁾ OJ No C 6, 10. 1. 1976, p. 2.

species — and in particular the maintenance of their numbers at an ecologically satisfactory level — go far beyond the rules governing hunting and their observance.

153. The Commission will examine the various hunting laws in respect of which it might be necessary to take Community action in order to ensure the conservation of animal species which help to preserve the ecological balance, in particular endangered species. The Commission will forward appropriate proposals to the Council.

(e) *Protection of wetlands of international importance*

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

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

156. The possibility of setting up international machinery for the administration and conservation of these biotopes was first examined in 1962 at the International Conference on marshlands (MAR Conference). On 2 February 1971, the International Conference at Ramsar in Iran adopted a Convention on the conservation of wetlands of international importance, especially the areas which serve as habitats and staging-points for migratory birds.

157. The accession of as many Member States as possible to the Ramsar Convention would be an initial step towards the protection of wetlands ⁽¹⁾. Nevertheless, this must be backed up by other initiatives at national and, if necessary, Community level.

158. Taking due account of work carried out in the Council of Europe, and on the basis of national inventories, the Commission will submit to the Council a coherent inventory of Community wetlands which it thinks need protection either be-

cause 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.

159. When it submits this inventory, the Commission will, if necessary, after consultation with national experts, and taking due account of work carried out both at Community level and within international organizations such as the Council of Europe, make appropriate proposals to the Council, particularly as regards the protection and management of certain wetlands and contiguous zones.

B. Protection of wild flora

160. Under the 1973 action programme, the Commission carried out studies on wildlife protection but these were confined to animal species that were endangered or becoming extinct. The situation regarding many plant species remains alarming whilst attracting less attention.

161. An important stage in their protection will be marked by the accession of as many Member States as possible to the Washington and Ramsar Conventions and the accession of the Community to the Washington Convention. The Commission will also study other types of action which, if implemented on a Community-wide basis, could contribute to the protection of wild flora.

C. Conservation of genetic resources

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

The various projects described in this chapter are all designed to preserve genetic resources as such.

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

164. Some Member States and some non-member countries have already built up collections of spe-

⁽¹⁾ See in this connection Commission recommendation 75/66/EEC of 20 December 1974 to the Member States (OJ No L 21, 28. 1. 1975, p. 24). As at 1 February 1977, this Convention had been signed by six Member States, two of which had ratified it.

cies and set up gene banks. The development and rational management of these projects require a special effort of coordination.

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

165. Given the ecological and economic importance of conserving genetic resources of domestic and wild animal species and cultivated and wild plants, for example 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, as far as the Community is connected, in the creation of a world network of gene banks (FAO-IBPGR — International Board for Plant Genetic Resources).

166. The Commission will take any initiative which proves necessary at Community level, for example under the common agricultural policy.

CHAPTER 3

PROTECTION AND MANAGEMENT OF NATURAL RESOURCES CAMPAIGN AGAINST WASTAGE

Section 1

WATER RESOURCES

167. The physical interdependence of the various media which make up the aquatic ecosystem, such as fresh surface waters, underground waters and sea waters, and, of equal and related importance, the interdependence 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 than in arid zones. Nowadays, however, with economic growth, urban concentration and the degradation in quality of the available resources, a need for much stricter planning and control is now becoming felt throughout the Community. In certain areas of the Community, the lack of water is such as to hinder general development, especially of agriculture and industry, and may even be severe enough to create conditions of chronic underdevelopment.

The scope of such planning and management of resources has broadened and demands not only consideration of numerous objectives such as the regularization and maintenance of a minimum rate of flow and the successive re-use of water but also a deeper study of the various solutions for achieving specific economic, social and environmental objectives.

It is necessary in planning to examine all the different aspects very carefully. Ecological effects should be considered as important as questions of economic and regional development.

168. Action to tackle the problems of availability of water resources has already been provided for in Part II, Title II, Chapter 2 of the 1973 action programme. These problems were also the subject of a Council Decision taken at its 311th meeting held in Brussels on 7 November 1974. On that occasion, the Council, after taking note of an Italian report and of a communication from the Commission, requested 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 identification and definition of the aims to be pursued and action to be undertaken'.

169. In the light of this Decision, 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 foreseeable requirements for many years to come. 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.

170. Under this environmental action programme measures should be taken at the appropriate level in connection with the management of water resources. These measures should be so formulated that they:

- satisfy environmental quality and economic growth;
- take account of the physical interdependence of the various environments, which cannot be managed independently;
- do not dissociate problems of quantity and quality.

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

171. The principal objectives of the studies to be carried out by the Commission are:

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

To this end, the Commission will:

- carry out a comparison of the economic, legal and technical means which can be used to combat wastage of water and to increase the recycling and re-use thereof;
- mount a campaign to promote greater consumer awareness in this field;
- 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;
- study how to develop multi-purpose water schemes involving redirection of the flow of water within the catchment area to guarantee supplies for abstraction, successive use, flood control, the stabilization of water levels and the improvement of water quality;
- carry out studies on the drafting of an outline programme of hydrological develop-

ment and environmental improvement in the framework of the Community's agricultural structural policy;

- 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;
 - take into consideration the problem of supplying small islands with water;
 - study ways of reducing evapotranspiration (particularly through the wider use of certain crops), especially in those areas where there is high level of demand during periods of low seasonal rainfall;
- (b) to protect all water and especially high-quality sources; this involves:
- gradually restricting the use of certain underground waters to human consumption as far as compatible with a rational management of resources;
 - protecting the quality of groundwater and its abstraction points against pollution and against any ecologically unacceptable deterioration in the groundwater system;
 - building up groundwater levels by artificial or natural means to increase capacity;
 - combating water pollution in general (see Title II, Chapter 2);
- (c) to improve the presentation and comparability of statements of available water resources and foreseeable water requirements.

172. Furthermore the Commission will organize exchanges of information in a working party of national experts on methods of national or regional water management and, in particular, on:

- the drawing up and implementation of national or regional plans;
- the setting up of administrative bodies to deal with water management;
- the use of economic measures;
- the use of mathematical models;
- the use of physical planning models.

173. In the light of the results of both the studies referred to in paragraph 171 and the exchanges of information referred to in paragraph 172 the

Commission will report to the Council on the possibilities for improving water supplies in the Community ⁽¹⁾.

Section 2

WASTE MANAGEMENT BY A COMPREHENSIVE POLICY OF PREVENTION, RECLAMATION AND DISPOSAL

174. The quantity of waste of every type generated each year in the Community is estimated at about 1 700 million tonnes, i.e. household refuse at about 90 million tonnes, industrial waste at about 115 million tonnes, sewage sludge at about 200 million tonnes, agricultural waste at about 950 million tonnes and waste from the extractive industries at about 300 million tonnes. The annual increase in the quantity of waste is estimated at about 5%. The accumulation of waste is often accompanied by air and water pollution and substantial ill-effects.

175. Tipping remains one of the most widely used means of disposal and, if uncontrolled, involves serious risks to human beings and environment owing to the presence in many kinds of waste of toxic and dangerous substances. Furthermore, tipping may well increase in quantity as a result of anti-pollution measures to prevent disposal into running streams. In general, the full extent of tipping, which currently accounts for 70 to 80% of all waste, represents a loss of materials in so far as such waste could be re-used economically, quite apart from the environmental problems to which it may give rise.

176. 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 waste contains substances with a potential value which is difficult to calculate but certainly large; such substances include metals, glass, rubber, textiles, oil, plastics, certain chemical substances, etc.

177. For many years, and particularly since 1973, both industry and local authorities have made a substantial effort to recover such substances. However, only a proportion of them is at present being recovered.

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

- 60% for wood pulp and paper;
- 80 to 90% for iron and non-ferrous metals, in particular tin and zinc.

178. The protection of the environment against pollution, sound economic management of resources, the effort to reduce the Community's dependence on imported raw materials, the rational long-term management of natural resources which are either non-renewable or can be renewed only at a certain 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, who by his attitude and behaviour plays an important role in the generation of waste;
- 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 waste generated. Industry should also plan measures to extend the durability of its products in order to reduce the generation of waste;
- at local authorities, which are responsible for the collection and, where appropriate, the sorting of waste;
- at the national authorities, which can, for example by means of public procurement contracts, play an important role in increasing outlets for certain reclaimed substances and, more generally, can introduce overall policies for the rational use of raw materials.

⁽¹⁾ The Council recalled, in this connection, that at its 406th meeting on 9 September 1976, it had already shown itself in favour of the drawing up of a plan/programme for the development of water supplies.

⁽²⁾ See the Commission's communication to the Council of 5 February 1975 on Community supplies of raw materials.

179. All the Member States are aware of the need for action to improve the recovery of materials contained in waste.

In all the Member States bodies have been set up to study such recovery and to define priorities. In some cases specialized bodies have been established to carry out a number of specific projects.

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

- (a) to reduce pollution arising from the unorganized accumulation and unsuitable processing of waste;
- (b) 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 its Member States on external sources of supply and, in the long run, of the foreseeable depletion and resulting predictable rise in cost of certain materials;
- (c) to avoid distortions of competition and obstacles to trade which might arise from measures taken to deal with waste solely at national level (for example aid, dues and taxes, transfer of toxic waste from one State to another, or prohibition of such transfers);
- (d) 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.

181. The Community has already taken a number of decisions on the recovery and disposal of waste: Part II, Title I, Chapter 7 of the 1973 action programme laid down that the Commission would carry out a number of studies and activities 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, which has adopted them, Directive 75/442/EEC of 15 July

1975 on waste ⁽¹⁾, Directive 75/439/EEC of 16 June 1975 on the disposal of waste oils ⁽²⁾ and Directive 76/403/EEC of 6 April 1976 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls ⁽³⁾.

182. Directive 75/442/EEC on waste states in Article 3 that 'Member States shall take appropriate steps to encourage the prevention, recycling and processing of waste, the extraction of raw materials and possibly of energy therefrom and any other process for the re-use of waste', and that 'they shall inform the Commission in good time of any draft rules to such effect and, in particular, of any draft rules concerning:

- (a) the use of products which might be a source of technical difficulties as regards disposal or lead to excessive disposal costs;
- (b) the encouragement of:
 - the reduction in the quantities of certain waste,
 - the treatment of waste for its recycling and re-use,
 - the recovery of raw materials and/or the production of energy from certain waste;
- (c) the use of certain natural resources, including energy resources, in applications where they may be replaced by recovered materials.'

183. The Commission considers that the procedure provided for in the second paragraph of Article 3 of Directive 75/442/EEC is merely a preliminary 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 waste and, more generally to combat wastage of certain natural resources and energy.

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

The Council noted a Commission statement to this effect at its meeting on 15 July 1976.

⁽¹⁾ OJ No L 194, 25. 7. 1975, p. 39.

⁽²⁾ OJ No L 194, 25. 7. 1975, p. 23.

⁽³⁾ OJ No L 108, 26. 4. 1976, p. 41.

184. The Commission will continue to put into effect all the above Council Decisions. 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 or the environment.

A. Prevention of waste generation

185. While many industrialists and private persons are indeed already aware of the need to combat waste and conserve resources, the structure and unwieldiness of investment, product design and consumer habits often combine to hinder a greater awareness of this need and of the action to be taken as a result.

186. The aim of a waste management policy must be, with due allowance for economic and technical constraints, to avoid the generation of waste and to ensure that materials are used as efficiently as possible at every stage of manufacture and use. This will mean studying the possibility of using alternative materials instead of materials which are very rare or could eventually become so, and encouraging industry to design and manufacture products with 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 Committee on Waste Management, set up under Commission Decision 76/431/EEC⁽¹⁾.

B. Recycling and re-use of wastes

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

- (a) Instability of the market for secondary raw materials and inadequate and unreliable market outlets.

The demand for recycled substances is subject to short-term fluctuation according to the availability of primary raw materials and their cost. This leads 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. This situation presents problems for local authorities and industry.

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.

- (b) 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 and economic consequences of an excessive use of scarce resources.
- (c) Inadequacy of reclamation processes which cannot be made profitable without damaging the environment.
- (d) 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). The recovery of materials from household refuse is particularly difficult to organize.

188. In the face of the difficulties referred to in paragraph 187, public authorities should launch studies and take measures at the appropriate levels.

⁽¹⁾ OJ No L 115, 1. 5. 1976, p. 73.

189. On the basis of opinions delivered by the Committee on Waste Management and, for research and development, the work of the CREST Study Subcommittee Research and Development — Raw Materials, the Commission:

- (a) will launch the measures for which it is responsible under Directive 75/442/EEC on waste (in particular Articles 3 and 12) and Directive 75/439/EEC on waste oils (in particular Article 15);
- (b) will study ways and means of making the market for secondary raw materials more stable and more extensive;
- (c) will promote waste exchange by appropriate measures;
- (d) 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 waste;
- (e) will consider which research and development sectors require support and coordination at Community level;
- (f) will compare the various organizational systems which achieve the most efficient recovery of waste, especially of toxic and dangerous wastes;
- (g) will consider what measures the public authorities could take to improve, for example, by means of public procurement contracts, outlets for certain secondary raw materials;
- (h) will add its efforts to those of the Member States, though its information activities and its policy of consumer information and protection, to arouse public awareness of and encourage cooperation with the actions launched (e.g. by information campaigns on model initiatives taken by certain industries and local authorities, by awarding Community prizes, etc.);
- (i) will study means of improving by Community action the flow of information to industrialists on supply and demand for waste, on research carried out in this field in the Member States (see Title IV Chapter 3) on the risks connected with chemical products used in industry which sometimes reappear in waste (Data Bank ECDIN) and, more generally, on all information relating to waste and dangerous substances.

190. 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,
- certain chemical substances.

191. The Commission will present appropriate proposals to the Council in the light of its findings and of the opinion of the Committee on Waste Management.

C. Safe disposal of non-recovered waste

192. The Commission submitted to the Council on 28 July 1976 a proposal for a Directive on toxic and dangerous wastes ⁽¹⁾. As regards the disposal of waste, the Commission will continue the work referred to in Part II, Title I, Chapter 7 of the 1973 action programme and the action instituted by Directive 75/442/EEC and Directive 75/439/EEC.

193. 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, mining waste and so on).

194. Finally, it will study in the appropriate context the problems of surveillance of the storing of toxic products and third party liability and insurance problems connected with the processing of such products.

Radioactive waste — a special case

195. As stated in Title II, Chapter 5, Section 2, certain projects on the production of energy will be conducted by the Commission. The programme on management and storage of radioactive wastes which was adopted by Decision 75/406/Euratom ⁽²⁾ is also being carried out.

196. The Commission will also study the problems which arise when nuclear power stations are permanently closed down.

⁽¹⁾ OJ No C 194, 18. 9. 1976, p. 2.

⁽²⁾ OJ No L 178, 9. 7. 1975, p. 28.

197. For the most part the waste produced consists 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.

198. 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 re-used.

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.

199. As these problems are *sui generis*, earlier study and experience should be pooled to 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 the Community action to be launched.

200. Community actions could be carried out, with the help of national experts, along the following lines:

- (a) Estimation of the quantities of radioactive waste of different categories likely to be pro-

duced by the decommissioning of nuclear installations.

- (b) 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 determined on the basis of this study.
- (c) Comparison of available studies and past experience relating to decommissioning operations and the various possible methods for the final storage of radioactive waste resulting from these operations.
- (d) Identification of certain guiding principles in the design and operation of nuclear plant with a view to simplifying their subsequent decommissioning.
- (e) Identification of guiding principles in the decommissioning of nuclear plant which could form the initial elements of a Community policy in this field.

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

Section 3

ENVIRONMENTAL PROBLEMS CAUSED BY THE DEPLETION OF CERTAIN NATURAL RESOURCES

202. 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 1973 action programme ⁽¹⁾.

⁽¹⁾ The Commission has already launched studies on metals of the platinum group, mercury, fluorine, phosphates and chromium. CREST studies will also contribute to this work.

TITLE IV

GENERAL ACTION TO PROTECT AND IMPROVE THE ENVIRONMENT

CHAPTER 1

ENVIRONMENTAL IMPACT ASSESSMENT

203. One of the essential principles of the Community environment policy laid down in the 1973 action programme is the need for a preventive policy. 'The best environment policy' says the pro-

gramme 'consists in preventing the creation of pollution or nuisances at source, rather than subsequently trying to counteract their effects.' It continues: 'Effects on the environment should be

taken into account at the earliest possible stage in all the technical planning and decision-making processes. 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.'

204. It should also be recalled that when adopting the 1973 action programme, the Council noted the determination of the Member States to ensure that the present quality of the various environmental areas, taking into account the Community regions as a whole, would not deteriorate, in view of the often irreversible or practically irreversible nature of some pollution. The Commission will continue the studies it has begun on ways and means of making this approach a reality.

205. Similarly, in pursuing such a preventive policy, one of the objectives adopted by the Council is to ensure 'that more account is taken of environmental aspects in town planning and land use'.

206. There is a considerable body of current laws, regulations and administrative provisions, and much current administrative practice in the Member States, some of it long standing, enabling account to be taken to some extent of environmental impact in one sector or another. Furthermore, in parallel with a practice which originated in the United States and in other industrialized countries, certain Member States have introduced or given consideration to specific provisions under which systematic analysis of the environmental impact of certain plans and projects becomes compulsory.

207. The application at the appropriate administrative levels of procedures for assessing environmental impact meets the need to implement the objectives and principles laid down in the 1973 action programme.

208. In order to determine whether and to what extent the regulations of the Member States need to be harmonized, and whether this is necessary at Community level, the Commission will undertake the necessary studies. It will examine how procedures for assessing impact on the environment might be applied in the Community and in the Member States, while taking due account of the administrative situations peculiar to the various Member States.

With the assistance of national experts, the Commission will examine the various relevant aspects with particular reference to those elements already contained in the existing regulations of the individual Member States (e.g. the scope of the procedures, how they are organized and made up, and the cost of the assessments).

209. The Commission will study the possible alternatives for each of the areas of work mentioned above and weigh up the advantages and disadvantages which each presents. In drawing up its proposals, the Commission will do its utmost to ensure that the proposed procedures do not lead to any unwarranted delays in investment programmes, and do not overburden the administrative planning and authorization procedures.

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

CHAPTER 2

ECONOMIC ASPECTS

A. Introduction.

210. The protection and improvement of the environment (open space, surroundings and natural resources considered as integral parts of the living environment) must be considered as essential factors in the organization and promotion of human progress (see the principles mentioned above). An environmental policy does not conflict with economic development. Indeed, the lack of such a policy may in itself place constraints on the develop-

ment of some economic activities. An environmental policy is a constant reminder that economic development cannot be made at the expense of the environment which shapes man's destiny, be it his natural surroundings or the living environment he creates for himself.

211. An environmental policy can therefore influence certain economic activities by placing certain constraints on them and introducing certain reason-

able and consistent structural changes. The need to ensure the renewal of depleted natural resources will also mean the creation of new economic activities and may be put to use by the authorities within the framework of their short-term economic policies.

Conversely, the economic and social implications of an environmental policy must be studied carefully and in so far as possible be taken into account in its implementation.

212. The cost of and benefits from the measures to protect and improve the environment must be assessed. Such an assessment should, however, take into account both the long-term effects of these measures and data of a social nature which may often be difficult to quantify.

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

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

(a) Specific proposals

213. The 1973 action programme includes the statements that 'the protection of the environment against pollution and its improvement by the taking into consideration of the quality of life in the decision-making machinery and production structures inevitably involves various kinds of expenditure', and that 'it is essential that the authorities make accurate assessments of the size of this expenditure in order to have a clear idea of what the economic, financial and social repercussions of proposed decisions are likely to be, and to adapt accordingly the procedures for implementing these decisions'.

214. While 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, a public body, local authority or for private individuals. The Commission will take account of the impact at microeconomic level of the various measures contemplated by costing the proposed measures, and, where relevant their effect on 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, public bodies, local authorities or private individuals concerned to bear these costs.

The Commission will also consider the effects which the proposed measures might have on international competition, development and employment.

215. However, when assessing the advantages of the proposals, comparison with the costs will not always be possible without attributing some particular interpretation and weighting to the advantages. First, improvement of the quality of the environment, which represents the beneficial effects of the measures taken, often cannot be assessed in monetary terms. This means that in such cases it is impossible to compare the benefits directly with the costs involved in implementing the measures; however, in these cases some cruder measure of output or benefit in more physical terms will often be possible and very valuable. Secondly, it is to be expected that the implementation of environmental measures will generally encourage industry to perfect less expensive anti-pollution techniques. This means that the cost of anti-pollution measures — which is measured on the basis of the state of advancement of the technique — will usually be over-estimated as compared with long-term costs.

(b) Methodological and statistical problems

216. The methodological work begun under the 1973 action programme must be continued so that a quantitative evaluation of the microeconomic and macroeconomic effect 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.

217. 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 as possible into new social statistics in the national accounting systems.

218. 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 already being used or being prepared by the Member States, and will examine the possibility of defining a common system of indicators for particular characteristics and for the general 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 devised by the Member States are compatible with each other and with the system of the United Nations.

The Commission will propose appropriate measures to the Council on the basis of the results of these studies.

(c) *Effectiveness of economic instruments*

219. The Commission will continue with the studies of the effectiveness of the economic instruments that can be employed in the fight against pollution which were begun under the 1973 action programme. In so doing, the Commission will examine the likely effects of the various alternative environmental

goals and instruments that are possible in order to evaluate their effectiveness in relation to the aims of this action programme and the functioning of the common market.

C. The 'polluter pays' principle

220. On 3 March 1975 the Council adopted recommendation 75/436/Euratom/ECSC/EEC regarding cost allocation and action by public authorities on environmental matters ⁽¹⁾ within the framework of the 1973 action programme. This recommendation describes the rules of practical application of the 'polluter pays' principle.

221. 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. Such aspects include, amongst others, elaborating on the provisions of recommendation 75/436/Euratom/ECSC/EEC as regards the harmonization of instruments, especially concerning the way in which the systems of charges operate. Another aspect is that of the application of the principle to polluters causing pollution which affects a territorial zone covering several States.

D. Promotion of measures to improve the environment

222. While the 1973 action programme laid particular stress on the reduction of pollution and nuisances, it also suggested a series of measures to improve the quality of the environment to which the 'polluter pays' principle as such does not apply to such measures.

These measures will have to be studied by the Commission for the purpose of assessing the advisability of adopting criteria for allocating the cost involved.

⁽¹⁾ OJ No L 194, 25. 7. 1975, p. 1.

CHAPTER 3

DISSEMINATION OF INFORMATION RELATING
TO ENVIRONMENTAL PROTECTION

223. 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 initia-

tives are relatively recent and the fact that many instances have been noted in which the requirements regarding information and the solutions envisaged for providing such information are the same in the various countries make it desirable and relatively

easy to broaden coordination at Community level.

224. 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 systems planned under the UNEP and other similar international systems. In this connection Council Decision 76/161/EEC of 8 December 1975 establishing a joint procedure for the setting up and constant updating of an inventory of sources of information on the environment in the Community ⁽¹⁾ is the first important stage in setting up such coordination. 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.

225. 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, the Commission will continue with the studies and activities provided for in Part II, Title I, Chapter 11 of the 1973 action programme.

The Commission will give priority to the following tasks:

(a) Inventory of information sources

226. Pursuant to the above Council Decision 76/161/EEC a preliminary version, on tape, of the inventory of sources of information on the environment in the Community (documentation services, 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 above-mentioned inventory;
- ensure that the Community makes a contribution to the International Referral System (IRS) implemented within the context of the UNEP.

The Commission will lastly submit to the Council appropriate proposals concerning possible participation by the Community, as a regional or sectoral focal point in the functioning of the IRS System.

⁽¹⁾ OJ No L 31, 5. 2. 1976, p. 8.

(b) Establishment of a coordinated body of information services

227. Pursuant to Council Decision 75/200/EEC of 18 March 1975 adopting an initial three-year plan of action in the field of scientific and technical information and documentation ⁽²⁾, the Euronet network will make available to users a varied body of automated data bases produced by the world's chief abstracting services (Chemical Abstracts, Biological Abstracts, etc.) or established within 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 will 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 make the best possible use of sources of information, whether computerized or not.

The studies will include:

- the exact specification 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 to be provided for or promoted, such as analysis and information;
- deciding what systems should be set up on a decentralized basis in order to facilitate access to the various services through the relevant national centres.

(c) Information system on environmental legislation

228. 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 compatible with the wider system planned to cover all Community law (CELEX) as well with the international

⁽²⁾ OJ No L 100, 21. 4. 1975, p. 18.

system now being set up by the International Union for the Conservation of Nature and Natural Resources in collaboration with UNEP.

(d) Analysis of the technology available to combat pollution

229. A study financed by the Commission has highlighted the difficulties involved in gathering and analyzing 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 advisable to abandon the idea of creating a European centre for analyzing information on such 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 application of this action programme and of other Council acts and in particular on the search for the 'best technical means available' in the context of the implementation of the Directive 76/464/EEC (third subparagraph of Article 6 (1)). The Commission will submit propo-

sals to the Council setting out practical arrangements for implementing such a specialized network.

(e) System of information on conferences

230. On the basis of the results of current pilot studies, the Commission will submit proposals to the Council concerning the possible establishment of a specialized information network covering congresses and conferences on the environment; these would include such systems now available in the Member States and would be linked with other such systems in some non-Community countries and at international level.

(f) Data bank on chemicals likely to contaminate the environment

231. The Commission will make an assessment, in collaboration with national experts, of the ECDIN pilot project, currently implemented under the research programme adopted in Decision 73/174/EEC (see paragraph 232 below) and which will be integrated into the IRS. On the basis of this assessment, it will consider how such a data bank can be set up and operated and if necessary will put a proposal to the Council concerning the introduction of such a system.

CHAPTER 4

RESEARCH PROJECTS CONCERNING THE PROTECTION OF THE ENVIRONMENT

The purpose of the research programme is to back up the Community action programme on the environment by means of direct and indirect actions.

232. The direct research activities pursued at the Ispra Joint Research Centre (JRC) are the subject of Decision 73/126/EEC ⁽¹⁾, Decision 73/174/EEC ⁽²⁾ adopting a research programme for the European Economic Community on the protection of the environment (direct project) and Decision 75/514/EEC ⁽³⁾. The discussions in question finished on 31 December 1976 and covered the following topics:

- analysis and monitoring (particularly development of a multidetection unit; studies on tele-detection and measurement of pollution; formation of a data bank for chemicals);

- spread and effect of pollutants (in particular studies of bio-indicators of water pollution, genetic toxicity and bio-telemetry of subacute toxic effects on laboratory animals);
- model and systems analysis of the process of eutrophication of an alpine lake and of atmospheric pollution;
- theoretical studies on thermal pollution and the purification of water by catalytic oxidation;
- optimum operation of the data bank concerning chemicals in the environment;
- laying down of criteria for the compatibility of new industrial products with the environment (environment label, assessment and technical tests);

⁽¹⁾ OJ No L 153, 9. 6. 1973, p. 11.

⁽²⁾ OJ No L 189, 11. 7. 1973, p. 30.

⁽³⁾ OJ No L 231, 2. 9. 1975, p. 19.

— study of the thermal balance in an urban system.

233. The Commission submitted to the Council on 11 May 1976 a proposal for a Joint Research Centre multiannual research programme (1977 to 1980); this proposal contained a project concerning the environment and resources.

234. On 18 June 1973 the Council adopted Decision 73/180/EEC adopting a European Economic Community research programme for the protection of the environment (indirect project) ⁽¹⁾. The programme in question was completed on 31 December 1975 and covered the following topics:

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

235. On 15 March 1976 the Council adopted Decision 76/311/EEC adopting a research programme (1976 to 1980) for the European Economic Com-

⁽¹⁾ OJ No L 189, 11. 7. 1973, p. 43.

munity in the environment field (indirect action) ⁽²⁾⁽³⁾. This programme was adopted for a period of five years from 1 January 1976 and covers the following areas:

- research aimed at the establishment of criteria (exposure-effect relationships) for pollutants and potentially toxic chemical products;
- research and development concerning environmental management and information, in particular concerning chemicals likely to contaminate the environment (ECDIN project);
- research and development concerning the reduction and prevention of pollution and nuisances including the implementation of 'actual' technologies;
- research and development concerning the protection and improvement of the natural environment.

⁽²⁾ OJ No L 74, 20. 3. 1976, p. 36.

⁽³⁾ The Council also adopted on 15 March 1976 a five-year research programme on radiation protection, the aim of which is 'to supplement, broaden and deepen the information necessary for an objective evaluation of the effects of and the dangers arising from ionizing radiations with regard to individuals and to plant, animal and human life'. 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 in the environment and its component elements by radioactive contaminants or by irradiation and to develop techniques to prevent the occurrence of such changes. (Decision 76/309/Euratom, OJ No L 74, 20. 3. 1976, p. 32).

CHAPTER 5

PROMOTION OF AWARENESS OF ENVIRONMENTAL PROBLEMS AND EDUCATION

236. 'The protection of the environment is a matter for all in the Community, who should therefore be made aware of its importance. The success of an environment policy presupposes that all categories of the population and all the social forces of the Community help to protect and improve the environment. This means that at all levels continuous and detailed educational activity should take place in order that the entire Community may become aware of the problem and assume its responsibilities in full toward the generations to come.' (See paragraph 21).

237. The Commission will continue with the effort it has been making since 1973 to establish

this important principle and will take into account the work being carried out in the relevant international organizations. It will therefore continue with the activities provided for in Part II, Title II, Chapter 6 of the 1973 action programme following the guidelines laid down in that chapter, particularly:

- periodically publishing reports on the state of the environment in the Community;
- preparing educational brochures for lecturers and primary and secondary school teachers and material suitable for use in primary school teaching;

- Community support for university activities;
- cooperating with national and European non-governmental organizations, such as the European Environmental Bureau.

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

(a) Popularized editions of reports

238. 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. ⁽¹⁾

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 deal with the large number of requests received, the Commission will henceforth publish popularized versions of these reports.

(b) Creation of a network for the exchange of information on experience gained in pilot primary schools

239. In support of the scheme already in hand to prepare educational brochures for primary and secondary school teachers and material suitable for use in primary school teaching, the Commission will set up a network for the exchange of information gained in pilot primary schools.

(c) Projects to promote participation by the general public in the protection and improvement of the environment

240. If the general public is to be made aware of environmental problems, a complete and objective body of information is absolutely essential.

By lending its support to the carrying out of certain projects, the Community will contribute to the efforts of the Member States to encourage the active involvement of their people in problems connected with protection and improvement of the environment. Such projects might include:

⁽¹⁾ The final reports on these studies are generally published by the Commission in the series 'Environment and the quality of life'.

- national projects involving the active participation of the population in recovery, recycling and other measures to conserve certain natural resources (e.g. waste and water management), particularly as the Community's contribution to the objectives 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.

(d) Specific information projects

241. Wherever Community action appears appropriate, the Community will implement specific projects in addition to its general activities in disseminating information and in arousing public awareness of the problems. During the period covered by the programme, specific projects will involve the following:

- by agreement with the postal authorities of the Member States, a series of European stamps representing various aspects of 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 occupational groups even more aware, particularly of the harmful effects of and more efficient methods for applying certain products used in the exercise of their occupations, the effects of certain occupational practices on the environment and, more generally, of what action can be taken to prevent certain types of damage to the environment or even to improve it, while at the same time achieving the same, or even higher, yield.

(e) Introduction of environment labels

242. Environment labels could be awarded by an appropriate body for products complying with certain criteria. The aim of such an approach

would be to encourage the consumer to buy products which give rise to minimum pollution and wastage in production and use (i.e., less polluting products, products consuming less energy and less non-renewable raw material in manufacture; products causing the least disposal problem; products containing more renewable raw materials), and to bring on to the market, in response to consumer demand, a large number of products complying with these criteria. This task is not one for the Community alone. However, the scale of the work to be done, the greater impact of a multi-national system and the obstacles which the existence of different national systems could put in the way of the smooth operation of the common market argue in favour of a Community approach to this problem.

With the assistance of the appropriate groups of national experts (such as the Committee on Waste Management 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 relevant systems, measures, projects, etc., already in being within and outside the Community; it will then analyze these data from the angles of technical feasibility and economic and social usefulness. On this basis it will examine the practicability 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 suitable proposals where required.

CHAPTER 6

EUROPEAN FOUNDATION FOR THE IMPROVEMENT OF LIVING AND WORKING CONDITIONS

243. Part II, Title II, Chapter 5 of the 1973 action programme provides for the creation of a European Foundation for the Improvement of Living and Working Conditions. This Foundation created by Council Regulation (EEC) No 1365/75 of 26 May 1975 ⁽¹⁾, located in Ireland, has since begun activity.

244. 'The aim of the Foundation is to contribute to the planning and establishment of better living and working conditions through action designed to increase and disseminate knowledge likely to assist this development.

245. With this aim in view, the task of the Foundation is to develop and to pursue ideas on the medium and long-term improvement of living and working conditions in the light of practical experience and to identify factors leading to change. The Foundation will take the relevant Community policies into account when carrying out its tasks. It will advise

the Community institutions on foreseeable objectives and guidelines by forwarding in particular scientific information and technical data.

246. It will deal more specifically with the following issues regarding the improvement of living and working conditions and endeavour to determine the priorities to be observed:

- man at work,
- organization of work and particularly job design
- problems peculiar to certain categories of workers,
- long-term aspects of improvement of the environment,
- distribution of human activities in space and time.'

247. The Commission will do all in its power to ensure that 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.

⁽¹⁾ OJ No L 139, 30. 5. 1975, p. 1.

CHAPTER 7

IMPROVEMENT OF THE WORKING ENVIRONMENT

248. Part II, Title II, Chapter 4 of the 1973 action programme contains certain projects designed to improve the working environment. A number of those projects are found in the Community's social action programme adopted in the Council resolution of 21 January 1974 ⁽¹⁾.

249. The Commission will continue to implement those projects which it has already begun and will also undertake new projects on the basis of the general guidelines contained in the chapter of the 1973 action programme referred to above, particularly as regards humanization of work.

⁽¹⁾ OJ No C 13, 12. 2. 1974, p. 1.

CHAPTER 8

MEASURES TO ENSURE COMPLIANCE
WITH ENVIRONMENTAL PROTECTION REGULATIONS

250. In the 1973 action programme stress was laid on the extent to which the effectiveness of joint action on the environment depended on both adequate application of Community measures and on effective and coordinated monitoring of the measures taken.

During the last three years the Commission has therefore 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.

251. The Commission will continue to implement the measures described in Part II, Title I, Chapter 8 of the 1973 action programme as regards the organization at Community level of exchanges of information on the monitoring carried out and on the 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.

252. The Commission will also examine whether there is a case for implementing a system for the reciprocal communication of information on pollution control data, as provided for in Part II, Title I, Chapter 3 of the 1973 action programme.

TITLE V

COMMUNITY ACTION AT INTERNATIONAL LEVEL

253. One of the objectives of this action programme is to seek common solutions to environment problems with States outside the Community, particularly in international organizations.

254. Furthermore, one of the principles of this policy states that 'the effectiveness of effort 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 'a global environmental policy is only possible on the basis of new, more efficient forms of international cooperation which take into

account both world ecological correlations and the interdependence of the economies of the world'.

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

CHAPTER 1

ACTION BY THE COMMUNITY AND ITS MEMBER STATES IN INTERNATIONAL BODIES AND ORGANIZATIONS, AND COOPERATION WITH NON-MEMBER COUNTRIES

256. The Community and its Member States will continue with the international action provided for in Part II, Title III of the 1973 action programme, and in particular with its action in international bodies and organizations such as the UNEP, the Economic Commission for Europe of the United Nations, the OECD, the Council of Europe, WHO, UNESCO, FAO, etc. In so doing, the Community will try to avoid unnecessary duplication by cooperating closely with the secretariats of the various organizations.

257. The Community will also, within the framework of its competence, continue to pursue its efforts as a party to international agreements concerning the environment, and in particular the fight against fresh and sea water pollution (see Title II, Chapter 2 of this programme).

258. 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 this connection, it should also be pointed out that the Commission and the Member States are kept informed, as laid out in the Information Agreement of 5 March 1973 ⁽¹⁾, of agreements concluded or to be concluded between certain Member States and non-member countries.

⁽¹⁾ OJ No C 9, 15. 3. 1973, p. 1.

CHAPTER 2

COOPERATION WITH DEVELOPING COUNTRIES ON ENVIRONMENTAL MATTERS

259. According to the principles of this action programme, 'an all-embracing environmental policy is possible only on the basis of new, more effective forms of international cooperation which take into account both ecological inter-relationships on a world scale and the interdependence of the world economy'. In view of such inter-relationships and interdependence, it will not be possible to ensure adequate protection of the environment to the extent necessary until such objectives are incorporated in the growth process not only of industrialized countries but also of developing countries as well as in relations in the context of economic cooperation and development.

260. In recent years, especially since the Stockholm Conference on the human environment, international fora, in particular the United Nations, have made repeated appeals for account to be taken in development and cooperation strategies of the necessity and the urgency of ensuring the preservation of ecological balance and of integrating environmental objectives.

The Stockholm Conference issued an appeal for such principles to be adopted in the field of cooperation with developing countries and in development plans concerning those countries.

At its meeting in April 1976 the Governing Council of the UNEP (United Nations Environment Programme) — in which the Communities play an active part — drew attention to the need to prepare, in cooperation with the international financing institutions, techniques and methods for evaluating the environmental aspects and the foreseeable consequences of development programmes and projects.

261. Through the close cooperation established by the Lomé Convention and its agreements with the Mediterranean countries, the Community is providing the developing countries with an increasing volume of aid designed to supplement their own efforts and based on proposals made by each of them in the light of their policies and their development priorities.

Against this background and on these bases, the Community will study the possibility of drawing these States' attention to environmental matters when contributing to the implementation of the projects and action programmes submitted to it. Moreover, it will devote the special attention to projects aimed at increasing the value of renewable local resources or at developing the technologies most suited to the specific requirements of these countries.

262. The Commission will study ways of providing these States with the available information on technical, legal and administrative experience and knowledge acquired by the Community in the matter of environment management, and of organizing exchanges of views on the subject, where required.

263. In accordance with the principles of the action programme, 'the Community and its Member States must take into account in their environment policy 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'. The Community and the Member States will, in particular through the harmonization and coordination of cooperation relations, continue their efforts to ensure that the adverse consequences referred to above are avoided.

In accordance with the above principle, which was included in the Declaration adopted at the Stockholm Conference, the Commission has participated in investigations carried out by the United Nations Conference on trade and development by supplying its evaluations of the foreseeable effects on the developing countries' trade of the measures contemplated under its action programme on the environment.