

## 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 19 October 1987

on the continuation and implementation of a European Community policy and action  
programme on the environment (1987-1992)

(87/C 328/01)

(This text replaces the one which appears in OJ No C 289, 29. 10. 1987, p. 3)

THE COUNCIL OF THE EUROPEAN COMMUNITIES  
AND THE REPRESENTATIVES OF THE GOVERN-  
MENTS 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 Community,

*Having regard to the draft* from the Commission,

*Having regard to the opinion* of the European Par-  
liament <sup>(1)</sup>,

*Having regard to the opinion* of the Economic and Social  
Committee <sup>(2)</sup>,

Whereas the Treaty establishing the European Economic  
Community, as amended by the Single European Act,  
provides for the development and implementation of a  
Community policy on the environment, and lays down  
the objectives and principles which should govern such  
policy;

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 <sup>(3)</sup> calls for the  
implementation of a European Communities programme  
of action on the environment; whereas the action  
programme was extended and supplemented for the  
period 1977 to 1986 by the resolutions of the Council  
and the Representatives of the Governments of the  
Member States, meeting within the Council, of 17 May  
1977 <sup>(4)</sup> and of 7 February 1983 <sup>(5)</sup>; whereas the  
programme of action is still valid and whereas it should  
be updated, further implemented and supplemented for  
the period 1987 to 1992 by new tasks which prove to be  
necessary;

Whereas it is necessary, in accordance with the Treaty as  
amended by the Single European Act, to avoid the  
adoption by the Member States of divergent measures  
likely to bring about economic and competition  
distortions in the common market;

Whereas the European Year of the Environment, which  
begins on 21 March 1987, offers a welcome opportunity  
of initiating the changes of attitude and promoting the  
action necessary to give practical effect to these  
perceptions;

<sup>(1)</sup> Opinion delivered on 14 May 1987 (not yet published in the  
Official Journal).

<sup>(2)</sup> Opinion delivered on 14 May 1987 (not yet published in the  
Official Journal).

<sup>(3)</sup> OJ No C 112, 20. 12. 1973, p. 1.

<sup>(4)</sup> OJ No C 139, 13. 6. 1977, p. 1.

<sup>(5)</sup> OJ No C 46, 17. 2. 1983, p. 1.

RECALLS that the Single European Act, which constitutes a new legal basis for Community policy on the environment, lays down that action by the Community relating to the environment shall have the following objectives:

- to preserve, protect and improve the quality of the environment,
- to contribute towards protecting human health,
- to ensure a prudent and rational utilization of natural resources;

RECALLS that the Single European Act lays down that:

- action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay,
- environmental protection requirements shall be a component of the Community's other policies,
- within their respective spheres of competence, the Community and the Member States shall cooperate with third countries and with the relevant international organizations;

RECALLS, in conclusion, that the Single European Act also provides that in preparing its action relating to the environment, the Community will take account of:

- available scientific and technical data,
- environmental conditions in the various regions of the Community,
- the potential benefits and costs of action or of lack of action,
- the economic and social development of the Community as a whole and the balanced development of its regions;

RECALLS, moreover, that the Single European Act provides that the Community shall take action relating to the environment to the extent to which the above objectives can be attained better at Community level than at the level of the individual Member States; that, without prejudice to certain Community measures, Member States shall be responsible for financing and implementing other measures;

RECALLS, finally, that the Commission, in its proposals on health and environmental protection, takes as a basis a high level of protection as laid down in the relevant provisions of the Single European Act;

RECOGNIZES that the protection of the environment can help to improve economic growth and facilitate job creation;

WELCOMES the Commission's intention of working closely with industry, trade unions and interested non-governmental organizations in the drawing-up and implementation of environmental policy and programmes;

UNDERLINES the particular importance it attaches to the implementation of the Community legislation and INVITES the Commission to review systematically the application and the practical effects of existing Community policy and to provide regular reports on this to the Council and the European Parliament so that an assessment of the effectiveness of such a policy can be made and, *inter alia*, useful guidelines for future proposals determined;

DECLARES that, in view of the foregoing, and on the basis of past achievements, it is important for Community action to concentrate on the following priority areas while observing the respective powers of the Community and the Member States:

#### *Pollution prevention*

(a) reduction at source of pollution and nuisance in various areas:

- combating air pollution, *inter alia* by effective implementation of existing Council Directives on air quality and air pollution from industrial plants, and by adopting and implementing measures concerning emissions from large combustion plants and motor vehicles,
- combating fresh-water and marine pollution from specific or diffused sources, *inter alia*, by the implementation of Council Directive 76/464/EEC of 4 May 1976 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community<sup>(1)</sup>, and by the general improvement of the Community's aquatic environment in particular the North Sea and the Mediterranean,
- combating soil pollution, among others caused by agro-chemical products and toxic wastes,
- harmonized implementation of the existing Directives on toxic and dangerous wastes, in particular the transfrontier transport thereof.

<sup>(1)</sup> OJ No L 129, 18. 5. 1976, p. 23.

In this context, Community action shall take particular account of the need to:

- prevent the transfer of pollution from one part of the environment to another,
  - combat transfrontier pollution;
- (b) control of chemical substances and preparations:
- evaluation, in particular through greater use of multi-environment studies, of risks to the environment and human health caused by chemical substances and preparations,
  - identification and implementation of the most efficient and economical control measures for these substances which are a potential hazard for the environment and consumers' health;
- (c) prevention of industrial accidents:
- Measures for the general prevention of industrial accidents and an effective response and restriction of the consequences of accidents which might nevertheless occur, by:
- more effective implementation of Council Directive 82/501/EEC of 24 June 1982 on the major-accident hazards of certain industrial activities <sup>(1)</sup>,
  - review of this Directive, if necessary, to include, *inter alia*, a possible widening of its scope,
  - greater exchange of information on the matter between Member States;
- (d) combating noise pollution at source;
- (e) measures concerning the evaluation and best use of biotechnology with regard to the environment;
- (f) effective action to protect the health of the population and the environment from harm through nuclear radiation both as a result of normal operations and in the circumstances of an accident;

#### *Improvement in management of resources*

- (g) measures to protect and enhance Europe's natural heritage, in particular:
- implementation of Council acts in force such as Regulation (EEC) No 3626/82 of 3 December 1982 on the implementation in the Community of the Convention on international trade in endangered species of wild fauna and flora <sup>(2)</sup>

and Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds <sup>(3)</sup>,

- the protection, as laid down in the Treaty, of areas of importance in the Community, *inter alia*, in the framework of Directive 79/409/EEC, or of areas which are particularly sensitive environmentally, and encouragement of the revival of areas which are environmentally impaired,
  - protection of forests against atmospheric pollution and forest fires, including the implementation of the measures laid down in Council Regulation (EEC) No 3528/86 of 17 November 1986 on the protection of the Community's forests against atmospheric pollution <sup>(4)</sup> and (EEC) No 3529/86 of 17 November 1986 on the protection of the Community's forests against fire <sup>(5)</sup>;
- (h) measures relating to natural or man-made hazards or disasters affecting public health and the environment, including both evaluation of risk and adequate response;
- (i) encouragement of agricultural practices which are environmentally beneficial;
- (j) protection of the soil, in particular by combating erosion, by conserving plant cover, by the prevention of damage caused by certain industrial and agricultural activities and by combating such damage while bearing in mind the various geomorphological characteristics of the different areas;
- (k) improving water resources and the management of water, in particular by reducing water pollution, protecting catchment areas and encouraging the re-use of waste water;
- (l) the development of improved waste management in relation to reduction of quantities, treatment, recycling and re-use;
- (m) overall and integrated environmental protection of the Mediterranean region, taking particular account of all the specific aspects of that region when giving practical application to the action programme;

#### *International activities*

- (n) support and, where appropriate, active participation by the Community and the Member States in the activities of international organizations concerned with environmental protection within the framework of their respective powers;

<sup>(1)</sup> OJ No L 230, 5. 8. 1982, p. 1.

<sup>(2)</sup> OJ No L 384, 31. 12. 1982, p. 1.

<sup>(3)</sup> OJ No L 103, 25. 4. 1979, p. 1.

<sup>(4)</sup> OJ No L 326, 21. 11. 1986, p. 2.

<sup>(5)</sup> OJ No L 326, 21. 11. 1986, p. 5.

- (o) cooperation with developing countries on environmental matters and on protection of natural resources, having particular regard to questions of desertification and water supply, tropical forests and the production and use of dangerous substances or products and technological cooperation;

*Development of appropriate instruments*

- (p) improving the scientific bases of environment policy, *inter alia*, through appropriate research programmes;
- (q) effective implementation of Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment<sup>(1)</sup> and the integration of the environmental dimension in other Community policies;
- (r) implementation of appropriate standards in order to ensure a high level of public health and environmental protection;
- (s) development of efficient economic instruments such as taxes, levies, State aid, authorization of negotiable rebates with a view to implementing the principle that the polluter pays, in accordance with the Council Recommendation 75/436/Euratom, ECSC, EEC of 3 March 1975 regarding cost

allocation and action by public authorities on environmental matters<sup>(2)</sup> (the 'polluter pays' principle);

- (t) encouraging the development, dissemination and distribution of clean technology, notably in the case of heavily polluting industries;
- (u) improved access to information on the environment;
- (v) increased effort to promote environmental education and training at appropriate levels, and greater public awareness;

NOTES the action programme set out in the Annex to this resolution and approves in general the guidelines;

UNDERTAKES to act on the Commission proposals wherever possible within nine months of the date on which they are submitted or, as the case may be, of the date on which the opinions of the European Parliament and of the Economic and Social Committee are submitted;

STATES that the decision to make available the financial resources necessary for implementing this resolution and the action programme attached thereto will be taken in accordance with the usual procedures, in compliance with Article 130 R of the Single European Act, and in particular paragraph 4 thereof.

<sup>(1)</sup> OJ No L 175, 5. 7. 1985, p. 40.

<sup>(2)</sup> OJ No L 194, 25. 7. 1975, p. 1.

## ANNEX

## EEC FOURTH ENVIRONMENTAL ACTION PROGRAMME

(1987-1992)

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## FOURTH ENVIRONMENT ACTION PROGRAMME

### 1. INTRODUCTION

1.1. The Community's First Environmental Action Programme adopted in 1973 <sup>(1)</sup>, having spelled out the objectives and principles of environment policy, went on to list a large number of essentially remedial actions that were seen to be necessary at Community level. The objectives and principles remain valid <sup>(2)</sup> and some of the specific actions remain to be completed, but meanwhile the Community's approach to environmental protection has evolved very considerably.

1.2. The Second Environmental Action Programme adopted in 1977 essentially updated and extended the First but by 1983, when the Third Environmental Action Programme came to be adopted, the progress in policy thinking and in the approach to environmental protection had already become clear. The preventive approach — i.e. an approach requiring economic and social developments to be undertaken in such a way as to avoid the creation of environmental problems — had become central. The resources of the environment were recognized as constituting the basis of, but also setting the limits to, further economic and social development. Prevention was to be achieved through the integration of environmental requirements into the planning and execution of actions in many economic and social sectors, and stress was placed on prior environmental impact assessment as a crucial tool for ensuring such integration.

1.3. Now, as the Community adopts a Fourth Environmental Action Programme for the six-year period 1987-1992, the context has again changed. It is no longer seriously contested that environmental protection policy has a central part to play in the whole corpus of Community policies and that environmental protection needs to be taken into account as a fundamental factor when economic decisions are taken. Continuing — and in many cases growing — problems of environmental deterioration have convinced the Commission that the establishment of strict standards for environmental protection is no longer merely an option; it has become essential. Moreover, the Commission is also convinced that, when account is taken of the growing public demand for improved standards of environmental protection and for environmentally friendly goods — both within the Community and worldwide — Community industry will not be successful unless it increasingly gears itself towards the meeting of such standards and the production of such goods. High standards of environmental protection have thus become an imperative — and an economic imperative at that.

1.4. These new perceptions as to the importance and as to the role of environmental protection policy for the Community have been strongly reinforced by two recent conclusions of the European Council which, in a sense, provide the agenda and the terms of reference for the Commission's proposals for the Community's Fourth Environmental Action Programme.

1.5. The first of these two conclusions was, of course, the decision of the European Council — on the recommendation of the Intergovernmental Conference — to propose the inclusion in the amended Treaty of Rome of a chapter on the environment. This decision plainly recognizes the need for a developed Community environmental policy at the heart of the Community's other policies and sets out guidelines for its content. It is particularly significant that, alone amongst the common policies included in the amended Treaty, it will be laid down in relation to environment policy (Article 130R) that its requirements shall constitute a component of other Community policies; and that in relation, in particular, to standards established on the basis of Article 100A of the amended Treaty, it is laid down that Commission proposals concerning, *inter alia*, environmental protection, will take, as a base, a high level of protection. The Article also provides that national provisions applied in the name of environmental protection should not be used as a means of arbitrary discrimination or a disguised restriction on trade between Member States. A copy of the proposed Treaty modifications that are relevant to environment is set out in Annex 2 to this programme.

<sup>(1)</sup> OJ No C 112, 20. 12. 1973.

<sup>(2)</sup> OJ No C 139, 13. 6. 1977, see Annex 1.

1.6. The second conclusion of importance for environmental policy is the recognition by the European Council in March 1985 <sup>(1)</sup> that environmental protection policy can contribute to improved economic growth and job creation. In the past environmental requirements have often been seen as merely imposing regulations and costs on industry, agriculture, transport, etc. Now, in a world where higher environmental standards are more and more being required, the achievement of such standards must increasingly be seen as an essential element in the future economic success of the Community. The European Council went on to affirm its determination to give policy the dimension of an essential component of the economic, industrial, agricultural and social policies implemented by the Community and by its Member States.

1.7. This then is the agenda for and the orientation of the Community's Fourth Environmental Action Programme. The challenge — which is also an opportunity — is to find the means of making further progress in environmental policy in such a way that the economic and employment benefits foreseen by the European Council can also be achieved.

## 2. GENERAL POLICY ORIENTATIONS

### 2.1. Amendments to the Treaty of Rome

2.1.1. The EEC Treaty, as it will be amended by the Single European Act, envisages the pursuit of environment policy in two ways at Community level. First the Treaty will contain a specific chapter (Title VII) on environment policy (Articles 130R to 130T), which fixes the objectives and principles of such policy, in particular the necessity of preventive action which is placed side by side with the requirement of protecting and improving the quality of the environment. Furthermore the Treaty will expressly stipulate that the requirements of environment policy constitute a component part of the other Community policies.

2.1.2. In addition, the Treaty recognizes that environmental protection actions may be important for the achievement of the internal market — a principal Community objective for the coming five years. It is evident that environmental actions taken at Member State level alone might easily lead to new barriers to intra-Community trade or distort competition. In this context it is noteworthy that Article 100A — which deals with the adoption of measures of the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment or functioning of the common market — not only lays down that such measures shall be adopted by qualified majority voting but also provides that the Commission, in its proposals laid down in Article 100, paragraph 1, concerning health, safety, environmental protection and consumer protection, will take as a base a high level of protection.

2.1.3. The Commission intends to make full use of the provisions of the new Treaty, and in particular Article 100A. It acknowledges the need to combine, by way of actions which effectively protect the environment, two of the main objectives of the Treaty, i.e. the achievement of the internal market and the development of a high level of environmental standards within the Community. The Commission is moreover convinced that the development of high environmental standards is consistent with, and sometimes necessary for, the protection and improvement of the future competitive position of Community industry.

2.1.4. It is also important to note that Article 130B of the Single European Act places stress on the promotion of economic and social cohesion within the Community and on the reduction of regional disparities. Moreover, the chapter dealing with environment policy makes plain that the Community, in preparing its action relating to the environment, is to take account *inter alia* of environmental conditions in

<sup>(1)</sup> The European Council considers that a Community environmental protection policy must be based on the following considerations:

- (i) having acknowledged that this policy can contribute to improved economic growth and job creation, it affirms its determination to give this policy the dimension of an essential component of the economic, industrial, agricultural and social policies implemented by the Community and by its Member States;
- (ii) it acknowledges the need for the Member States to take coherent action in the Community framework to protect the air, the sea and the soil, since isolated action is unlikely to prove effective and may even be harmful.

It requests the Council to expedite its proceedings and to make every effort, together with the Commission, to ensure that the years to come are marked by significant progress in Community action for the protection of the environment in Europe and throughout the world.

In this connection, the European Council has decided that 1987 will be designated "European Environment Year".

Bulletin of the European Communities, March 1985.

the various regions of the Community; and of the economic and social development of the Community as a whole and the balanced development of its regions. It is clear therefore that a particular importance will attach, during the period of the Fourth Environmental Action Programme, to close cooperative action in the implementation of the Community's environmental and regional policies. The Commission will take the necessary steps to ensure that this occurs.

2.1.5. Actions to ensure the consolidation of Community environment policy with the Community's other policies for which the amended Treaty calls, will be accompanied by a number of other actions of a broad-ranging character during the next five years. Thus the Commission will carefully and critically assess the policy pursued in the different environment sectors in order to check whether the experience of past legislation and its implementation should suggest new strategies, why parts of the previous environment action programmes have not been implemented, and what lessons can be learned from the past and used in the future.

2.1.6. The Commission will re-assess the obligations of Member States under existing Directives to report on the application of those Directives. To that end it will submit a proposal for a Directive which will standardize and rationalize the general obligation to submit reports; and will link them more effectively to the production, on a three-yearly cycle, of Community state of the environment reports. The Commission also proposes to give greater publicity to reports on the different environmental Directives and to Commission reports on the effects on the ground of Community environmental legislation.

2.1.7. Under the Information Agreement of 1973 <sup>(1)</sup> Member States agreed to notify the Commission of their intentions to introduce environmental legislation at national level. In view of the provisions of the amended Treaty concerning both environment policy and the completion of the internal market by 1992, which imply the necessity to elaborate any necessary Community-level, product-related environmental standards on the same timescale, the Commission considers that the time has come to transform the Information Agreement into a binding Community instrument. The Commission will accordingly submit a proposal for a Directive to render obligatory the notification of proposed environmental legislation, in so far as this is not already covered under the provisions of Directive 83/189/EEC <sup>(2)</sup> and thus make possible a more systematic assessment of the necessity to take environmental action at Community level.

## 2.2. Implementation of Community Directives

2.2.1. The effective implementation of Community environmental legislation by all Member States will be of primary importance for the Community.

2.2.2. The transposition of Community legislation into national law is usually achieved within a reasonable time, although sometimes later than the dates laid down in the Directives; it is clear that the new Member States, in particular, will have to make special efforts in the coming years. The Commission has, however, in the past identified a considerable number of omissions and deviations in national laws, sometimes of considerable importance, and has been obliged to initiate infringement procedures against Member States, in order to bring national legislation into line with the requirements of Community law.

2.2.3. In the future the question of the transposition of Community Directives into national law is likely to receive greater attention from the interested public, since the Commission has decided to allow public access to its data base which stores information on the national legislation — whether specially adopted or already in existence — which formally implements Community law.

2.2.4. Looking beyond the question of legal action, the further questions of the practical implementation at national level of the requirements of Community legislation and its effectiveness in reality in improving the quality of the environment, also both raise considerable problems.

2.2.5. In theory the Commission has the power to check whether Community acts and the national laws which are based on them are actually fully complied with in practical terms at local or regional levels. This power derives from Article 155 of the Treaty and, furthermore, from Articles in the individual Directives which provide that Member States shall report to the Commission on the implementation of Directives. However, national reports are not always submitted regularly and often do not give sufficient details to allow the Commission to assess sufficiently well the practical implementation.

<sup>(1)</sup> OJ No C 9, 15. 3. 1973; OJ No C 86, 20. 7. 1974.

<sup>(2)</sup> OJ No L 109, 26. 4. 1983, p. 8.



2.2.6. To address both of these aspects — i.e. formal legal compliance and practical implementation — the Commission intends to intensify the dialogue with national (or, as the case may be, regional) administrations from Member States so as to promote a more fully harmonized understanding of and approach to both legal and practical questions concerning implementation; and to persuade them to ensure the effective implementation of Community acts and the national laws based on them. Such discussions might assist some administrations by enabling them to benefit from experience gained by administrations in other Member States. They should also have the effect of avoiding, to the greatest extent possible, the necessity for the Commission to resort to infringement procedures.

2.2.7. The Commission also intends to take further actions in order to promote both better compliance with the requirements of Community environmental legislation and its more effective implementation. These actions will include:

- an examination of the question whether, in appropriate cases, Community environment inspectors should be appointed to work with national officials so as to ensure the harmonized and effective implementation of Community law,
- better publicity for the Community's environment policy and its impact at local, regional and national level, in order to increase public awareness of the need to protect the environment effectively,
- encouraging private persons, non-governmental organizations or local authorities to bring instances of non-compliance or of inadequate compliance to the attention of the Commission, in order to have remedial action started,
- organizing seminars, workshops and other forums which allow the exchange of experience among interested persons and organizations as to how Community law is applied; and how effective it is in improving the environment,
- initiating infringement procedures under Article 169 of the Treaty against Member States, in order to ensure that Member States actually honour their obligations under Community law.

2.2.8. The Commission is convinced that complete and effective implementation of the Community environment acts by all Member States is a matter of priority concern; and that it will lead to a considerable improvement in the quality of the environment, contribute to better integration of national environment policies and actions, and strengthen the cohesion of the Community. Therefore it will consider implementation as a priority under the Fourth Environmental Action Programme.

### 2.3. Integration with other Community policies

2.3.1. Whilst it is true that there can be no sound environmental policy unless, at the same time, there is progress on the economic and social front, it is equally true that there can be no lasting economic and social progress unless environmental considerations are taken into account and are indeed seen as an essential part of economic and social development. This has been clearly recognized by the European Council when it affirmed its determination to give to environmental protection policy the dimension of an essential component of the economic, industrial, agricultural and social policies implemented by the Community and its Member States.

2.3.2. It will accordingly be a central part of the Commission's efforts during the period of the Fourth Environmental Action Programme to make major progress towards the practical realization of this objective — initially at the level of the Community's own policies and actions; secondly at the level of the policies implemented by Member States; but as soon as possible in a more generalized way so that all economic and social developments throughout the Community, whether undertaken by public or private bodies or of a mixed character, would have environmental requirements built fully into their planning and execution.

2.3.3. In relation to these broad-ranging initiatives an obvious priority will be given to projects and to ensuring that the practical carrying into effect of developments of whatever kind, takes adequate account of environmental requirements. But the Commission's concern will also be extended, as rapidly as possible, to cover policies and policy statements; plans and their implementation; procedures; programmes (including both their overall objectives and their sub-elements), as well as individual projects.

2.3.4. So far as concerns the Community's own policies a special importance already attaches to projects and programmes financed from the structural funds and other Community funds. The recent establishment of standing arrangements for the close coordination of operations under the aegis of all the structural funds will clearly greatly assist in taking full account of environmental needs. Within the framework of

those coordination arrangements, the Commission is already working on the development of effective internal procedures to ensure that environmental requirements are built into the processes of assessing and approving proposals for all developments to be financed from such funds. These procedures will be based closely on the content of the Directive on environmental impact assessment (85/337/EEC) <sup>(1)</sup>. They will also foresee the obligation to undertake environmental impact assessments in appropriate cases. Once these procedures have been established in relation to the Community's own policies, the Commission will consider the question of their wider application and will make appropriate proposals.

2.3.5. However, the environmental assessment of development proposals is not by itself sufficient to ensure the adequate integration of environmental requirements into other policy areas. By way of illustrating the nature of the initiatives that need to be undertaken to ensure the full integration of these requirements into the planning and execution of economic and social activity within the Community, the following paragraphs indicate the Commission's intentions in relation to particular policy areas where, in the Commission's view, specific actions are necessary.

2.3.6. *Agriculture* — Europe's much admired landscape has been formed and shaped by agriculture over the centuries. However, the development of modern farming practices poses questions which require an urgent response. Inappropriate land use damages landscapes' quality and areas of special interest for conservation; misuse of chemicals and the uncontrolled disposal of agricultural wastes pollute water supplies and damage wildlife. The Commission has already announced its initial proposals (following publication of its Green Paper on 'Perspectives for the Common Agricultural Policy' <sup>(2)</sup>) and its subsequent communication 'A Future for Community Agriculture' <sup>(3)</sup> to ensure that agricultural policy and practice in the Community will do more to respect the environment and to conserve the priceless heritage of landscape and species. They focus on measures 'to support agriculture in areas where it is essential for land use planning, maintenance of the social balance and protection of the environment and landscape' and on the needs 'to make farmers more aware of environmental issues'.

2.3.7. The Commission has also in COM(85) 750 made clear its view that to establish a proper balance between agricultural development and the sometimes conflicting needs of conserving the natural environment, a series of actions related in particular to the use of agro-chemicals, the treatment of agricultural wastes and the conservation of species, habitats and landscapes is necessary. In relation to large-scale agricultural and forestry projects and programmes the Commission has made plain on many occasions in the past that it will require the use of environmental impact assessments. As indicated in the Commission's recent communication to the Council on Community action in the forestry sector <sup>(4)</sup>, an increase in the forest area of the Community is desirable for a number of reasons, including the contribution that this could make to environmental protection and improvement. On all these matters the Commission will make appropriate proposals as soon as possible.

2.3.8. Moreover the systematic monitoring of forest die-back is an essential measure to accompany measures to control atmospheric pollution; proposals on this (and also to control forest fires) have long been before the Council; the Commission urges the need for their early adoption.

2.3.9. *Industry* — The integration of environmental considerations into industrial policy has to be seen in a much wider context than pollution prevention or control and environmental impact assessment procedures. The siting and design of industrial installations; industry's choice of product and process; and its approach to the management of its wastes, must all be influenced by environmental considerations. In turn, the role of industry in generating the wealth which *inter alia* makes possible the necessary environmental investments and improvements must be recognized.

2.3.10. It is the Commission's clear policy to develop proposals for environmental protection legislation in close consultation with industry. A further objective is, whenever possible, to give advance warning of likely changes in legislation laying down stricter environmental standards or requirements sufficiently far ahead to give industry time to adjust and to enable the new standards to be taken into account in its forward investment, policy and product planning.

<sup>(1)</sup> OJ No L 175, 6. 7. 1985.

<sup>(2)</sup> COM(85) 333, 13. 7. 1985.

<sup>(3)</sup> COM(85) 750, 18. 12. 1985.

<sup>(4)</sup> COM(86) 26, 31. 1. 1986.

2.3.11. Legislation, however, is not the whole story. It is clear that environmental standards will become progressively stricter and that the public demand for improved environmental quality will grow. It is, therefore, most important that industry should, on its own initiative and in its own interest, increasingly take steps to integrate environmental considerations into its own policies and operating procedures and practices. Many industrial companies have already taken important steps in this direction; and the same is true of certain banks, insurance companies, etc. The necessary full integration of environmental requirements into all economic and social activities will not, however, have been achieved until this approach becomes generalized. To this end the Commission will, during the period of the Fourth Environmental Action Programme, work in close consultation with industry in the development of suitable guidelines and codes of practice, so as to encourage such an evolution as rapidly as possible.

2.3.12. In doing so it will be necessary to recognize that the need for increasingly strict standards poses the greatest problems for the older industries that are involved in restructuring and have a lot of old plant. By contrast some of the new industries which are replacing them involve innovative technologies which are, by their very nature, less polluting and less environmentally troublesome than some of the old ones that they replace. Moreover, some of the innovative techniques can be and are being used in environmental management industries (such as pollution control equipment) thus bringing together improved environmental management and technological innovation.

2.3.13. Whether or not it is easy for a particular industry to respond to the demand for stricter environmental standards, the Commission is convinced that, overall, the competitiveness of Community industry on world markets in the 1990's will depend partly on its products reaching environmental standards at least as high as those of competitors. If such progress is not made, then Community producers will lose market share not only on international markets, but also on the internal market. Moreover it needs to be recognized that pollution represents a waste of resources and is often linked with obsolete technologies. On both these counts the imposition of ambitious environmental standards in the remainder of the 1980's, which stimulate technological innovation in order to meet them, will protect markets and jobs in the long-term. These developing standards will be real challenges for industry; but will offer real opportunities as well.

2.3.14. Stricter environmental standards are likely to provide growth opportunities especially for small and medium-sized enterprises. The Community has recognized the importance of such companies for overall economic and employment growth in Europe. The very specific demands on product development, innovation and manufacturing which result from higher environmental standards are likely to be met above all by smaller firms which have the flexibility necessary to meet such demands. The resulting creation and development of small and medium-sized enterprises will be a significant contribution to the European economy in coming years. On the other hand, small and medium-sized enterprises cannot be exempted from meeting increasingly severe environmental standards although they may find difficulty in doing so. In some cases it may be necessary for the public authorities to assist these firms in carrying out the investment required to meet such standards. At the same time it is incumbent on legislators, both at the Community and national level, to consider the costs which legislation imposes on such enterprises. High environmental standards should be achieved in the least bureaucratic and most cost-efficient way.

2.3.15. *Competition policy* — In recognition of their importance in terms of the common European interest, state aids designed to promote the protection of the environment have been authorized by the Commission, under certain conditions, since 1974. The aim of allowing limited state aids for this purpose is to promote the introduction of, and industrial adaptation to, regulations which ensure effective environmental protection and to lead eventually to the promotion of the 'polluter pays' principle. The framework governing approval of such aids expires on 31 December 1986 and the Commission is currently studying the possibility of extending it.

2.3.16. *Regional policy* — One of the most important of the Community's policies is its regional development policy which seeks to promote the economic development of those regions of the Community that are less developed or are economically disadvantaged; and thus to promote economic convergence. Many of the projects financed from the regional fund are relatively large-scale infrastructure projects; many of the assisted areas contain environmentally important or sensitive zones, hence the integration of environmental requirements into the planning and execution of regional development policies and programmes (and of individual projects) is of particular importance. The procedures referred to in paragraph 2.3.4 above should satisfactorily ensure such integration.

2.3.17. The interaction between regional policy and environmental policy goes further than this essentially preventive aspect however. Amongst the less economically advanced areas of the Community

cases can arise in which necessary environmental improvements may be delayed because of their financial impact on existing enterprises. In addition, public authorities in certain areas of the Community already face economic problems — applying Community measures, especially in relation to the installation of basic environmental infrastructure. In order to overcome these difficulties the Commission will make a proposal for a Community programme, within the framework of the regional fund, which will have as its objective to assist disadvantaged areas of the Community to implement Community environment Directives — thus promoting both socio-economic development in such areas and Community environment policy. Further reference to this intention, which was announced in COM(86) 76, is made in paragraphs 2.5.4 and 5.4.6 below. The Commission hopes to be able to put forward precise proposals during the first half of 1987. In accordance with the framework of the Council's resolution of 17 February 1983, adopting the Third Community Environmental Programme<sup>(1)</sup>, the Commission intends to be guided, *inter alia*, by the need to take account of the differing economic and ecological conditions and the differing structures in the Community.

2.3.18. *Energy* — The production of energy is heavily dependent on the use of fossil fuels and thus energy policy is inevitably concerned by atmospheric pollution issues. Environmental requirements in turn affect energy costs and the competitive position as between different energy sources. The balanced pursuit of environmental and energy policy objectives is therefore of special importance, as stated in the Commission's recent communication on new Community energy objectives<sup>(2)</sup>. Energy conservation and alternative non-fossil energy sources will help improve air quality. Technologies exist that can achieve significant reductions in polluting emissions from fossil fuel power-stations at reasonable costs; the Commission's proposals for the reduction of emissions from large combustion installations (see section 4.1.4) took account of this.

2.3.19. The safe use of nuclear power in particular within the Community will certainly be fully discussed in the course of the far-reaching review that is currently being undertaken as announced in the Commission's communication to the Council on the follow-up to the recent accident at Chernobyl<sup>(3)</sup>, within the context of that review certain measures of an environmental protection character will be examined and appropriate proposals made (see paragraphs 4.1.7, 4.2.2, 4.3.8, 5.3.7 and 7.1.6 (second item)); they concern the possible applicability to nuclear installations of approaches developed in relation to non-nuclear industry on emission standards and safety criteria: dumping of wastes at sea; and the transport of dangerous materials (including nuclear materials).

2.3.20. Looking further ahead into the future it is clear that difficult problems could arise from the use of fossil fuels if the build-up of atmospheric carbon dioxide levels and the 'Greenhouse effect' are shown (as certain scientists fear) to have serious impacts on climate and agricultural productivity worldwide. In case further scientific research should confirm the likelihood of such impacts, the Community should already be thinking about possible responses and alternative energy strategies. The Commission will continue its studies in this context.

2.3.21. In general therefore it is evident that all actions taken in the field of energy policy need to be considered from an environmental as well as economic standpoint (and *vice-versa*). A degree of integration has already been achieved but, as has been indicated, there may be real problems ahead. The management of nuclear waste, which is the subject of a Community research programme, as well as of a Community plan of action (1988-1992), remains a central issue of environmental concern. It will be necessary to strengthen the Community policy by building on the results of work already in hand, particularly within the framework of the Community's research programmes, with a view to developing clear orientations or guidelines at Community level for the disposal of such waste.

2.3.22. *Internal market* — The completion of the internal market by 1992 is an established Community commitment and one of the most important challenges facing the Community. The achievement of this goal requires the active support and assistance of all other Community policies. In the field of environment policy the main potential impact of the completion of the internal market will be in relation to product

<sup>(1)</sup> OJ No C 46, 17. 2. 1983.

<sup>(2)</sup> COM(85) 245, 28. 5. 1986.

<sup>(3)</sup> COM(86) 327, 12. 6. 1986.

standards. In important cases, national standards could differ widely, particularly on the protection of the environment. It is essential in that case to seek at an early stage and at Community level any harmonization of these standards which may be necessary for environmental reasons. The Single European Act lays down that the approximation of laws on environmental protection will be based on a high level of protection (see paragraph 1.5). The Commission will make appropriate proposals during the period of the Fourth Environmental Action Programme between now and 1992.

2.3.23. *Transport* — The interaction of transport and the environment is a wide-ranging one. Transport, in the widest sense, is at the root of many environmental issues (noise, air pollution, impact on landscape, etc.), but it can also contribute directly and positively to the creation or improvement of certain environments. Improved accessibility widens opportunities for people to experience and appreciate environmentally important areas. On the other hand there is no doubt that badly planned transport links can be very destructive of environmental quality. Improving the environmental acceptability of vehicles is important and as is mentioned elsewhere action to this end is well in hand. Major transport infrastructure links, however, require particular attention with a view to minimizing adverse environmental impacts and maximizing benefits; in virtually all cases they will of course be subject to prior environmental impact assessment under the terms of Directive 85/337/EEC. The Commission will ensure that increasing attention is paid to all these interactions which will have a growing importance particularly given the new impetus to develop the common transport policy.

2.3.24. *Tourism* — Similarly, the impact of tourism on the environment and *vice-versa* is a matter of great concern, particularly having regard to the need to maintain and improve the quality of Europe's natural and architectural heritage.

2.3.25. *Social policy* — The essential part played by environmental protection policy in the field of social policy has to be recognized. There are numerous links especially in the field of worker protection, professional education and general labour conditions. The whole field of training in environmental skills and the extent to which environmental policies can generate employment (see paragraphs 2.4.6 and 2.4.7) are of clear relevance to social policy. The execution of the social policy and environmental action programmes have therefore to be coordinated as much as possible. New actions in the field of environmental protection policy of considerable importance for social policy may need to be taken, especially concerning the function and the status of those responsible in industrial plants for the correct application of environmental protection regulations.

2.3.26. *Consumer protection* — Action in the field of consumer protection has a considerable potential to build in the environmental dimension and thus to support Community environment policy. Programmes of consumer education and information, some of them promoted via Community instruments, should concern themselves with the environmental aspects of products and services as well as with consumer aspects. The legitimate emphasis on product safety, e.g. in the field of cosmetics, also has an environmental dimension. So too do such typical consumer interests as the quality of drinking water and the design and durability of products. The Commission will take steps to ensure a closer coordination of policies in these areas.

2.3.27. *Development cooperation* — A special importance is attached to the integration of environmental requirements into the Community's development programmes. This is so because so many of the Third World's problems are in essence environmental problems; policies which very directly seek to protect and improve the environment and to create the conditions for sustainable economic growth are therefore essential if the problems of development are to be effectively tackled.

2.3.28. *General* — In general the Commission will seek to ensure that steps are taken to integrate environmental requirements into the planning and execution of all economic, industrial, agricultural and social policies, as required by the European Council conclusions referred to in paragraph 2.3.1. Initially, as indicated in paragraph 2.3.2, emphasis will be placed on the Community's own policies; to this end the Commission will develop internal procedures and practices to ensure that this integration of environmental factors takes place routinely in relation to all other policy areas. The Commission will also work, during the period of the Fourth Environmental Action Programme, on the development of guidance, procedures and other tools that could contribute to a similar integration at the level of policies implemented by Member States; and by both public and private economic operators.

#### 2.4. Economic and employment aspects of environmental policies and actions

2.4.1. Environmental measures are an integral component of the Community's economic activity, because environmental protection improves the quality of life and safeguards natural resources, thus permitting full realization of the benefits of economic activity, in the form of better patterns of economic growth and employment, with consequent beneficial effects on the competitiveness of industry. The Commission is, however, aware of the difficulties of drawing up a balance sheet of the positive and negative economic and employment effects of environmental policies and actions. For such a balance sheet to be valid it is essential that the benefits (as well as the costs) of environmental measures should be taken fully into account in decision-making procedures, whether or not they are amenable to measurement in money terms.

2.4.2. Against this background it is of great importance that the amendments to the Treaty of Rome agreed by the Governments of Member States envisage *inter alia* that Community environment actions shall take account of the potential benefits and costs of action or of lack of action. The Commission will endeavour to develop methods of assessment which will facilitate this task and which will, so far as possible, ensure the preparation of an adequate cost-benefit analysis as a basis for environmental proposals.

2.4.3. Such assessments will clearly have to take into account both short- and long-term effects. The Commission, of course, recognizes that the economic gains from the pursuit of strict environmental requirements may not be without cost in the short-term. In some cases therefore they may pose short-term problems in terms of financing and competitiveness. In other cases the rate of return on investment will be such that there will be short-term economic (as well as environmental) gains. In yet other cases the short-term costs of implementing environmental measures can be offset by longer term economic gains (if for example there is a stimulus to the development and introduction of cost-saving technologies or a competitive gain in markets with strict environmental regulations).

2.4.4. Even if the economic benefits to be derived from environmental measures can only be achieved in the longer term, there may still be sound environmental and economic reasons why the necessary investments should be undertaken. OECD has concluded that 'the benefits generated by environmental measures (including the damage costs avoided) have generally been greater than their costs'. In all cases it is essential that the damage costs of failing to take environmental action should be calculated and available for comparison.

2.4.5. It is also important, however, to bear in mind that the short-term costs resulting from the introduction of new environmental standards may have adverse effects on the competitiveness of certain enterprises that have to comply with them. This calls for close attention not only to the type and levels of environmental standards to be introduced but equally important to the timescale of implementation. The Commission will therefore aim, in its development of environmental measures, to ensure that the objectives and means are made clear to industry and that enterprises are allowed a reasonable time to adjust to the new standards. Adjustment to new environmental standards can in some circumstances be facilitated by financial support (see Section 2.5).

2.4.6. So far as concerns employment the Commission takes the clear view that a strengthened environment policy will in general have positive effects on job creation through environmental infrastructure and investment and through the manufacture of new products that are directly related to the improvement of environmental quality. Even though in some cases when environmental regulations increase industrial costs, there can be short-term negative impacts on employment, there is on the other hand much evidence that, in the past, environmental policies have probably had a marginally positive impact overall on employment. What is certain is that there are many environmental measures that can have direct and indirect positive job-creating effects (such as those designed to tackle inner city decay or to re-use derelict land or to repair landscape damage in areas of natural beauty) but which have hitherto been quite inadequately used. In general, environmental measures should be structured in such a way that the impact on employment is as positive as possible.

2.4.7. The Commission will accordingly shortly propose a five-year Community-wide programme of 'demonstration projects' in all Member States designed to demonstrate how environmental actions and the implementation of environmental policies can generate jobs; and to create a large body of experience and information on which industry and all Member States can draw in the future.

## 2.5. Economic instruments

2.5.1. A variety of different measures and procedures can be used to improve or maintain environmental quality. These, of course, include the legal regulation of products, processes, emissions and wastes; but they also include various economic instruments (such as taxes, charges, state aids, tradeable discharge permits); and agreements with polluters. The choice of the most appropriate instrument or instruments to use in any particular case will depend on circumstances, the legal and administrative framework and on the nature of the environmental problem being tackled.

2.5.2. The Community has an important role in the development of pollution control instruments of an economic character; and in devising guidelines for their use in the implementation of Community legislation. Any such measures must, of course, be used in ways which are consistent with the principles of Community environmental policy — notably the 'polluter pays principle' and the preventive approach.

2.5.3. The 1975 recommendation on cost allocation<sup>(1)</sup> provides for the use of charges, in circumstances where this is deemed appropriate. The Commission intends to undertake further work in this area with a view to developing the use of economic instruments in support of Community legislation. The 1975 recommendation also provides for state aids for pollution control measures when it is considered that exceptions can be justified to the 'polluter pays principle'. Member States are permitted, under a framework established by the Commission, to provide limited financial assistance to ease the introduction of new pollution control regulations for plants already in existence; this framework expires on 31 December 1986 and the Commission is presently considering the desirability of extending it.

2.5.4. The Commission is also considering further provision for assistance towards pollution control measures and will (see paragraph 2.3.16 above) make a proposal for a Community programme, within the framework of the regional fund, to improve environmental infrastructure and to aid the implementation of Community environment Directives in disadvantaged areas of the Community.

2.5.5. Finally the Commission intends to consider the scope for the better definition of responsibility in the environmental field (including the possibility that the polluter should assume extended liability for damage caused by products or processes); and to devote attention to the question of the coordination of instruments where there are significant transboundary effects associated with product standards or trans-frontier pollution.

2.5.6. More concretely the Commission intends to consider the use of economic instruments as a possible means of implementing Community policy in the fields of air pollution (see Section 4.1), water pollution (see Section 4.2), protection against noise (see Section 4.5), nature protection (see Section 5.1), and waste management (see Section 5.3).

## 2.6. Information and education

2.6.1. Mention has been made of the need to render the whole process of regulation and application of existing rules more transparent, particularly as far as public information is concerned. In this context it is important to improve the opportunities given by national regulations to individuals and groups to defend their rights or interests in administrative procedures. In the Commission's view particular attention needs to be given to situations where access to information is an element for the better protection of man or the environment, whether through the better application of regulations or otherwise. Comparable attention needs to be given to access to information in cases of transfrontier pollution.

2.6.2. In the Commission's view it should be possible to devise ways of improving public access to the information held by environmental authorities, whilst at the same time giving protection to information which can legitimately be regarded as confidential. The Commission will study the need for, and desirability of, a Community 'Freedom of Environmental Information Act' and will make appropriate proposals.

2.6.3. Quite apart, however, from the question of establishing rights of access, there is no doubt that the widespread diffusion of information on the environment and on environmental problems, policies and programmes can powerfully support both the evolution and public acceptance of necessary environmental measures. Not enough efforts have been made to this end, although it is important to note that a number of Member States now regularly publish national 'State of the Environment' reports. The Commission for its part will in future publish Community 'State of the Environment' reports on a three-yearly cycle

(<sup>1</sup>) OJ No L 194, 25. 7. 1975.

starting in 1987, drawing for this purpose on information supplied by Member States under the provisions of Community Directives and on information available through the progressive development of the Community Information System on the State of the Environment and on natural resources (CORINE) <sup>(1)</sup> (see paragraph 2.6.6 below).

2.6.4. More generally the Commission intends to review its whole approach to the diffusion of information on environmental issues. Much more could be done to inform the public and thus influence public opinion in favour of strict environmental policies. As indicated in Section 2.2 the Commission intends to ensure the wider availability of information on the implementation of Community environmental legislation. The Commission will also take steps to ensure that many more of the numerous reports on scientific, technical and economic aspects that are prepared for the Commission's service in the course of developing policy proposals (but which may be of wider interest) are published in appropriate ways. The Commission is also supporting the launch of a new review on Community environmental policy and law. In addition, in order to enhance the efficacy of the actions on information, the Commission will ensure a better coordination between the Directorate-General for Information, Communication and Culture, and other concerned services.

2.6.5. The European Year of the Environment (EYE) (see Section 8) — the central aim of which is to convince every individual throughout the Community of the importance of the environment and thereby to change attitudes (both of society and of individuals) to the need for strict standards of environmental protection — offers both an opportunity and a challenge to improve dramatically on past performance in putting across relevant information on environmental issues and problems — and to put it across in ways that make it accessible to all elements in society; and that offers the chance of convincing them of the necessity to commit themselves to action (both during EYE and beyond) to achieve practical improvements.

2.6.6. At the level of hard data on environmentally significant parameters, the Community information system on the state of the environment (CORINE) will be of growing value and importance. The main purpose of CORINE is to ensure the availability of a sound base of comparable environmental information, to economic actors and decision-makers throughout the Community as an aid to the processes of policy-making, implementation of legislation and integration of the environmental dimension in other policy areas. The practical implementation of the CORINE programme is in hand and work on its continuous development will be undertaken during the period of the Fourth Environmental Action Programme. At the end of the phase of work covered by the Council Decision the Commission will report to the Council and present proposals which will ensure the availability throughout the Community of a wide range of up-to-date and comparable environmental and natural resource data, capable of being presented in ways and combinations likely to be of the greatest assistance to decision-makers.

2.6.7. Simultaneously and with a view to complementing the information produced in the framework of the CORINE programme, the Commission intends to reinforce the environmental component of the statistical programme of the European Community; in this connection it is in particular proposed to develop better information on the relationships between the economy and the environment.

2.6.8. Environmental education has a particular significance in strengthening public concern on environmental matters. As already noted everybody has to acknowledge that he can contribute, by his own behaviour, to better environmental conditions; and the stage at which this awareness can best be inculcated is during the period of education. Environmental education, which has already featured in earlier action programmes, will therefore continue to deserve support at Community level. The Pilot Schools Network has been successfully implemented (first at primary and then secondary levels) over the past eight years and has been strongly supported by Member States. Much valuable experience has been gained. The Commission intends to publish, during the European Year of the Environment, a full report on the work to date of the Pilot Schools Network and on the lessons learned. It will also send a communication to the Council indicating the basis on which it is intended that the network should be consolidated and extended to tertiary level, drawing on the experience to date and the latest developments in the field of educational science.

2.6.9. The function of non-governmental organizations in the development of environmental policy and thinking is a fundamental one. The development and application of environmental policy often necessitates difficult arbitration between the important but different interests of social and economic groups. The

<sup>(1)</sup> Decision 338/85/EEC; OJ No L 176, 6. 7. 1985.



interests of specific branches of industry, including both management and unions, have to be taken into account as well as the different situations in the Member States. So too do the views of pressure groups defending specific or sectoral interests.

In such complex situations the existence of non-governmental organizations who may be considered to represent general environmental interests and can act as partners of the policy-making organs, is of great importance. It is for that reason that the Commission will continue its constructive and permanent contact and exchange with representative environmental organisations at European level, especially with the European Environment Bureau.

2.6.10. Industrial federations, (e.g. UNICE) and trade union bodies (e.g. ETUC), are making increasing efforts to collaborate at both national and European level in the formulation and execution of environmental policy. The Commission believes that it is very important to strengthen and to organize more efficiently its cooperation with both the industrial federations and the unions and will make continuing efforts to this end. In this connection, the Commission intends to make the maximum possible use of the contributions made by the European Foundation for the Improvement of Working and Living Conditions.

### 3. APPROACHES TO THE PREVENTION AND CONTROL OF POLLUTION

#### 3.1. General principles

3.1.1. Environmental policies are conceived and implemented in stages, moving from the perception of an environmental problem (either an actual problem or — preferably — at the stage at which it is still only potential) to the institution and enforcement of necessary measures whether remedial or preventive. The basic objective of all such measures is to prevent harm to man and to the environment or, where damage has already occurred, to correct it.

3.1.2. The nature of the measures that need to be taken to deal with pollution problems in practice inevitably shows a considerable degree of variation, depending *inter alia* on the nature of the adverse effects perceived or anticipated, their causes, and the sources of the problem. Thus, for example, a pollution problem might to varying degrees be:

- acute or chronic,
- localized or geographically dispersed,
- related primarily to a single pollutant or to combinations of pollutants,
- concentrated in one medium (air, water or land) or affect several, and/or involve the movement of pollutants between media,
- moreover the source of any given pollution problem may be a point source (or sources) or diffuse, may be fixed or mobile, and may be linked principally with one industrial sector, or with several.

3.1.3. Given this complexity it is natural — and appropriate — that the approaches to pollution control that are encountered in practice will differ in their emphasis, depending on technical, administrative and legal possibilities for control measures, as well as on the way in which the effects of pollution and control measures are distributed. However, it is important to recognize that these different approaches do not reflect any difference in fundamental principles. Thus, for example, a measure which concentrates on a single pollutant can be justified if (in the particular circumstances and in the light of available scientific evidence) it appears that there are no significant interactions with other pollutants; but this special case does not negate the general principle that pollution control policies should take account of such interactive effects.

3.1.4. The first stage in the control of a pollution problem is research and detailed study to investigate the factors involved and their interrelationships. In general, pollution problems may be characterized by four main factors — the pollutant, the sources of the pollutant, the environmental medium or media into which the pollutant is discharged or in which it appears or through which it is transported, and the target organism or environment. Control action may be directed towards any one or more of these elements of the problem.

3.1.5. The pollutant may be a single chemical substance or a mixture; it may consist of organic or inorganic substances or both; it may be a physical entity such as noise or heat. Control action directed at

the pollutant aims to prevent or reduce emissions of a specific substance or type of pollution from all sources into the relevant environmental media. Source-based controls aim to reduce emissions for the major sources into all media where the pollutant has a significant impact.

3.1.6. If the focus is placed on the environmental media concerned, then it is clear that one or more may be involved in the discharges and transport of pollutants; the most significant are air, water, soil, sediments and biota. Controls based on the environmental medium usually aim to reduce emissions of a specific substance from all major sources into one medium.

3.1.7. Finally turning to the target of pollution, this is usually a living organism but it can be inanimate — the soil or a building for instance. Target-base controls aim to protect the organism or environment from damage i.e. an environmental quality objective in the form of target-based controls.

3.1.8. When an environmental problem has been identified and investigated an appropriate control strategy can be decided upon. The control strategy selected may include biological standards, exposure limits, environmental quality objectives or standards, emission standards, process or operating standards, product standards, limits on total emissions or a range of preventive controls, at national or regional levels; (such as the application of environmental impact assessment procedures or testing and notification requirements for new industrial processes and products) — or some combination of these.

3.1.9. The control strategy adopted may clearly require various forms of action at Community level, depending, for example, on the spread and nature of the environmental problem, the effects of possible measures on the operation of the common market in goods and services and interactions with other Community policies.

### 3.2. Multi-media pollution controls

3.2.1. When problems are caused by the emission of pollutants from many sources into a single medium (with no significant cross-media effect) an approach based on emission limits or on environmental quality standards for that medium may be the most appropriate. Up until now Community environmental policy has tended to follow this approach. Although the Third Environmental Action Programme referred to the need to 'avoid any transfer of pollution that might arise from only partial measures', the tendency has been to concentrate on pollution problems as these arise in the different media: air, water, soil has predominated. There have of course, been some important horizontal instruments, for example the Sixth Amendment (\*) and the recently adopted Directive on environmental impact assessment (\*), but, in the main, the view taken has been a sectoral one and this view has been reflected in the structure of the Commission's own departments dealing with the environment.

3.2.2. Thus, early on, quality objectives for certain uses of water were defined at Community level; these were followed in turn by Community emission standards as far as the discharge of certain dangerous substances to water were concerned (though the so-called 'parallel' approach of Directive 76/464/EEC (\*) meant that these standards were at the same time accompanied by quality objectives). In tackling air pollution too, certain air quality standards were defined at Community level to be followed by the adoption of a framework Directive on emissions from certain industrial installations (\*) which envisaged the establishment of Community-wide emission limits; and by Commission proposals for emission limits on the discharges to the atmosphere from large combustion installations. The problems of waste were attacked through a series of Community Directives, aimed at establishing a general framework for the disposal of waste to land, in particular toxic and dangerous waste. The dumping of waste at sea is the subject of a recent Commission proposal (\*).

3.2.3. One inevitable consequence of the sectoral approach to pollution is that, as standards are tightened in one area, so the pressures may increase in another area. If discharges to air or water are restricted, then disposal to land may seem the preferred solution. But if the controls on the disposal of waste to land (and at sea) are in turn tightened, other difficulties may arise. The Commission's clear view is that the Community needs to move to increasingly strict environmental standards in all sectors. In these circumstances it is at least arguable that a sector by sector approach to pollution problems is not necessarily

(\*) OJ No L 259, 18. 9. 1979.

(\*) OJ No L 175, 5. 7. 1985.

(\*) OJ No L 129, 18. 5. 1976.

(\*) OJ No L 188, 16. 7. 1984.

(\*) OJ No C 245, 26. 9. 1985.

the most economically efficient solution, i.e. it does not necessarily achieve the maximum pollution reduction (taking all media into consideration) for a given economic cost.

### 3.3. Substance-oriented controls

3.3.1. A review of Community legislation reveals that the approach so far adopted to pollution in the different environmental sectors has not always been entirely consistent. Where interactions between polluting substances are not, for the purposes of environmental management, perceived as a significant consideration, a coherent strategy would seek to:

- (a) assess the exposure by a particular pollutant through the various pathways (air, water, soil) of a particular target;
- (b) assess the effects of such exposures, including the risks for health and the environment;
- (c) set standards designed to limit the impact of pollution where this is appropriate.

3.3.2. Because of its largely sectoral orientation previous Community action has tended to concentrate on discharges of a particular pollutant, to one medium (for example, water) in isolation from impacts on other media such as air or soil. In some circumstances this approach is open to criticism on the grounds that cross-media effects are not negligible. In earlier Community action programmes on the environment and in various instruments already adopted by the Council, there are already to be found various 'priority listings' of substances. But on the whole these listings are sector-specific (e.g. the 'black list' and 'grey list' of substances whose discharge into the aquatic environment is to be controlled under the provisions of Directive 76/464/EEC) <sup>(1)</sup>. There has not yet been a coherent attempt within the Community to assess substances on a cross-media basis or to devise control strategies on such a basis, although in practice in certain cases the aggregation of different standards which may have evolved haphazardly over a period of time in different sectors relating to a particular substance may in fact have led to more or less effective control.

3.3.3. An integrated substance-oriented approach to chemicals will:

- take account of the occurrence of a particular substance from whatever source,
- proceed towards an integrated risk assessment, which takes into account the different routes through which people and the environment are exposed,
- lead to choices regarding the most effective and efficient solution to the problems caused.

3.3.4. Such an integrated approach to chemicals management will lead to the selection, at Community level, of a provisional list of priority substances for environmental policy. Further evaluation and assessment may result in a definitive list of priority substances which in turn should lead to consideration, at Community level, of relevant control strategies for individual substances such as PCBs, cadmium, lead, phosphates, arsenic, copper, mercury, asbestos, dioxins, etc; such strategies would, of course, need to take account of controls that already exist at Community level in certain fields.

3.3.5. The Commission has already begun to work on the basis of a substance-oriented approach in certain particular cases. An example of one possible application of this approach is contained in the Commission's proposal to reduce environmental pollution by asbestos <sup>(2)</sup>.

3.3.6. Other ways of applying the same principle are possible. The Commission is carefully reviewing, on an 'across the board' basis, the environmental problems caused by cadmium. This review will lead to conclusions as to whether existing Community legislation restricting discharges to the environment of this substance, by whatever route, are sufficient or whether gaps exist; and, if so, what is the most cost-effective control strategy to ensure an adequate degree of protection. In these circumstances, appropriate proposals would be made.

### 3.4. Source-oriented controls

3.4.1. Environment management should ideally take into account interactions between sources of pollutants (where for example a limited absorptive capacity is shared between several discharges). In some cases, however, it may be reasonable to focus controls on a single type of source (especially where there are no other significant sources of pollutant or pollutants concerned). To some extent Community Directives (adopted or proposed) on automobiles and large combustion installations represent such a

<sup>(1)</sup> OJ No L 129, 18. 5. 1976.

<sup>(2)</sup> OJ No C 349, 31. 12. 1985.

source-oriented approach in the sense that they deal with a group or class of polluters (traffic, power plants). But they do not set out deliberately to look at the totality of the polluting discharges (including waste generation) of the particular class or group. The 'source-oriented' approach as defined in Chapter 5 of the First Environment Action Programme (actions specific to certain industrial sectors and to energy production) has not made much progress at least at Community level even though 15 key industrial sectors were identified in that programme and numerous studies were undertaken.

3.4.2. In fact, proposals were made for only two industrial sectors — titanium dioxide (where a multi-media approach was adopted) and pulp-and-paper (where the emphasis was on discharges to water). The pulp-and-paper proposal remains unadopted, and even unconsidered, by the Council, whilst the history of the titanium-dioxide proposal has not been encouraging. Nevertheless a source-oriented approach (aimed at individual industries or target groups of industries, and covering all discharges to air, land, or water and including the generation of solid as well as liquid or gaseous wastes) is appropriate in certain circumstances and is one of the alternative approaches available that may be worth considering again.

3.4.3. To support such an approach a better, more comprehensive knowledge of the emissions into air, water and to soil in the form of wastes from major sources of such emissions would certainly be needed, as well as knowledge of their likely evolution. Emission inventories should be set up and kept up to date; the state of the art of technologies to control emissions should also be regularly maintained and disseminated to those concerned and to the public, together with the costs entailed. Such action is clearly desirable in any event, whatever approach to pollution control is adopted and the Commission will take the necessary steps to make progress in these directions in cooperation with Member States and with the industries concerned.

3.4.4. The Commission will reflect further on these questions and will undertake the necessary studies and discussions to enable thinking on the matter to be carried forward. In doing so it will be important to acknowledge the difficulties that have prevented progress to date — such as the sense of apparent 'discrimination' against particular industrial sectors; and the problems of overlap where pollutants covered by a source-oriented approach are also regulated through sectoral legislation. It will also be important to recognize that for a global multi-media, multi-pollutant approach to work effectively would require a highly sophisticated control mechanism; the capacity to make valid judgements as to the optimum package of control actions which would enable wastes to be reduced, managed or distributed in ways which cause the least damage to, and yet provide the best use of, the environment (thus securing the greatest environmental benefit at the lowest economic cost); and the power to enforce such judgements. This in turn would inevitably have institutional implications in Member States — a powerful unified control authority, able to arbitrate as between different environmental sectors to secure optimum solutions, would seem to be an unavoidable corollary of such an approach. There are of course many other reasons for arguing the desirability of such agencies.

### 3.5. Product standards, emission limits and environmental quality objectives and standards

3.5.1. Environmental regulations setting standards for products or emissions can be based on the technical characteristics of the industry or product subject to regulation and/or on a formally specified quality objective or standard for the receiving environment. A wide variety of approaches has in fact been used.

3.5.2. In legislation adopted to date the Community has, for example, fixed limits for gaseous emissions from motor vehicles and in the case of certain air pollutants, the Commission has proposed that emission limits should be set for some fixed sources. At the same time for some air pollutants, e.g. SO<sub>2</sub>, particulates and lead, environmental air quality standards have been agreed at Community level. As far as the discharge of dangerous substances to water is concerned, the Community has agreed on the so-called parallel approach for 'black list' substances, under which Member States are free to choose either the environmental quality objective or the emission limit approach, while insisting that for discharges of 'grey list' substances (as for the Directives dealing with particular uses of water) the quality objectives approach should be followed.

3.5.3. As far as the pollution of the soil is concerned, the first Directive adopted — on the use of sewage sludge in agriculture <sup>(1)</sup> — provides for both quality standards and emission limits (spreading rates and quantities) to be observed simultaneously; whilst in certain other Directives requirements have been expressed in general terms only.

3.5.4. In many important cases (e.g. lead in petrol, the sulphur content of gasoils) product standards have been laid down with the dual objective of protecting the environment and avoiding artificial barriers to trade or distortions of competition. In other cases other approaches have been adopted — such as the requirement to establish programmes (e.g. the Directive on drinks containers <sup>(2)</sup>), or agreed reductions in the level of use (e.g. the Decisions on CFC's <sup>(3)</sup>). In some of the water Directives guide values as well as mandatory values have been laid down; and plainly other forms of guidance as to good practice could have a part to play.

3.5.5. Another important element in establishing standards at Community level is the 'state of the art', in terms of available technology. The question arises of how to translate this general concept into concrete values. It is noteworthy that in recent Community environmental legislation (especially in relation to atmospheric pollution and water pollution) reference is increasingly made to best available technology. Against this background arrangements made at Community level to promote a more efficient exchange of information between Member States and with the Commission regarding their own experience and knowledge of applicable technologies would be of value. The Commission intends to make proposals as to how such an information exchange could best be achieved.

#### 3.6. Conclusions

3.6.1. The Commission does not take the view that any one approach is necessarily to be preferred to others. Much depends on the circumstances of the case. Accordingly future proposals will set standards in the manner which is most appropriate, in the light of environmental protection requirements and the Community's responsibilities. Thus Community measures (for example product noise regulations) whose main purpose is to avoid trade distortions arising from unilateral actions by Member States will tend to emphasize technical conditions for the maintenance of environmental quality; on the other hand measures to combat cross-frontier pollution such as acid rain will need to take into account both environmental quality standards and the technical requirements for remedial action.

3.6.2. However, the Commission considers that the Community has had sufficient experience of the many different approaches to environmental protection that have been adopted in Community legislation to date — and have been described and discussed above — to make it desirable and worthwhile for the whole matter to be reviewed. The aim of such a review would be to determine whether any rationale can be worked out which would provide useful guidance as to the preferred approaches to be adopted in future Community legislation. The Commission will accordingly, in close cooperation with Member States, take the necessary steps to set in hand a general review of the value and efficacy of the approaches to standard-setting adopted to date, coupled with consideration of possible future developments, (including the role of economic instruments (see paragraph 2.5.6 above).

### 4. ACTION IN SPECIFIC SECTORS

#### 4.1. Atmospheric pollution

4.1.1. Although the Community has already made some progress in dealing with traditional causes of air pollution, such as smoke, particulates and sulphur dioxide in industrialized urban areas, new problems have emerged recently, linked *inter alia* to increased traffic and to acid depositions which are likely to remain of major concern. The air pollutants involved, especially sulphur, nitrogen oxides, hydrocarbons and photochemical oxidants, are known to act individually, collectively or synergistically to acidify the soil and surface waters, to inhibit plant growth and to damage monuments, buildings and structures; they are also potentially detrimental to human health.

<sup>(1)</sup> OJ No L 181, 4. 7. 1986.

<sup>(2)</sup> OJ No L 176, 6. 7. 1985.

<sup>(3)</sup> OJ No L 329, 25. 11. 1982.

4.1.2. Industrial processes, waste incineration and other human activities giving rise to emissions to the air of identified or suspected persistent, dangerous or toxic substances (e.g. heavy metals, PCBs, asbestos) may not only contaminate the air but lead to the transfer of the pollution to other parts of the environment and there produce deleterious effects on human beings and ecosystems. This is an added reason for reducing emissions to air.

4.1.3. The European Council at its Stuttgart meeting in June 1983 called for the acceleration and reinforcement of action at national, Community and international level with the aim of combatting the pollution of the environment and in particular of the air. As a first response the Commission forwarded to the Council a number of proposals aimed at the limitation and reduction of emissions from major stationary and mobile sources <sup>(1)</sup>; in parallel a major effort was deployed on research into the causes and effects of the air pollutants designed to elucidate the causal mechanisms associated with the damage observed.

4.1.4. The Commission also made plain that it was adopting a strategic approach which involved requiring a substantial overall decrease of emissions of acidifying substances from all major sources. This will be pursued. In this connection it is of prime importance that the Commission's proposal for reducing emissions from large combustion installations, which is still under discussion in the Council, should soon be adopted, hopefully before the Fourth Environmental Action Programme begins <sup>(2)</sup>. Similarly, the finalization and implementation of the new 'European Standards' for motor vehicle exhaust emissions will lead to further reductions in nitrogen oxides, hydrocarbons and other pollutants. But these measures by themselves are unlikely to be sufficient.

4.1.5. The Commission is currently working on the development of an overall longer-term strategy to reduce air pollution within the European Community as well as beyond its boundaries, with the aim of defining an adequate and comprehensive approach in response to the challenge given by the Stuttgart European Council. This overall strategy will be published as a communication to the Council during 1987.

4.1.6. Major objectives within this strategy will be:

- to identify the atmospheric pollutants (outdoor and indoor) which are currently and potentially of greatest concern from the standpoint of the protection of human health and of the environment,
- to determine the most appropriate means — whether substance and/or source-oriented — for dealing with the pollution problems already identified or likely to become important, whilst taking care that air pollution is not simply transferred to water or soil,
- to set and implement Community-wide objectives for substantial reductions of total emissions from all relevant sources into the air, in order to combat acid deposition and associated damages including corrosion and forest die-back,
- in the longer term to reduce the ambient air concentrations of the most important pollutants down to levels considered acceptable for the protection of sensitive ecosystems,
- to define and implement preventive measures against indoor pollution from a growing number of substances,
- to develop and put in place related instruments which can assist in achieving these objectives, including:
  - an inventory of emissions and major source categories,
  - an inventory of best available pollution abatement technologies and associated costs,
  - new low polluting technologies,
  - monitoring networks,
  - modelling techniques,
  - economic instruments to prevent pollution.

<sup>(1)</sup> See 17th General Report on the Activities of the European Communities, 1983, paragraphs 377-381.

<sup>(2)</sup> OJ No C 49, 21. 2. 1984.

4.1.7. In continuation of work already initiated under the preceeding action programmes, the major plant categories listed in the Directive on air pollution from industrial plant (\*) (Directive 84/360/EEC) which warrant Community-wide emission standards will have to be dealt with. Moreover Community emission standards, based on best available technology, may also be needed for sources not yet covered by this Directive, (in particular for nuclear installations and for installations burning fuel oil and solid fuels) so as to achieve, over a reasonable period of time, a framework within which all the major air pollutants from the main categories of installations are controlled on a coherent basis. On all these matters the Commission will make appropriate proposals.

4.1.8. Further measures will be proposed for reducing air pollution from transport categories not yet covered by Community legislation. Air quality standards may also be required for certain pollutants such as photochemical oxidants, of which ozone is suspected to play a key role because of its synergistic effects in connection with acid depositions. Consideration will be given to developing ecological air quality standards at Community level, covering, for example, acid deposition in forests and other sensitive ecosystems.

4.1.9. Outside the Community, the need for coordinated international action on atmospheric pollution will remain paramount, even when the Community has put its own house in order; it will still need, if real progress is to be achieved, to continue to play an active and constructive part in the work of international bodies such as the Economic Commission for Europe, and the International Atomic Energy Agency and through relevant international conventions, whenever or wherever air pollution problems are identified and discussed.

#### 4.2. Fresh water and sea water

4.2.1 The Third Environmental Action Programme noted that the Commission would continue with the measures begun under the first two programmes and would implement the Directives and Decisions adopted by the Council with a view to preventing and reducing water pollution. These Directives and Decisions related in particular to the setting at Community level of quality standards for particular uses of water (to date, surface water, drinking water, bathing water and groundwater are covered together with waters used for fish and shellfish raising); and to reducing pollution caused by the discharge of certain dangerous substances to the aquatic environment. The third programme noted that the main areas of activity were:

- the control of pollution by dangerous substances,
- the control of pollution from oil spills,
- monitoring and control with a view to improving water quality and reducing pollution.

4.2.2. These priorities remain valid in the context of the Fourth Environmental Action Programme and the Commission will make appropriate proposals in relation to all these areas. In addition, however, it needs to be stressed that the priority attributed to marine pollution is steadily increasing and that, in that context, the Commission will pay considerable attention to other dangerous substances transported by sea, as well as to oil. The Commission has also indicated in COM(86) 327 its intention to consider the case for proposing Community emission standards, based upon best available technology, for nuclear installations and to make proposals for Community adherence to the London Dumping Convention.

4.2.3. As far as concerns the questions of water pollution caused by the discharge of dangerous substances to the aquatic environment, there may be a case for reviewing the advantages and limitations of the so-called 'parallel' approach established by Directive 76/464/EEC as indicated in Section 3.3 above. The two approaches are not equally well adapted to tackling either point or diffuse sources of pollution. The Commission will reflect on the possibility of developing proposals for a more coherent pollution control policy covering both types of pollution source and involving the more discriminating use of either one or both of these parallel approaches.

4.2.4. Meanwhile the Commission intends to continue with the detailed implementation of Directive 76/464/EEC. Now that the general framework Directive for fixing emission limits and quality objectives

(\*) OJ No L 188, 16. 7. 1984, p. 20.

for dangerous substances has been adopted <sup>(1)</sup>, the task of establishing values in respect of substances featuring amongst the 129 'black list' (Annex I) substances published by the Commission in 1982 <sup>(2)</sup> can be much accelerated. The Commission will make proposals for values in respect of many of these substances during the period of the Fourth Environmental Action Programme. Work will also continue on the 'grey list' (Annex II) substances and the Commission intends to make proposals for quality objectives in respect of a number of these substances, especially lead, copper, nickel and zinc if this is necessary on the basis of experience acquired at national level.

4.2.5. However, even with an increasing tempo of action as set out above, measures to protect the Community's aquatic environment will be by no means complete. New actions will be necessary in a number of areas. The Commission intends to make proposals for Directives on the control and reduction of water pollution resulting from the spreading or discharge of livestock effluents and the excessive use of fertilizers and pesticides; advisory and education actions are also necessary to increase farmers' awareness of the problems which may arise; in this way agriculture, like other sectors, would contribute to the Community's efforts to reduce water pollution. The Commission will also propose minimum standards to be achieved in the long-term in all Community water and will re-examine the question of the establishment of quality standards for further uses of water, additional to those mentioned in paragraph 4.2.1 above, in particular for the industrial use of water and the agricultural use of water.

4.2.6. As far as the protection of the sea is concerned, the main objectives of future actions will be:

- the implementation of the relevant international conventions and protocols to which the Community is a contracting party <sup>(3)</sup> and active participation in the work of other international bodies dealing with marine pollution <sup>(4)</sup>,
- the development of a strategy and action plan (MEDSPA) for the protection of the Mediterranean area (including of course the Mediterranean Sea) as envisaged in the Commission's communication to the Council of 24 April 1984 <sup>(5)</sup>,
- the implementation of the Declaration adopted by the Contracting Parties to the Barcelona Convention on their Fourth Ordinary Meeting in Genoa (September 1985),
- the implementation of decisions taken at the first North Sea Conference and active participation in the second conference which is due to take place in 1987,
- the reduction of land-based emissions of pollutants into the sea through rivers and the dumping of wastes and by atmospheric transport,
- harmonized enforcement at Community level of optional annexes to the MARPOL 1973/78 Convention,
- the development and practical implementation of the Community information system for dealing, in particular, with harmful substances spilled at sea,
- the continuation of the programme of demonstration pilot projects for marine protection against oil and other chemical substances; these projects will aim to improve national capabilities to respond in cases of emergency situations and/or to develop new means or methods for dealing with important spillages; they will also contribute to identifying ways in which aspects of ship design, arrangements for the stowing of cargo and the packaging and labelling of harmful substances carried in containers can facilitate successful response in the event of accident,
- training those responsible for the combatting of marine pollution caused by oil and harmful substances,
- better integration of environmental requirements into maritime transport policies.

In relation to all these areas of action, appropriate initiatives will be taken by the Commission, in close consultation with Member States, either through the Council machinery or via the relevant advisory committees.

<sup>(1)</sup> OJ No L 181, 4. 7. 1986.

<sup>(2)</sup> OJ No C 176, 14. 7. 1982.

<sup>(3)</sup> — the Barcelona Convention for the protection of the Mediterranean Sea against pollution and its four protocols (dumping, land-based sources, accidental pollution, specially protected areas),  
— the Paris Convention for the prevention of marine pollution from land-based sources,  
— the Bonn Agreement for cooperation in dealing with pollution of the North Sea by oil and other harmful substances.

<sup>(4)</sup> e.g. IMO, UNEP, Port State Control, ILO.

<sup>(5)</sup> OJ No C 133, 21. 5. 1984.



4.2.7. In addition to the actions described above a number of new specific preventive measures are, in the Commission's view, necessary. These relate in particular to the improvement of the reception facilities available for oily wastes and other ship-borne wastes; and improved arrangements for dealing with garbage. The Commission will make appropriate proposals.

4.2.8. Other matters, affecting both fresh and sea waters, to which increased Community attention may be necessary, include questions related to the handling and disposal of polluted sediments; the eutrophication of water bodies in certain areas of the Community; and the updating of the list of dangerous substances. These matters will be examined in depth by the Commission and appropriate initiatives to deal with them will continue to be taken.

4.2.9. The improvement of water supply and management will continue to be a major task for the Community, especially in semi-arid regions and in the small islands of the Community. The Commission will continue to devote part of its efforts to this question and will pay particular attention to it in its work related to the Mediterranean area under MEDSPA.

4.2.10. The Commission will also continue to participate actively in the work of the Rhine Commission with the aim of securing improved protection of the river Rhine from all forms of pollution. In addition the Commission is participating together with the Federal Republic of Germany in the negotiation of arrangements for the environmental protection of the river Danube.

#### 4.3. Chemicals

4.3.1. Continuing priorities will be the implementation of the new chemicals notification system (Directive 79/831/EEC) and the classification, packaging and labelling of new and existing chemicals <sup>(1)</sup>.

4.3.2. The notification system set up by Directive 79/831/EEC enables the Commission and Member States to monitor the hazards, distribution and uses of chemicals marketed after 18 September 1981. A similar procedure is needed for the integrated risk assessment of 'existing chemicals' (those marketed before this date and listed on the European Inventory of Existing Chemical Substances (EINECS)).

4.3.3. A Directive will be proposed to provide a comprehensive structure for risk assessment and regulation of existing chemicals, where such evaluation is needed. This Directive will establish a procedure for treating a priority list of chemicals for immediate attention, as well as setting out the means for gathering information, requiring testing, and evaluating the risks to people and the environment. It also could be a mechanism to coordinate the development of chemical specific control strategies, where this proves to be necessary.

4.3.4. The Commission will keep under continuous review the classification systems, testing requirements and test guidelines laid down in environmental Directives, with a view to achieving further rationalization where this is possible. It will in particular take into account work currently being undertaken in the OECD and elsewhere regarding the development, validation and use of alternative non-animal methods using fewer animals or involving less painful procedures.

4.3.5. The substance-oriented approach to environmental pollution problems arising from widely used substances and/or chemicals has been described earlier (see section 3.2). As noted, such an approach will

- take account of the occurrence of a particular pollutant from whatever source,
- proceed towards an integrated risk assessment which takes into account the different routes through which people and the environment are exposed,
- lead to choices regarding the most effective and efficient measures (whether legislation or actions of other kinds) to solve the problems arising.

The Commission is already following this approach in its work on certain substances that are widely used and widely dispersed in the environment — in particular cadmium and lead. Appropriate proposals will be made.

<sup>(1)</sup> OJ No L 259, 15. 10. 1979, p. 10.

4.3.6. Another major new thrust will be the integrated regulation of dangerous chemicals. The Commission will review the adequacy of existing Community legislation, in particular the Directive on marketing and use of chemicals (79/663/EEC) <sup>(1)</sup>, which in the past has been used to control PCBs and asbestos, among other substances.

4.3.7. Legislation and Community action at international level has already been proposed regarding the export and import of dangerous chemicals that are banned or severely restricted in the Community. But the question of the export of dangerous industrial processes and plant to non-EEC countries remains a matter of high priority. The Community should develop legislation on the export of dangerous industrial processes based on the information and experience gained under the Directive on major-accident hazards (82/501/EEC) <sup>(2)</sup>: as soon as sufficient experience has been gained under that Directive, the Commission will make appropriate proposals.

4.3.8. In another possible application of the experience gained under Directive 82/501/EEC the Commission will study whether the procedures established under that Directive for in-plant safety, accident prevention, emergency planning, training, information, etc. could usefully be applied to nuclear installations. A report will be made to the Council on the matter as soon as possible.

4.3.9. More generally it must be recognized that concern over the international movement and production of dangerous chemicals, wastes and plant is growing rapidly. In this field accidents, though happily rare, can be devastating (Seveso and Bhopal). In addition to the continuing implementation and development of Community legislation on dangerous chemical substances (as described above) and on the transfrontier movement of toxic and dangerous wastes (see Section 5.3 below), urgent action is needed to develop at international level adequate control measures and notification and authorization procedures, which will provide a high degree of security without hampering legitimate manufacture and trade in dangerous products. There is a strong case for the Community, in collaboration with OECD and the UN, to promote the rapid development of worldwide codes of practice to supplement the specific legislative measures needed to cover some aspects of these matters and the Commission will take initiatives to this end.

4.3.10. The Community, alongside Member States, is already a contracting party to the international convention dealing with the protection of the ozone layer. A protocol dealing with chlorofluorocarbons (CFC's) is in process of being developed. The Community, by successive Council Decisions, has limited the use of CFC's within the Community and it is important that it should become a contracting party to the international protocol. The Commission is actively participating, together with Member States, in the preparatory work that is underway and proposals will be made at the appropriate stage for a mandate to negotiate the final text.

#### 4.4. Biotechnology

4.4.1. The developments in biotechnology in recent years have been dramatic and have major policy implications for the Community. The Commission has played a leading role in developing a Community strategy for European biotechnology, including, in particular, the development of a rational approach to recombinant DNA research. The Community also has long established Regulations, which it is continuing to update where necessary in certain areas of biotechnology application, including e.g. foodstuffs, pharmaceuticals and agriculture. Research relevant to risk assessment techniques forms part of the current Biotechnology Research Action Programme 1985-89, and this will be continued and expanded when the programme is revised.

4.4.2. From the standpoint of environmental protection two aspects are important. On the one hand, biotechnology has potential for assisting in environmental protection, e.g. in water purification; in reducing the biological oxygen demand of organic wastes from industries processing biological materials and in the detoxification of wastes. On the other hand, there is undoubtedly some public disquiet related to the unfamiliarity of the more recent advances in genetic engineering, and in particular about the prospective widespread use in agriculture and environment of novel organisms and the possible risks related thereto.

4.4.3. The European Community's interest in controlling the possible risks from biotechnology is obvious: because organisms can reproduce, novel combinations of genetic materials might give rise to

<sup>(1)</sup> OJ No L 262, 27. 9. 1976, p. 201.

<sup>(2)</sup> OJ No L 230, 5. 8. 1982.

problems comparable with those created in the past by incursions of natural pathogens into new environment (e.g. Dutch elm disease). Also, the rapid development of industries using modern techniques of genetic manipulation means that the potential environmental impacts of the processes and products of biotechnology might multiply rapidly if appropriate precautions are not taken.

4.4.4. Long experience in such fields as health care and environmental protection policy demonstrates that it is better to evaluate potential risks as far as possible in advance of large-scale production, so that preventive action can be taken, if necessary. Clearly the onus must be laid upon the innovator to provide to the regulatory authorities data adequate for such appraisal. Such evaluations could also be complemented by *a posteriori* monitoring in the light of accumulating experience.

4.4.5. There is a strong case for such action being taken at Community level — both to protect the health and environment of Community citizens and to preserve the common market against unilateral national regulations. In discussions with senior officials of the Member States it has become clear that the Community should move quickly and decisively to ensure that there is a comprehensive legislative framework for the development of processes and products involving potentially dangerous novel organisms. The Commission has accordingly already started work through a specially constituted Committee — the Biotechnology Regulation Interservice Committee (BRIC) — on the assessment and further development as necessary of health and environmental regulations in this area.

4.4.6. A comprehensive approach to the protection of the environment from possible risks from genetically altered or exotic organisms may be needed relating to:

- (1) the nature (and potential viability in the environment) of the organisms produced, particularly where the constituents of a novel organism are known to have toxic characteristics;
- (2) the production processes used;
- (3) operating discharges to the environment;
- (4) waste disposal and management practices;
- (5) accident prevention and the risks if accidental releases do occur;
- (6) application methods and sites when deliberate release to the environment is intended;
- (7) detection, monitoring and control of survival, multiplication and dissemination;
- (8) exposed populations and routes of exposure;
- (9) effects of the organisms on humans, other species and ecosystems.

4.4.7. No fundamental distinction can be made between the type of risks arising from already existing organisms, organisms produced by traditional means of genetic modification and organisms produced by the much more precise methods of modern biotechnology. However, the great variety and quantity of new uses being developed for genetically modified organisms could increase the scale of risks from these uses unless their development takes place in a well-defined regulatory environment.

4.4.8. Regulations on novel organisms must distinguish between risks in two different areas of use: on the one hand, the risks from contained industrial uses of genetically manipulated micro-organisms, which are not likely to require measures fundamentally different from those that have been taken in the past; on the other hand, in the case of the planned release of novel organisms in the environment (such as live vaccines, micro-organisms for the detoxification of waste or biological pest management, or new plant and animal species) where past experience (e. g. of the ecological impact on existing populations of the introduction of exotic species) has shown that special precautions may be necessary.

4.4.9. The Commission intends to assess the requirements and bring forward appropriate proposals to Council in two areas:

- (1) on the classification, containment and control of risks to people and the environment from the manufacture, use and disposal of novel organisms,
- (2) on notification and consultation on the planned use of novel organisms in the environment.

The likely need in the first area will be to harmonize standards and procedures for the classification, containment, accident control, emergency planning and response, and the disposal, as waste, of potentially hazardous organisms used in industrial production processes. On planned release, the likely need will be to establish a European notification and permit system for the release into the environment of novel organisms.

4.4.10. Because no Member State (nor indeed, any other country) yet has comprehensive legislation in this field, the Community has an important opportunity to develop an appropriate framework for itself as well as providing a model for other countries. The Commission will accordingly, parallel with the internal Community action described above, seek to extend and reinforce the effectiveness of such action through negotiations in the OECD and other international organizations.

4.4.11. The Commission will also continue and expand scientific research on the assessment of risks from the development and use of biological agents.

#### 4.5. Noise

4.5.1. All Community Directives on noise that have been agreed to date are concerned with noise from products. They set limits to the permitted noise emissions from four-wheeled vehicles, tractors, motorcycles, construction plant, aircraft and lawnmowers. In addition, proposed Directives — setting emission limits for helicopters and railway vehicles and requiring the noise-labelling of household appliances — are under discussion in the Council.

4.5.2. The question now arises as to the extent to which the Community should concern itself with noise questions which are not specific to products. Although the Second Environmental Action Programme spoke in ambitious terms of 'defining and implementing a Community anti-noise policy', under which the Commission would propose a programme setting out the general framework for a body of measures to be taken at different levels to combat noise (including quality objectives, zoning matters, noise-related charges, etc.), in practice (because of limitations on staff resources) the Commission has not yet been able to progress beyond the product-oriented approach.

4.5.3. Yet noise is an environmental problem which affects virtually every Community citizen; and which according to surveys of public opinion, remains of considerable importance. The Commission accordingly intends, during the period of the Fourth Environmental Action Programme, to endeavour to make progress on a number of matters. These include:

- the defining of quality objectives or guidelines, setting limits to ambient noise levels, in various circumstances,
- the regulation of the noise permitted in motorcycle silencer replacements,
- the inclusion of noise-inspection measures in the vehicle inspection systems of Member States,
- the extension of existing Community Directives on aircraft noise to provide for a 'non-addition rule' so as to bring into force in the Community the standards of ICAO Annex 16, Chapter 3, at an agreed early date,
- the development of a common approach to noise-related landing charges for aircraft (something which would be entirely consistent with the 'polluter pays principle').

4.5.4. Overall the Commission's approach will be to combine the establishment of noise emission limits for specific products with the fixing of ambient noise levels. In addition the Commission will consider the possible use of charges (or other economic instruments) aimed at discouraging noisier products and favouring more silent ones, thus creating pressure on manufacturers to develop less noisy articles. Finally the Commission will, working with the relevant standard-setting bodies (such as ISO), seek to establish the basis for evaluating noise created by traffic, industry, construction works, etc.

#### 4.6. Nuclear safety

4.6.1. It is clear that the growing commitment of the Community to the safe use of nuclear power, within the framework laid down by the Euratom Treaty (along with other civil uses of radioactive materials) raises questions of importance in terms of environmental protection.

4.6.2. In its outline communication to the Council on the consequences of the Chernobyl accident (<sup>1</sup>), the Commission announced its intention to develop proposals for a coherent policy aimed at the protection of workers, the public and the environment. The preventive approach envisaged in that communication (in addition to measures to be taken in the event of a crisis) is of course entirely consistent with the preventive approach which is at the heart of Community environment policy.

4.6.3. Up to the present a high degree of environmental protection from radioactivity has been ensured by the approach adopted in the Euratom Treaty, which focusses on ensuring the achievement of inter-

(<sup>1</sup>) COM(86) 327 final.

nationally agreed levels of radiological protection of Community citizens coupled with the requirement that all exposures shall be kept as low as reasonably achievable (ALARA). The objective of this approach is to ensure that human exposure is reduced to levels which, in any event, respect international standards and the corresponding basic safety standards established by Community legislation<sup>(1)</sup>. However, it was recognized by the Commission, both in its communication on the consequences of the Chernobyl accident and in its subsequent communication on 'The Development of measures for the publication of Chapter III of the Euratom Treaty'<sup>(2)</sup> that a number of specifically environmental aspects of nuclear safety (in addition to the radiological protection aspects) now needed to be further examined in detail.

4.6.4. These aspects comprise the following:

- the question of whether the emissions standards concept should be applied to nuclear installations, in the knowledge that in any case the basic standards will remain in force,
- the problems involved in the harmonization of safety criteria and the actions to be taken,
- the question of whether the provisions of the Euratom basic standards concerning preventive measures designed to reduce accident risks, such as notification of the characteristics of nuclear facilities and of emergency plans, are correctly applied and sufficient for the protection of the public,
- the transport of dangerous materials (including radioactive materials) on which a study has been in hand since the Mont Louis accident in 1984. As indicated in paragraph 5.3.7, a full report on that work will shortly be sent to the Council and will indicate that the Commission intends to make proposals for the application by Community legislation of the provisions of the relevant international agreements governing the transport of such materials to international traffic; the Commission's proposals will also seek to ensure that Member States adopt regulations for national transport based on the same principles,
- the management of radioactive wastes. Here the general position is that work on a Community research programme and plan of action (1988-1992) is proceeding satisfactorily; but the Commission takes the view that the management of nuclear waste remains a control issue of environmental concern. It will be necessary to strengthen the Community policy by building on the results of work already in hand, particularly within the framework of the Community's research programmes, with a view to developing clear orientations or guidelines at Community level for the disposal of such waste. The Commission also takes the view that, so far as concerns the disposal of radioactive wastes at sea (which is controlled internationally by the London Dumping Convention) it is most desirable that the Community as such should participate in the work of that convention; proposals to this end will be submitted to the Council before the end of 1986.

4.6.5. More generally, the Commission is increasingly conscious of the potential implications for the environment of the operation of and of discharges from nuclear installations of all kinds; and of the policies and practices adopted in relation to the management and disposal of radioactive wastes. In the context of the pursuit of its obligations under the Euratom Treaty (and also in the context of its obligations under the amended EEC Treaty) the Commission intends to keep under close surveillance the question of environmental protection in the context of the use of nuclear power (and other civil uses of radioactive materials) and will make proposals for Community action as appropriate.

## 5. MANAGEMENT OF ENVIRONMENTAL RESOURCES

### 5.1. Conservation of nature and natural resources

5.1.1. The period of the Fourth Environmental Action Programme needs to see a number of important developments in the field of nature conservation. It is probably true to say, that, of all the aspects of environmental policy, nothing excites so much public interest and concern as the need to protect nature and habitat, landscape, fauna and flora, from the threat of further degradation or depletion. The First Environmental Action Programme, adopted in 1973, contained important chapters on the protection of the natural environment and this emphasis was maintained in the two subsequent programmes.

<sup>(1)</sup> OJ No L 246, 17. 9. 1980 and OJ No L 265, 5. 10. 1984.

<sup>(2)</sup> COM(86) 434 final.

5.1.2. More than six years have now elapsed since the Council adopted its Directive and resolution on the conservation of wild birds (79/409/EEC) <sup>(1)</sup>. It is of course essential to ensure that this Directive and resolution are fully implemented in the Member States. Similarly the effective implementation of Regulation (EEC) No 3626/82 which applied the International Convention on Trade in Endangered Species (CITES) <sup>(2)</sup> within the Community is necessary. Both measures are of major importance for conservation both within the Community and beyond its borders; the continuing implementation of both will therefore be a matter of priority during the period of the Fourth Environmental Action Programme. But this alone is not enough; the time is now ripe for the Community and Member States to make a major new thrust in the field of nature conservation.

5.1.3. Certain of the actions envisaged in other fields, for example, the possible reforms of the common agricultural policy which are set out in the Commission's communications to the Council and the Parliament of 15 July 1985 (Perspectives for the Common Agricultural Policy) <sup>(3)</sup> and of 18 December 1985 (A Future for European Agriculture) <sup>(4)</sup> envisage changes which, if implemented, would have an important beneficial impact on nature and nature conservation. Measures taken to limit pollution of air, water and soil also benefit wildlife and plant life. The proposals amending the structural policy are an important step in that direction <sup>(5)</sup>. The implementation of environmental impact assessment procedures, as set out in the Council Directive of 27 June 1985 (85/337/EEC) <sup>(6)</sup> may help to avoid some of the more obvious dangers to the natural environment. But, once again, these measures by themselves will not be enough.

5.1.4. What essentially is needed is a Community instrument aimed at protecting not just birds but all species of fauna and flora; and not just the habitats of birds, but the habitat of wildlife — animals and plants — more generally. Such a comprehensive framework should ensure that, throughout the Community, positive measures are taken to protect all forms of wildlife and their habitat; such measures should be aimed at the three main objectives of the World Conservation Strategy:

- the maintenance of essential ecological processes and life support systems,
- the preservation of genetic diversity,
- the sustainable utilization of species and ecosystems.

5.1.5. The Commission will make appropriate proposals on these lines. The Commission is also working on the preparation of a comprehensive list of sites throughout the Community that are protected under the various categories of protected areas. Such a list is a necessary basis for the consistent implementation of the kind of framework instrument discussed above.

5.1.6. Within such a framework, urgent action is also needed, aimed at the protection of endangered plants and species, such as those listed in the appendices of the Berne Convention. It seems clear from recent reports that the implementation of the Berne Convention in the Member States of the Community, as elsewhere, is poor. A comprehensive framework of nature protection measures, at Community level, would undoubtedly help to improve the situation of endangered species of plants and animals within the Community, whilst at the same time helping to achieve the three-fold objective of the World Conservation Strategy.

5.1.7. In addition to Community measures of the kind mentioned above the 'nature conservation' section of the Community's ACE Regulation (EEC) No 1872/84 <sup>(7)</sup> should be expanded and extended to help the achievement of the above objectives; it would be neither logical nor desirable to restrict its scope to species covered by the 'Birds Directive'; the Commission will make appropriate proposals. The potential contribution of other policies to nature conservation objectives will also be important; the Commission intends to keep in mind the scope for an increasing scale of actions of this kind as the adaptation of the common agricultural policy to current needs continues.

<sup>(1)</sup> OJ No L 103, 25. 4. 1979.

<sup>(2)</sup> OJ No L 384, 31. 12. 1982.

<sup>(3)</sup> COM(85) 333, 13. 7. 1985.

<sup>(4)</sup> COM(85) 750, 18. 12. 1985.

<sup>(5)</sup> COM(85) 199 final.

<sup>(6)</sup> OJ No L 175, 5. 7. 1985.

<sup>(7)</sup> OJ No L 176, 13. 7. 1984.

5.1.8. A Community framework for nature protection will involve not only environmental organisations, and environment departments, but also far wider interests, including industrial, commercial and farming interests. Above all it involves the promotion of awareness and understanding and of the will to act in a field where immediate economic interests will only rarely be served by such actions. For this reason — as well as because of its intrinsic importance and high public support — the theme of nature protection will feature prominently in the activities to be undertaken during the European Year of the Environment.

5.1.9. Under the environment chapter of the Commission's programme for 1985, the Commission stated:

'An improvement in the quality of life also entails respect for animals in the Member States and in the Member States' dealings with the rest of the world. The regular debates concerning the hunting of seal pups should not conceal the many questions raised by the exploitation of animals in Europe: the use of animals for experiments, factory farming, trade in animals and the processing of animals for consumption purposes. The Commission will examine all possible steps which can be taken in this connection.'

It will be important in the context of the Fourth Environment Programme to put some flesh on this brief statement.

5.1.10. Priorities will include the better enforcement of existing Community Directives relating to animal protection and the proposal of new Community measures where this is appropriate, e.g. for the protection of laboratory animals and the welfare of farm animals.

## 5. 2. Protection of the soil

5.2.1. The protection of the soil is a field to which it is increasingly recognized that special attention must be paid. This arises in the first instance from the recognition of the growing threats to the soil and of the extent of the damage suffered. Secondly, as already discussed in Section 3, it is clear that a satisfactory pollution control policy cannot be limited to a sectoral approach; and that, as far as the soil is concerned, actions limited purely to the management of waste will not by themselves achieve the necessary protection. As for soil erosion, efforts for the continuation of farming under the disadvantaged areas Directive <sup>(1)</sup> and more specific measures for fire control have contributed to solve this problem.

5.2.2. However, it is not an easy task to ensure the protection of the soil because it is a complex medium, has multiple interrelationships with other media (and *vice-versa*), and serves multiple functions, (e.g. reservoir and filter for water, store of primary mineral matter, basis for human activity).

5.2.3. The threats to the soil can be grouped into three categories:

- contamination by harmful substances (or by substances with low biodegradability) of various origins (urban, agricultural or industrial wastes; agro-chemical products, acid deposition, etc.),
- degradation of the physical or chemical structure; erosion, natural hazards, compaction through the use of heavy machinery,
- misuse and waste as a result of space-consuming activities.

5.2.4. In order to take account of these characteristics and to respond to the threats, a global approach to soil protection is necessary.

5.2.5. The Commission will accordingly launch work in the near future to develop such an overall Community approach in order to supplement existing efforts. Within this framework the Commission will make proposals for specific actions to tackle the three principal causes of soil degradation: contamination, physical degradation and soil misuse; these proposals will be:

- to reinforce the arrangements for coordination between policies to ensure that soil protection is more effectively taken into account in particular in the Community's agricultural and regional development policies,
- to reduce the damage caused by agriculture to the ecological infrastructure by proposing measures (within the context of the reform of the common agricultural policy) to encourage less intensive livestock production systems; to reduce the use of agricultural chemicals; and to ensure the proper management of agricultural waste (especially from intensive livestock units — see also Section 2.3),

<sup>(1)</sup> Directive 75/268/EEC, OJ No L 172, 3. 7. 1975.

- to prevent soil erosion and rapid run-off of water (including the identification and mapping of rapidly erodible soils in the Community),
- to identify and clean up polluted waste disposal sites; to encourage the recovery and re-use of contaminated or derelict land (e.g. old industrial sites, mining land, etc.); and to reduce the hazard to soil from current waste disposal practices,
- to encourage the development of innovative soil protection techniques and the transfer of available know-how.

5.2.6. It should, in addition, be noted that proposed measures to reduce pollutant emissions to air (Section 4.1) and to protect surface and ground water (Section 4.2) will also contribute to the protection of the soil. In addition, soil will be a central focus in the actions relating to management of the environment in urban areas as well as coastal and mountainous zones (Section 5.4).

### 5.3. Waste management

5.3.1. The Community generates over 2 000 million tonnes of wastes each year, some 80 % of which is potentially re-usable or recyclable for raw materials or energy, some of which is toxic or dangerous, and some of which could be avoided altogether through the use of improved production processes, in both industry and agriculture. The quantity is growing steadily. Three-quarters of all waste is disposed of to land — in too many cases without even being properly buried.

5.3.2. New technologies must be stimulated to improve this situation and the Commission has recently decided upon the first series of support actions for clean technologies under Council Regulation (EEC) No 1872/84 relating to Community actions for the environment (ACE) <sup>(1)</sup>. It is clear that action to encourage the development of new technologies, coupled with the creation of the right market conditions for a more rational approach to the management of waste, would lead to a better utilization of resources, economic and employment gains and a considerable reduction in import dependence, as well as to a reduction in pollution risks.

5.3.3. The Second Action Programme on the Environment, adopted by the Council on 17 May 1977 <sup>(2)</sup> set out a Community policy for 'waste management by a comprehensive policy of prevention, reclamation and disposal'. It focussed on three broad themes: the reduction of waste arisings, the increase of recycling and re-use, and the safe disposal of unavoidable wastes. The objectives of that approach were confirmed in the Third Action Programme adopted in February 1983 and will be carried forward through the period of the Fourth Action Programme.

5.3.4. Under the first policy-heading — the prevention of waste — further actions will be taken to develop the 'clean technologies' programme provided for under ACE Regulation. The experience acquired under the first cycle of ACE operations in the clean technology field will be reviewed and proposals will be made for the continuation and expansion of action under ACE. These proposals will, in particular, envisage the extension of the 'clean technologies' programme to cover clean technologies in fields not so far admitted under the Regulation and also the wider area of waste management. Work will also be undertaken aimed at defining criteria for 'environmentally sound products', i.e. products which give rise to little or no waste at the elimination stage.

5.3.5. As far as the second heading is concerned, 'the recycling and re-use of waste', it is clear that market forces will continue to play an important role. Nevertheless, the Community may be able to assist this process, in particular by:

- setting attainable objectives, as goals to be aimed at,
- the promotion of research and demonstration projects in the field of recycling of wastes,
- encouraging the assessment of the costs and benefits of alternative waste management options,
- establishing financial mechanisms designed to implement the 'polluter pays principle' (and thereby encourage recycling and reuse) (see under 2.5),

<sup>(1)</sup> OJ No L 176, 13. 7. 1984.

<sup>(2)</sup> OJ No C 139, 13. 6. 1977.



- the use of economic instruments to encourage the segregation and recycling of certain wastes,
- developing programmes of information exchange and consumer information to encourage recycling of products.

5.3.6. As far as the third heading is concerned, the safe disposal of waste, the Commission will need to complete the existing set of Directives by further Directives in specific areas, e.g. batteries, PCBs (to deal with the problem of the disposal of PCBs in transformers), solvents etc. Further revision of the description of waste in the 'toxic and dangerous' waste Directive (78/319/EEC) <sup>(1)</sup> is necessary. Work on the question of civil liability and insurance in relation to the transfrontier movement of such wastes will be completed and proposals will be made. The questions of the clean-up of sites where uncontrolled discharge of wastes has taken place in the past will be examined, as well as the possible intervention of Community funds, e.g. the Regional Development Fund.

5.3.7. Following the Mont Louis accident in 1984 the Commission took up an invitation from the European Parliament and has examined in detail the whole question of the Regulations governing the transport of dangerous materials and wastes. A full report on that work will shortly be sent to the Council and will indicate that the Commission intends to make proposals for the application by Community legislation of the provisions of the relevant international agreements governing the transport of such materials to both internal Community traffic and international traffic; these proposals will cover dangerous substances and wastes and also nuclear materials. In addition the Commission will make proposals to the Council regarding the harmonization of training requirements for drivers of vehicles transporting dangerous substances, including wastes.

5.3.8. Finally, the Commission intends to make a specific communication to the Council on the subject of waste management with the intention of proposing a practical framework for the more rational management of wastes; and in particular to encourage recycling. It is the Commission's view that, of all the actions that are necessary in the field of waste management, perhaps the most important in the long term would be to achieve a much higher rate of re-use and recycling of wastes than is the case at present — in all Member States and for most of the many different types of waste that arise.

5.3.9. Such an evolution would save resources, reduce pollution and limit the demand for land for waste disposal. Moreover, provided that appropriate economic conditions exist, progress in the direction of the increased re-use and recycling of wastes could contribute to economic growth and could create jobs. The European Year of the Environment offers the opportunity to launch such efforts and the Commission intends that the promotion of clean and low-waste technologies, recycling and the improved management of waste generally, should be prominent amongst the policy themes to be addressed during the year.

5.3.10. However, to make concrete practical progress in this field is an extremely complex matter. Each type of waste presents different possibilities and problems. The nature of the wastes generated and the way in which particular wastes present themselves (e.g. whether in a more or less accessible form or intimately mixed or combined with other substances) affects available options. Choices exist; in many cases alternatives are available — as also are less hazardous substitutes for toxic or dangerous materials, both in products and in processes. Much therefore depends on the design and content of products (since virtually all products will eventually enter the waste stream); the choice of processes used; the arrangements made for in-plant recycling of materials (clean technologies; closed-loop systems); and many other factors.

5.3.11. Much also depends on the extent to which new and innovative means can be developed and brought into use to tackle the problems of waste management, including improved techniques for the handling, sorting, treatment, transformation, reuse, recycling, detoxification and disposal of wastes of all kinds. Waste exchanges and reliable data on waste arisings can also play a part. But in the end, the most important factor of all will be the extent to which new, more environmentally-friendly practices, processes and procedures are — or can be made to be — economically attractive on a long-term basis. If they are, then there is little doubt that the Community's waste management industries will respond to the challenge.

<sup>(1)</sup> OJ No L 84, 31. 3. 1978, p. 43.

5.3.12. In its communication the Commission will endeavour to take account of all these factors while seeking to establish a rational basis for waste management in the Community through the setting of realizable objectives (especially for recycling). The Commission hopes, resources permitting, to transmit such a document to the Council early in the period covered by the Fourth Environmental Action Programme.

#### 5.4. Urban areas, coastal, and mountain zones

5.4.1. Urban areas in all Member States have experienced rapid and major changes over the past decade and will continue to do so for the foreseeable future. In some countries rapid urbanization as a result of rural-urban migration, and now the growth of the urban population itself, is resulting in poor housing, a mismatch between labour supply and demand, inadequate or overloaded urban infrastructure and services, and deteriorating environmental quality. In others, urbanization has given way to suburbanization and in many, counter-urbanization or decentralization. Population and new investment have sought locations away from the older, industrial conurbations which have been badly affected by structural change in the economy leaving high levels of unemployment, derelict or contaminated sites, vacant buildings and an ageing stock of housing and infrastructure.

5.4.2. In many urban areas economic decline and their particular difficulties have led to a degradation in the living and working conditions of their inhabitants. As a result the situation in 1985 is that, in many European cities, conditions are substantially worse than they were 10 or 15 years ago. Urban environmental problems must now assume an increased priority in Community environmental policy. New initiatives are underway in some cities such as Belfast and Naples which largely concentrate on economic development and infrastructure provision.

5.4.3. These programmes could be extended to other needy urban areas and should be complemented by comprehensive environmental programmes. The necessary action could include the reclamation of derelict and contaminated land, the creation of parks and other landscaped areas, the treatment of eyesores and measures to restore older buildings. Such activities will in themselves contribute to stimulating the local economy as well as laying the foundations for economic regeneration.

5.4.4. The scale of the problem, however, is substantial. For example, recent work undertaken by the Commission indicates that resources of the order of 1 000 million ECU per annum for a 12 year period are required from the public and private sectors to 'clean up' the land contaminated by former industrial activities before it can be re-used. Other urban improvements may also involve important expenditures. Moreover, in disadvantaged areas such as those described above, lack of resources may mean that even the implementation of Community environmental legislation can pose problems.

5.4.5. These situations will pose a major challenge for the Member States and the Community's structural funds in resource terms. It should also be a priority for the Community's research and development programme in new technologies; for the development of more cost-effective methods of 'clean up' and cleaner preventive technologies can contribute substantially to the improvement of the quality of urban life and stimulate the pollution control sector of the economy.

5.4.6. The Commission has already made plain in COM(86) 76 that it intends to make a proposal for a Community programme, within the framework of the regional fund, to assist disadvantaged areas of the Community to implement Community environment Directives. But much more than this will be needed if the problems of urban areas are really to be effectively tackled. One priority will be to consider to what extent the Community's existing structural funds (and notably the European Regional Fund) could be directed to comprehensive environmental programmes in inner city areas. It will therefore be of special importance to ensure that an adequate level of funding is available to enable the Community to participate adequately, along with public authorities and local industry, in urban renewal schemes which take full account of both environmental and regional policy requirements.

5.4.7. The Commission will prepare a report to submit to the Council, which will examine how the public and private sectors and other interests can work together towards the rehabilitation of certain urban areas and thus contribute to sustain their economic development. The programme of 'demonstration projects' on the job creation potential of environmental measures (see Section 2.4) should be of relevance in this regard. Urban rehabilitation will constitute an important theme for the European Year of the Environment.

5.4.8. Work on the development and ecological management of European coastal regions carried out by the Commission under previous action programmes and similar work by various international organizations, has identified problems specific to coastal areas and underlined the urgent need for solutions. The Commission has in particular supported from the beginning the work of the Conference of Peripheral Maritime Regions and the European Coastal Charter is the result of a common effort. The European Parliament has closely followed this work and requested the Commission to implement the policy and actions in this field in the spirit of the charter <sup>(1)</sup>.

5.4.9. It is, of course, primarily for the coastal regions themselves to respond to this request. To do so is plainly in their own environmental interest; but (since in many cases their main economic asset is precisely the quality and resources of their environment) it is also in their economic interest as well. For its part the Commission intends to take full account of the principles of the European Coastal Charter in the operation of relevant Community policies. In addition the Commission will undertake further studies related to the practical implementation of the charter and will publish the results.

5.4.10. The problems with which mountain areas are faced are similar in their nature to those of the coastal areas: they have to fulfil several often conflicting functions. They must guarantee the welfare of the local population, accommodate an increasing number of tourists from all areas of Europe and at the same time protect habitats for wildlife. Moreover, Community measures, within the framework of the common agricultural policy, have for more than a decade contributed to bringing changes in the landscape of the mountain zones. Recent proposals submitted by the Commission to the Council in order to complement and adapt the Directive dealing with aids to farmers in such areas <sup>(2)</sup>, should better contribute to the maintenance of valuable habitats and at the same time to farmers' income.

## 6. RESEARCH

6.1. Since 1973, the Community Environment Action Programme has been supported by a succession of multiannual environmental research programmes. The major aims of Community research in the field of environment are:

- to provide scientific and technical knowledge supporting directly the implementation of the programme of action on the environment,
- to address longer-term environmental problems, thus preparing the way for the development of preventive and anticipatory policies taking account of foreseeable environmental trends; and to provide the means to evaluate the effectiveness of current environmental policies,
- to serve as an instrument for enhancing further, at Community level, the coordination of national research activities in the environmental field, in order to improve the productivity of the overall effort through the encouragement of joint projects; the elimination of duplication; and the identification of gaps in research coverage.

6.2. Continuous efforts are made by means of a research action programme, to ensure efficient coordination of the various activities implemented by contract research, concerted actions and in-house research within the programme of the JRC. Various other research programmes within the Community's R & D framework programme, such as recycling of waste and secondary raw materials, contribute further to implementing the environment action programme. The new proposal for the Second R & D framework programme 1987-1991 provides for a further strengthening of environmental research.

6.3. The environment research programme covers four broad areas:

- environment protection as such — including amongst other topics, health and ecological effects of pollutants, assessment of chemicals, quality of air, water and soil, waste research and technologies for emission reduction,
- climatology and natural hazards, addressing long-term problems, such as possible climatic changes due to an increase of the CO<sub>2</sub>-concentration in the atmosphere,
- major technological hazards, such as the accidental release of dangerous products from industrial processes,
- remote sensing from space.

<sup>(1)</sup> OJ No C 182, 19. 7. 1982.

<sup>(2)</sup> Directive on farming in mountain and less-favoured areas (Directive 268/75/EEC).

6.4. The Fourth Environmental Research Programme covering contract research and concerted actions (1986-1990) was approved by the Council on 10 June 1986 and allocates a total of 75 million ECU to research on environmental protection (55 million ECU), climatology and natural hazards (17 million ECU) and major technological hazards (3 million ECU).

6.5. The ongoing programme of the JRC (1986-1987) and the proposed revision for its last year encompass work in the areas of environmental protection, industrial risk and remote sensing from space. It covers, in the light of available skills and competences, the following specific tasks amongst others:

- to act as a coordination centre for certain environmental issues likely to have short-term impact for the regulatory work of the Commission,
- to pursue medium and long-term studies in order to identify environmental trends and to maintain the role of the JRC within European environmental research,
- to provide scientific support to other Commission services in implementing Council Directives (e.g. ECDIN, Central Laboratory for Air Pollution).

6.6. In drawing up and implementing these programmes, every attempt has been made to link research to the fullest possible extent with the needs of the environmental action programmes (as recognized by a recent evaluation of the research programmes by an independent panel of experts). All efforts will be made further to improve this cooperation and to keep under review the links between research and policy development.

## 7. ACTION AT INTERNATIONAL LEVEL

### 7.1. Action within international organisations, and with third Countries

7.1.1. It is increasingly clear that there are many environmental problems that are of importance to the Community, which cannot effectively be dealt with at local, regional, national or even Community level. Some of these problems are, of their very nature, international (or even global) in character. It is accordingly essential that they should be tackled at those levels. This implies the necessity for the Community and its Member States to participate actively in international action for the protection of the environment.

7.1.2. The importance of the international dimension of the Community's work in the field of the environment has in fact always been underlined; and has been well developed in recent years. The European Council in March 1985, in urging the Council, together with the Commission, 'to make every effort to ensure that the years to come are marked by significant progress in Community action for the protection of the environment' made clear that this effort should be addressed to progress not only in Europe but also 'throughout the world'. The work programme of the Commission has also put special emphasis on the importance of the international activities in the field of the environment.

7.1.3. These activities involve increasing Community participation in many international organizations and also participation in the numerous international agreements that have been adopted as international environmental action and Community environmental policy have gathered momentum. This participation requires the closest cooperation between the Council and the Commission, which represents the Community.

7.1.4. Where the Commission negotiates on behalf of the Community it does so in accordance with Directives laid down by the Council. Where Member States participate in a convention it may be necessary for them to act within the framework of a common position laid down by the Council. Difficulties can arise in establishing in advance a Community or common position. The Commission will continue, as in the past, to make proposals as appropriate and as early as possible for negotiating mandates and for common positions. These will be designed to avoid unacceptable positions arising in international negotiations and at the time facilitate decision-taking processes within the international bodies concerned.

7.1.5. The satisfactory resolution, at Community level, of these problems has become increasingly important as the scope, extent and relevance to the Community's own environmental policies of action at international level has increased. But this growth in the importance of action at international level also has one further implication. It is clear that both the Community and its Member States must increase their effective participation in (including where appropriate their financial contribution to) the work of international organizations and the effective implementation of international conventions and protocols aimed at the protection of the environment.

7.1.6. In practical terms, it is the Commission's view that, in addition to the international priorities identified in other parts of this action programme <sup>(1)</sup>, certain other matters also need to be pursued as follows:

- strengthening Community participation in the protection of the regional seas (in particular Community participation in the Helsinki Convention and the Oslo Convention is necessary and, where appropriate, in conventions concluded under UNEP Regional Seas Programme),
- ensuring respect by the Community and Member States of the principles laid down in the Convention on the Law of the Sea (1982) as far as the protection of the marine environment is concerned,
- Community participation in the London Dumping Convention (see Section 4.2.2),
- more effective Community involvement in the work of the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR <sup>(2)</sup>) and an effective coordination of the position of Member States who are a party to the 1959 Antarctic Treaty with the aim of achieving a better protection of the unique ecosystem of the Antarctic,
- Community participation in the Council of Europe Convention for the protection of vertebrate animals used for experimental and other scientific purposes,
- input to the work of the World Commission on Environment and Development,
- in concertation with Member States, an increase in the support given to certain international organizations concerned with environmental protection, population and sustainable development (e.g. UNEP, UNDP, UNFPA, FAO, OECD, ECE/Geneva),
- encouraging participation in the European Year of the Environment by international organizations (such as EFTA, Council of Europe, UNEP, WHO, etc.) as well as by third countries.

7.1.7. The integration of the environmental dimension into other policies is of great importance also in the international activities of the Community. For example, the Community:

- should play an important role within the framework of the International Tropical Timber Agreement in ensuring that priority is given to conservation aspects,
- should also seek to further practical measures of conservation in regional fisheries or conservation organizations, such as the Convention on the Conservation of Antarctic Marine Living Resources and the North Atlantic Fisheries Organization.

7.1.8. The non-observance by certain nations of the moratorium on commercial whaling, decided upon by the International Whaling Commission in 1982, is a matter of great concern to the Community, which in 1981 adopted Council Regulation (EEC) No 348/81 <sup>(3)</sup> on the subject of the import of whale products into the Community and in 1982 Council Regulation (EEC) No 3626/82 <sup>(4)</sup> on the application of the Washington Convention which also covers whales. The Community should make all possible efforts, through diplomatic and other means, to ensure the observance of the moratorium on commercial whaling by all countries.

7.1.9. Finally, the Commission attaches importance to its bilateral liaison with certain third countries — especially with EFTA countries, the United States, Canada and Japan. These liaisons which are normally focussed largely on information exchange as to policy and legal developments — can be helpful in facilitating mutual understanding, in promoting a harmonization of approach at international level, and in contributing to the successful negotiation of international agreements.

## 7.2. Cooperation with developing countries on environmental matters

7.2.1. The major environmental problems of the Third World — desertification, tropical deforestation, the explosive growth of populations in both urban and rural areas, loss of wildlife and genetic diversity — are amongst the world's most daunting and potentially dangerous environmental problems. The Community's development policy will seek to combat the growing deterioration of natural resources by the implementation of action programmes which take account of environmental factors, more specifically than hitherto.

<sup>(1)</sup> See paragraphs 4.1.9, 4.2.6, 4.2.7, 4.3.4, 4.3.7, 4.3.8, 4.3.9, 4.4.8, 5.1.6 and 5.3.7.

<sup>(2)</sup> On 4 September 1981 the Council adopted a Decision on the conclusion by the Community of the Convention on the Conservation of Antarctic Marine Living Resources (81/691/EEC; OJ No L 252, 5. 9. 1981).

<sup>(3)</sup> OJ No L 39, 12. 2. 1981, p. 1.

<sup>(4)</sup> OJ No L 384, 31. 12. 1982, p. 1.

7.2.2. Particular attention has already been given to the problems of desertification and of resources conservation in Africa, the solution of which is essential in certain countries for long-term, sustainable, agricultural and rural development (see COM(86) 16 final (\*)).

7.2.3. More generally, the importance of forests, in particular, needs still increased emphasis in the Community's development and cooperation programmes. Tropical forests are one of the earth's most valuable natural resources. Throughout history, they have been essential sources of food, fuel, shelter, medicines and many other products. They sustain people and their environments by protecting soil and water resources; they have a profound influence on climate and on global natural cycles; they contain an estimated 50 % of the world's plant and animal species. Because tropical forests benefit people in so many ways, the alarming rate of forest destruction is a matter of grave concern.

7.2.4. The lives of more than one thousand million people in the developing countries, primarily the rural and urban poor, are disrupted by periodic flooding, fuel wood scarcity, soil and water degradation and reduced agricultural productivity — all caused in whole or in part by deforestation. Scientists estimate that some 40 % of the biologically-rich tropical moist forests have been cleared or degraded already. Some 11 million hectares are being lost each year. In many developing countries tropical forests will all but disappear in two or three decades if present trends continue.

7.2.5. The action necessary to counter these trends has recently been identified by FAO and by an International Task Force on Tropical Forests convened by the World Resources Institute, the World Bank and the United Nations Development Programme. The Community has a special role to play, in support of the objectives identified, through its development cooperation policies and programmes. Its contribution should include active Community participation in the International Tropical Timber Agreement with a view to supporting conservation objectives; a re-examination of the trade and aid policies of both the Community and the Member States from the standpoint of their impact on tropical forest conservation; and the promotion of a voluntary code of conduct among timber companies based in the Community to ensure that imports of tropical hardwoods only come from concessions that include ecologically positive management policies (including in particular the acceptance of appropriate obligations to renew and replant and to restore damaged lands and landscapes). The Commission will make appropriate proposals to promote such developments.

7.2.6. Because of the scale of the problem, however, Community effort alone will not be enough. Increasingly close international cooperation; larger and more efficiently used financial inputs; a re-examination of the trading, pricing and development assistance policies of the developed world and more generally major changes of attitude, will be necessary. These issues will also be at the centre of the work of the World Commission on Environment and Development. A meeting in Brussels between the Community and the World Commission to discuss its draft report will be an important event in the early part of the European Year of the Environment and will provide an occasion for active Community involvement in discussion on many major environmental issues.

7.2.7. The Third Lomé Convention, the 1984 Commission communication to the Council on development and environment (†) and the 1984 Council resolution on development and environment (‡), all make plain the Community's commitment to treat environmental protection and the conservation of natural resources as an integral part of sustainable development. Continuing efforts will be made to give practical effect to that commitment in the implementation of the Community's development aid policies.

7.2.8. Of particular significance in this context is the European action plan to combat desertification and to safeguard natural resources in Africa which was adopted by a Council resolution in April 1986. This action plan will unite the financial and technical efforts of the Community and the Member States. In view of the scale of action envisaged its implementation will require a close coordination between the recipient countries, regional and international organizations, Member States and Commission as well as other donors, and non-governmental organizations. To this effect, the Commission will fully utilize all instruments at its disposal and endeavour to improve the existing coordination mechanisms so that through an appropriate mobilization of combined resources a coherent and sustainable programme can be implemented.

(\*) COM(86) 16, 22. 1. 1986.

(†) COM(84) 605, 31. 10. 1984.

(‡) OJ No C 272, 12. 10. 1984.

7.2.9. Furthermore, in view of the links between conservation, population, development and environment, the Community should assist developing countries in promoting sustainable development by establishing appropriate national conservation strategies and will support, at their request and in compliance with established aid procedures, countries' population policies. This can include the strengthening of national capacity in population planning (census, demographic studies), the opening-up of land to agriculture and settlement (internal migration), and measures in the areas of education and health, particularly the development of mother and child care services, which include family planning. The Commission will put forward appropriate proposals in the near future. It is also clear that Community activities within relevant international organizations must be stepped up.

7.2.10. Finally — of relevance in relation to all the above matters — reference should be made to the 1980 'Declaration on Environmental Policies and Procedures relating to Economic Development', which was signed by all the major international development financing institutions, including the Commission and the European Investment Bank. The Committee of International Development Institutions on the Environment (CIDIE) which was set up to ensure that practical effect was given to that declaration has made notable progress in encouraging the development by participating institutions, exchanging information and experience on detailed policies and procedures of its members and encouraging their further development. This work will be pursued and also extended to training arrangements for staff of CIDIE member institutions as well as of developing countries. Both the Commission and the European Investment Bank take an active part in the activities of CIDIE, which *inter alia* are likely to lead shortly — with the support of UNEP — to a valuable new series of publications on aspects of the integration of environmental requirements into development policies. The Commission continues to urge the view that the scope of CIDIE should be expanded to involve more closely in its work both bilateral aid agencies and non-governmental organizations.

## 8. EUROPEAN YEAR OF THE ENVIRONMENT

8.1. The European Council, at its meeting of 29 and 30 March 1985 designated 1987 as the European Year of the Environment (EYE). The Commission strongly welcomed that decision which has also been welcomed and supported by the Council of Ministers<sup>(1)</sup> and by Parliament<sup>(2)</sup>. The Commission has preparations for the year well in hand in close cooperation with national committees established in each Member State.

8.2. The European Year of the Environment will start on 21 March 1987 and will run for 12 months. It will be action oriented. It will be a major event which will have an important impact throughout the Community. It must not, however, be seen as a one-off event, but rather as a launching-pad, an opportunity to raise the awareness of the importance of environmental issues and to change attitudes permanently. It is thus clear that the goals and objectives of the European Year of the Environment must remain valid throughout the period of the Fourth Environmental Action Programme and beyond.

8.3. It is the Commission's view that the programme of events that will take place during the European Year of the Environment should reflect Community policy on the environment and the general lines laid down by the European Council. It should in particular stress the newer perceptions underlined by the European Council — the need for a preventive approach; the need to integrate environmental considerations into all social and economic policies and actions; and the scope for environmental protection policy to contribute to improved economic growth and job creation.

8.4. The Commission believes that the main aim of the European Year of the Environment must be to bring about a shift of attitudes throughout society — in parliaments, in governments, in board rooms, in trade unions, in local, regional and provincial authorities, in schools, in universities, in associations of all kinds, in the media, but above all in individuals. It must seek to convince — and to secure commitment from — all elements in society of the view that the environment is important; that it is important for the Community's economic growth; that environmental problems are something that can be tackled; that everyone has a part to play and can do something; and that everyone should do something to demonstrate their commitment to environmental protection and their awareness of its importance. If this can be achieved there is little doubt that the European Year of the Environment will indeed mark the beginning of a new approach to environmental protection in which all will recognize that it has become a basic element in their lives and in all human activities.

<sup>(1)</sup> Council resolution 86/C 63/01, OJ No C 63, 18. 3. 1986, p. 1.

<sup>(2)</sup> OJ No C 68, 24. 3. 1986.

## 9. CONCLUSION

9.1. Community environment policy is entering a new and crucially important phase. With the agreement of the Governments of Member States to the amendments to the Treaty of Rome contained in the Single Act, the Community has given a new status and impetus to its environmental policy. The European Council has underlined that environmental protection can contribute to improved economic growth and job creation; and it has called, in stronger terms than ever before, for the integration of environmental requirements into the economic, industrial, agricultural and social policies implemented by both the Community and its Member States.

9.2. As has been already stated in the introduction, there is a wide and growing recognition that strict environmental standards are a necessity — not only in order to achieve an adequate degree of environmental protection and an improved quality of life, but also for economic reasons. As progress is made towards the completion of the Community's internal market by 1992, opportunities will grow in many areas and for many reasons — but only provided that high environmental standards are maintained. The Commission is convinced that better competitiveness of Community industry on world markets in the future will depend heavily upon its ability to offer environmentally-friendly goods and services, achieving standards at least as high as its competitors and that an alliance between technological innovation and a commitment to high environmental standards can offer new opportunities through the development of new and growing markets for environmental protection technologies and techniques.

9.3. The period of the Fourth Environmental Action Programme therefore presents the Community with a major challenge in the environmental field — a challenge to make a definitive move away from reacting to environmental problems after they have arisen towards a general preventive approach, based on the achievement of high standards in all environmental sectors, achieved through devoting a small part of the Community's huge scientific, technological and industrial resources and potential towards developing and bringing into use the equipment, technologies, management and administrative practices needed to achieve such standards; and at the same time to find means of deriving economic and employment gains from such a move.

9.4. To encourage the free market to operate in an environmentally rational way, however, the Community must also increase awareness of the need for high environmental standards. This is the central purpose of the European Year of the Environment, which starts on 21 March 1987; it offers the opportunity to launch the major transformation in attitudes and approach that the change of philosophy that is required in the field of environmental protection will call for.

9.5. The European Year of the Environment is not an end in itself nor is it a year that will cease to have impact once it is over. It must be seen as a launching pad for a new approach and the aim of this Fourth Environmental Action Programme is to spell out the measures that, in the Commission's view, will be necessary at Community level during the first part of this new phase in the development of the Community's environmental protection policy.

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## ANNEX 1

### TITLE 1

#### RESTATEMENT OF THE OBJECTIVES AND PRINCIPLES OF A COMMUNITY ENVIRONMENT POLICY (1)

##### 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.

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(1) OJ No C 139, 13. 6. 1977.



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 exploitation 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 <sup>(1)</sup>.

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<sup>(1)</sup> OJ No C 9, 15. 3. 1973, p. 1.

## ANNEX 2

## ENVIRONMENT PROVISIONS OF NEW TREATY

## Article 18

The EEC Treaty shall be supplemented by the following provisions:

*Article 100A*

1. By way of derogation from Article 100 and save where otherwise provided in this Treaty, the following provisions shall apply for the achievement of the objectives set out in Article 8A. The Council shall, acting by a qualified majority on a proposal from the Commission in cooperation with the European Parliament and the Economic and Social Committee, adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action in Member States which have as their object the establishment and functioning of the internal market.

2. Paragraph 1 shall not apply to fiscal provisions, to those relating to the free movement of persons nor to those relating to the rights and interests of employed persons.

3. The Commission, in its proposals laid down in paragraph 1 concerning health, safety, environmental protection and consumer protection, will take as a base a high level of protection.

4. If, after the adoption of a harmonization measure by the Council acting by a qualified majority, a Member State deems it necessary to apply national provisions on grounds of major needs referred to in Article 36, or relating to protection of the environment or the working environment, it shall notify the Commission of these provisions.

The Commission shall confirm the provisions involved after having verified that they are not a means of arbitrary discrimination or a disguised restriction on trade between Member States.

By way of derogation from the procedure laid down in Articles 169 and 170, the Commission or any Member State may bring the matter directly before the Court of Justice if it considers that another Member State is making improper use of the powers provided for in this Article.

5. The harmonization measures referred to above shall, in appropriate cases, include a safeguard clause authorizing the Member States to take, for one or more of the non-economic reasons referred to in Article 36, provisional measures subject to a Community control procedure.'

## Sub-Section VI

## ENVIRONMENT

## Article 25

A Title VII shall be added to Part Three of the EEC Treaty reading as follows:

## 'TITLE VII

## Environment

*Article 130R*

1. Action by the Community relating to the environment shall have the following objectives:

- to preserve, protect and improve the quality of the environment,
- to contribute towards protecting human health,
- to ensure a prudent and rational utilization of natural resources.

2. Action by the Community relating to the environment shall be based on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source, and that the polluter should pay. Environmental protection requirements shall be a component of the Community's other policies.

3. In preparing its action relating to the environment, the Community shall take account of:
- available scientific and technical data,
  - environmental conditions in the various regions of the Community,
  - the potential benefits and costs of action or of lack of action,
  - the economic and social development of the Community as a whole and the balanced development of its regions.

4. The Community shall take action relating to the environment to the extent to which the objectives referred to in paragraph 1 can be attained better at Community level than at the level of the individual Member States. Without prejudice to certain measures of a Community nature, the Member States shall finance and implement the other measures.

5. Within their respective spheres of competence, the Community and the Member States shall cooperate with third countries and with the relevant international organizations. The arrangements for Community cooperation may be the subject of agreements between the Community and the third parties concerned, which shall be negotiated and concluded in accordance with Article 228.

The previous paragraph shall be without prejudice to Member States' competence to negotiate in international bodies and to conclude international agreements.

#### *Article 130S*

The Council, acting unanimously on a proposal from the Commission and after consulting the European Parliament and the Economic and Social Committee, shall decide what action is to be taken by the Community.

The Council shall, under the conditions laid down in the preceding subparagraph, define those matters on which decisions are to be taken by a qualified majority.

#### *Article 130T*

The protective measures adopted in common pursuant to Article 130S shall not prevent any Member State from maintaining or introducing more stringent protective measures compatible with this Treaty.'

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