

COMMISSION
of the European Communities

**Communication from the Commission
to the Council on a European Communities'
programme concerning the environment**

(submitted on 24 March 1972)

SEC(72) 666
22 March 1972

Appended documents:

- COM(72) 333, 22 March 1972, p. 60
- COM(72) 334, 22 March 1972, p. 66
- COM(72) 335, 22 March 1972, p. 68

Blank pages not reproduced: 2, 8, 18, 58.

Bulletin of the European Communities
Supplement No. 5/72

Brussels

Contents

	Page
INTRODUCTION	
PART ONE: THE EUROPEAN COMMUNITIES AND ENVIRONMENTAL PROBLEMS	
I. <i>Type and importance of the environmental problems in the modern industrial society</i>	10
II. <i>The European Communities and the environmental problems in the light of the Treaties</i>	12
III. <i>Objectives and position of the European Communities in the preparation and implementation of an environment policy</i>	16
PART TWO: A EUROPEAN COMMUNITIES' PROGRAMME CONCERNING THE ENVIRONMENT	
I. <i>Programme to reduce pollution and nuisances and to safeguard the natural environment</i>	21
A. <i>Reduction of pollution and nuisances</i>	21
1. <i>Objective evaluation of the risks to human health and to the environment resulting from pollution</i>	22
2. <i>Institution at Community level of quality health standards and common definition of quality objectives for the environment</i>	23
3. <i>Special action regarding sources of pollution in certain areas of common interest and certain pollutants of a special nature</i>	25
4. <i>Common definition of the principles for apportionment (and harmonization of their means of application) of the costs of pollution control</i>	35
a) <i>Harmonization of methods of evaluation and methods of financing these costs</i>	35
b) <i>Apportionment of costs: the "polluter pays" principle</i>	35
5. <i>Action to ensure application of and effective compliance with the regulations and limits set</i>	37
a) <i>Verification and inspection of a technical nature</i>	37
S. 5/72	3

	Page
b) Verification of the application of provisions laid down by law, regulation and administrative action	37
c) Harmonization and strengthening of sanctions on polluters	38
B. <i>Conservation of the natural environment in the context of the agricultural policy</i>	40
C. <i>Implementation of the above actions in successive stages</i>	43
II. <i>Information to the Commission with a view to possible harmonization throughout the Community of urgent measures concerning the environment</i>	45
III. <i>Efforts to reach a common position in international organizations concerned with environmental problems. Relations with developing countries</i>	46
IV. <i>Action to improve the working environment inside factories</i>	47
V. <i>Action concerning the improvement and dissemination of knowledge and information on the environment</i>	48
1. Coordination or joint execution of research into pollution and nuisances: needs, general subjects, proposals	48
2. Processing and utilization of data on pollutants and pollution control.	53
3. Preparation of a periodical report on the state of the environment in the Community	54
4. Town planning studies	54
5. Action concerning training and education in connection with protection and improvement of the environment.	55
6. Establishment of a European Institute of the Environment	56

APPENDED DOCUMENTS

Page

1. Draft Council resolution on a programme to reduce pollution and nuisances and to safeguard the natural environment 60
2. Draft agreement by the Representatives of the Governments of the Member States meeting in Council on information to the Commission with a view to possible harmonization throughout the Community of urgent measures concerning the environment 66
3. Draft Council recommendation to the Member States signatories of the Berne Convention establishing the International Commission for the protection of the Rhine against pollution 68

Introduction

On 22 July 1971, the Commission adopted a First Communication on Community policy concerning the environment (doc. SEC (71) 2616 final). In this document, it stressed that the fight against the degradation of nature and the human environment should henceforth figure largely among the economic and social tasks of the Community and its Member States. It found that the measures taken by Member States in this respect could have very serious consequences on the functioning of the common market and more generally on the unity of the European economic area. After recalling the activities already undertaken by the Communities to protect and improve the environment, the Commission set out a number of ideas for additional action that it considered should be put in hand as quickly as possible.

This First Communication was addressed, for information, to the Council, the European Parliament and the Economic and Social Committee and at the same time sent to the appropriate departments in Member States and the applicant countries and to the various trade unions and industrial organizations concerned, in order to obtain useful comments and suggestions.

The Commission considered that the preparation of proposals for the Council should be preceded by the most wide-ranging and thorough consultations possible. These have been in progress throughout the past five months. The Commission welcomes the spirit of cooperation it has encountered among national administrations and the suggestions and technical assistance they have provided. It noted with special interest the memorandum from the French Government of 20 January 1972.¹

It is grateful for the observations, criticisms and comments it has received from the Committees of the European Parliament; the Committee on Social Affairs and Public Health, rapporteur on the subject; Economic Committee, Legal Committee, Committee on Energy, Research and Atomic Problems and Committee on Agriculture, to which it referred for opinions.

It welcomes the decision of the Economic and Social Committee to set up a sub-committee to study environmental problems, the work of which forms a particularly interesting source of ideas.

Finally, the Commission has particularly appreciated the encouragement and constructive comments from the trade unions and industrial organizations (ECFTU, OECMT, CGT-CGIL Liaison Committee, International Confederation of Executive Staffs), UNICE and CEEP.

¹ Memorandum from the French Government of 20.1.1972 on the development of European cooperation for environmental protection.

As it announced in the preface to its First Communication, the Commission, after considering the opinions obtained during its consultations, is now sending the Council a number of procedural and material proposals designed to protect and improve the environment in the Community.

The implementation of these proposals should not form a new common policy separate from the others. They are rather a collection of Community activities aimed at promoting throughout the Community a harmonious development of economic activities, an accelerated raising of the standard of living and closer relations between Member States, in the terms of Article 2 of the EEC Treaty, which will henceforth have to include the protection of the environment.

This document is in two parts. The first recapitulates the responsibilities of the Communities regarding protection of the environment, while the second contains a European Communities programme which should in the Commission's view cover the work to be done by the European Communities to curb pollution and nuisances and to improve living conditions. This is the basis on which the Commission now presents to the Council in separate documents:

- a draft Council resolution on a programme to reduce pollution and nuisances and to safeguard the natural environment,
- a draft agreement by the Representatives of the Governments of the Member States meeting in Council on information to the Commission with a view to possible harmonization throughout the Community of urgent measures concerning the environment,
- a draft Council recommendation to the Member States signatories of the Berne Convention establishing the International Commission for the protection of the Rhine against pollution.

Part one

**THE EUROPEAN COMMUNITIES
AND ENVIRONMENTAL PROBLEMS**

Type and importance of the environmental problems in the modern industrial society

Since the environment is understood to mean all the elements which, in the complexity of their relations, form the setting, surroundings and living conditions for man and society, as they exist or as they experienced, its protection and improvement have become an urgent subject of concern for the industrialized countries.

As is noted in the preface to the Federal German Government's very complete programme on the environment,¹ the problems involved in protecting the natural environment against the degradations made on it by human activities are not strictly speaking new. Man's ambition to live in a setting and under living conditions that are constantly improving most probably goes back to the earliest times. However, the development of the industrial society has greatly amplified, intensified and exacerbated the degradation of the natural environment, to the point where there is increasing concern about the dangers to natural balance, at regional and even planetary level, introduced by economic growth and the accompanying development of production, consumption and trade, the increase in population density,² the growing concentration of the population in towns and the efficiency and spread of modern products and technology.

Contemporary society requires an increasing quantity of raw materials per capita, mostly consumed in an "open-ended cycle", and not by reusing the waste in a "closed cycle", as is essential for good management of national resources. It is inherent in the nature of this method of consumption that it will sooner or later come to an end by exhausting natural resources and causing accelerated pollution of the biosphere. This consumption of materials is accompanied by an increase in energy requirements and in the living space needed per person.

Simultaneously the appreciable rise in the standard of living as a result of economic progress arouses, as people's most elementary material needs are satisfied, a growing desire to improve the setting, surroundings and conditions of their lives through collective benefits related to the environment.

These benefits concern in particular:

- in the physical environment, reduction in pollution and nuisances, urban and rural planning, the establishment of transport and communications systems, etc.
- in the social environment, the improvement of welfare systems, income, job, security working conditions, housing, education, etc.

¹ The Commission found this programme a particularly rich source of information and ideas as regards both the general approach and the special problems it covers.

² It is estimated that the world population will increase from the present level of 3 600 million to 7 000 million in 2000 and 15 to 30 000 million by the middle of next century.

- in the cultural environment, the preservation of urban and rural sites of interest and beauty spots, the improvement of teaching and information, cultural and leisure facilities, etc.

Contemporary society is marked by the irreversible phenomena of industrialization and urbanization, the latter taking the form of the development of vast built-up areas and the extension of the urban way of life to rural regions.

These changes, combined with the general rise in the standard of living which they bring with them have an appreciable influence on the living conditions of the peoples.

In regions with a high population density, there is often insufficiently controlled growth of urban built-up areas, inadequate housing, transport and traffic conditions, nuisances of all kinds and origins, inadequate leisure amenities, a deterioration in social relations and cultural amenities. The less developed or declining regions also experience many of these problems, often accentuated by poverty and sometimes almost complete depopulation.

These changes also affect the developing countries. In some of them in particular, a high population growth is further aggravating the degradation of the environment and reducing their natural resources.

Urbanization and industrialization phenomena also bring about radical changes in land utilization and consequently in the flora and fauna and in rural and urban landscapes. In regions with a high population density, green spaces are increasingly being developed and certain functions performed by nature to the benefit of man are gradually being shifted towards more remote regions (functions of nutrition and the production of raw materials above all). On the other hand some functions are gaining in importance (leisure, air and water purification, weather control, pollution indication).¹

The growing awareness of the degradation of the environment and the framework of life has caused individuals, local authorities and governments to reflect on the economic and social objectives pursued and the ways and means to be used.

It is no longer possible to guarantee the harmonious development of the economic and social activities to a state or group of states such as the Community without taking account of the consequences that the economic and political measures adopted will have on the well-being of man, on his living conditions and on the surroundings in which he lives.

As the memorandum of the French Government says, "the idea had gradually gained ground that beyond a certain level of prosperity economic growth should be controlled more strictly in accordance with quality requirements. Inversely,

¹ This function is fulfilled by the extreme sensitivity of certain species to specific forms of pollution, which allows pollution to be measured at a time when it is still possible to avoid more extensive damage.

it is becoming more and more certain that a determined policy to combat degradation of the environment, despite the additional cost to be borne by the community, is in the long term a guarantee and perhaps even a prerequisite for the harmonious progress of economic development” (see page three, fourth paragraph).

The proper functioning of a market economy also requires in principle, with some duly justified exceptions, that the social cost of pollution and nuisances and of the measures to be taken to remedy their consequences be borne by the originators, as is stated in the above-mentioned German programme.¹

The European Communities and the environmental problems in the light of the Treaties

The EEC Treaty

Environmental problems in the light of the aims of the EEC Treaty

The task of the EEC, under Article 2 of the Rome Treaty, is to promote throughout the Community harmonious development of economic activities, a continued and balanced expansion, an accelerated raising of the standard of living and closer relations between its Member States.²

To remain balanced, economic growth must henceforth be guided and controlled to a greater degree by quality requirements. Inversely, the protection of the environment is both a guarantee of and a prerequisite for a harmonious development of economic activities throughout the Community.

When approving the Third Programme of Medium-Term Economic Policy, the Council affirmed in 1971 that “the Community’s economic policy cannot be limited to the combined aims of growth and stability. It is meaningful in the contribution it makes to better living conditions: it must endeavour both to raise the standard of living and to improve the quality of life; it must also contribute to greater stability to the benefit of the less favoured social categories”.³

¹ This principle was also stated in the Third Programme of medium term economic policy in Chapter I, C, point 11, page 10: “... the principle of the acceptance of responsibility by the originators for the prevention or elimination of these nuisances must be progressively applied, taking account of the conditions of international competition”.

² One of the preambular paragraphs of the Treaty establishing the EEC also says that the High Contracting Parties “affirm as the essential objective of their efforts the constant improvement of the living and working conditions of their peoples”.

³ Third Programme of Medium-Term Economic Policy - Chapter I, C.

Environmental problems in the light of the principles and rules of the common market

Application of the principles and observance of the rules on which the working of the common market is based are directly affected by the measures taken to protect and improve the environment. The EEC Treaty provides for the establishment of a system ensuring that competition in the common market is not distorted (Art. 3, f) and for the free movement of goods (Art. 3, a).

Marked disparities between the measures taken by the authorities in Member States (in particular the establishment of maximum permissible levels for pollutants in products or waste) reflecting a very different evaluation either of the nature and harmfulness of pollution, or of the desirable quality objectives for the environment, or of the methods of allocating the costs of measures to curb pollution and improve living conditions or of the inspection and control methods of repressive measures, are bound to cause distortion of competition and diversion of investment incompatible with the proper working of the common market.

Likewise, disparities in legislation, regulations and administrative action concerning products that in themselves or by their use are likely to cause nuisance can create technical barriers to trade which have to be eliminated in application of the provisions of the EEC Treaty as between Member States¹ and where appropriate between the Community and third countries by means of international agreements.

However, the Community objective must be to preserve as far as possible the freedom of judgement of national, regional and local authorities. Harmonization should be sought only insofar as it is essential to provide a maximum of protection throughout the Community and to ensure free trade and undistorted conditions of competition. It must take account of the advisability of adopting methods suited to the different situations since disparities in geographical and natural conditions and in the "vocations" of the regions can in some cases entail the application of different standards.

However, it must draw the attention of present and future Member States to the danger there would be in allowing competition to develop between them in order to attract investment at the expense of the environment.

Environmental problems in the light of EEC policy

All the common policies are in fact concerned to a greater or lesser extent by the fight against pollution and the improvement of living conditions.

- *The common commercial policy* (Art. 3, b) must take account of the repercussions that the economic effects of measures concerning the environment may have on the development of international trade.

¹ In particular in the implementation of the general programme to eliminate technical barriers.

- *The common agricultural policy* (Art. 3, d), with its machinery affecting the prices of agricultural products and farm structures and its repercussions on land development, the use of fertilizers, weedkillers and insecticides, and the quality of the crops, has a great influence on the natural environment and living conditions.
- *The policy on competition* (Art. 3, f) must take account of the repercussions on trade and competition of State aids to certain companies to alleviate the costs they would normally incur as a result of the pollution they cause.
- *The social policy* is designed to promote improvement in the living and working conditions of workers to ensure that they share in the general progress (Art. 117, par. 1) and to ensure full employment and social justice.¹
- The allocation of the costs of combatting pollution and nuisances can considerably affect transport structures and prices.
- *The common transport policy* referred to in Art. 74 of the EEC Treaty must consider this point.²
- The developing countries, especially those associated with the Community, will have to take certain measures to protect their environment. It would be desirable for the foreseeable consequences on the natural environment of Community-financed *investment schemes* in these countries to be taken into account.
- *The energy policy* has to take account of the structural modifications that will result, particularly in the way of costs to the consumer, from the measures taken by the authorities and the private sector to overcome existing problems and to improve the situation in the near future; it must also see that the Community energy supply in the longer term is shifted towards sources and forms of energy that ensure maximum protection of the environment and not merely low costs and security of supply.
- *Regional policy* takes account of the development of the needs and aspirations of the people amongst the factors affecting the siting of industry and housing and alongside the development of technical and economic requirements; in this respect, the protection of the natural surroundings and the need for a high-quality environment will affect the siting of economic activities and housing, facilitate their better geographical distribution and thus contribute towards a better balanced development throughout the Community.

¹ See Supplement 2/71 - Annex to the Bulletin of the European Communities 4-1971 "Preliminary guidelines for a social policy programme in the Community".

² See the communication from the Commission to the Council on the development of the common transport policy (Supplement 8/71 - Annex to the Bulletin of the European Communities 12-1971).

- For its part, industry will be called upon to spend more in observing the antipollution regulations, to finance the development of new technologies causing less or no pollution and to produce plant and equipment designed to reduce or eliminate pollution. The *industrial policy* will have to take account of these factors.
- The fight against pollution and its harmonization at Community level are impossible without a detailed knowledge and common appreciation of the phenomena that produce it and without the development of products and technologies causing less or no pollution. Joint or coordinated *research and development* activities are necessary to provide more information, to establish a common technical language and a common methodology and to encourage the development of more suitable technologies.

The Euratom and ECSC Treaties

The Treaty establishing Euratom stipulates that the Commission shall establish uniform safety standards to protect the health of workers and of the general public and ensure that they are supplied (Art. 2). In addition, a chapter of the Euratom Treaty is devoted to the protection of the health of workers and the general public against the dangers arising from ionizing radiation (Title II, Chapter III).

Consequently the Community has laid down basic standards for protection against radiation and coordinated the network of measurement stations set up in Member States in order to ensure compliance with the standards and to carry out continuous monitoring of the level of radioactivity in the environment. The Commission is also examining, with the aid of national experts, plans for the disposal of radioactive waste liable to result in contamination of the environment in another Member State (Art. 37 of the Euratom Treaty). A revised draft of the basic standards is now in preparation to take account of the advancement of scientific knowledge on the nature and effects of radioactivity.

Under the Euratom research programme, the Community supports and coordinates a number of research projects in the field of biology and health protection designed to improve knowledge of the mode of action and effects of radioactive substances and ionizing radiation on man. A new five-year programme was approved by the Council in July 1971.

Finally, in its work under Articles 40 (illustrative programme) and 41 (opinion of the Commission on nuclear investment projects), the Commission is already giving wide consideration to problems concerning protection of the environment.

The Treaty establishing the ECSC gives the Community the task of promoting better conditions of living and of work and employment for workers, to ensure that they share in the general progress, in each of the industries for which it is responsible (Art. 3). This Treaty also stipulates that the High Authority

shall encourage technical and economic research relating to the production and the development of consumption of coal and steel, as well as safety of workers in these industries (Art. 55). The research undertaken since 1956 to reduce pollution and nuisances caused by the coal and steel industry and to improve health conditions at work, in particular in coal and iron mines, will be continued.¹

*

The protection and improvement of the environment are therefore already included in the Communities' tasks. They are explicitly or implicitly included in their aims, they affect the rules or principles fundamental to the EEC, the fit in, to a varying but increasing extent, with EEC policy and the specific activities under the three Treaties. The Commission will give greater attention to the aspects of protection and improvement of the environment in implementation of the provisions of the Treaties and will endeavour to ensure that the preparation of its proposals in the various fields is accompanied by an assessment of the consequences of the envisaged or proposed measures on the quality of life.

Objectives and position of the European Communities in the preparation and implementation of an environment policy

As stated by the Commission at the beginning of its First Communication, protection and improvement of the environment entail the pursuit of four objectives:

- to reduce and as far as possible abolish the harmful effects on the environment of technical progress and, more generally, economic and social activities, while limiting the effects of this action on economic growth;
- to preserve the natural resources which are already or are liable to become rare assets or may even be destroyed by seeing that the ecological balance is not destroyed and the biosphere is protected;
- to plan land use so as to curb in particular the harmful consequences of the increasing concentration of people in the towns and to meet the need for contact with nature and the aesthetic quality of life;
- to guide future progress and where necessary to foster new progress so as to satisfy the real needs of mankind, expressed in qualitative as well as quantitative terms.

¹ Special importance will be attached to better dissemination of the results of this research.

The scope and importance of the problems involved are such that measures can only be taken and applied effectively if two requirements are met:

Firstly, it is necessary to establish an order of priority for the objectives and to define for each a preliminary list of activities to be carried out gradually but without delay in accordance with an accurate and realistic timetable.

Secondly, it is necessary to determine the nature and limits of Community responsibilities as opposed to those of Member States and international organizations and to define clearly what should be done by Community action or by cooperation between Member States.

On the basis of these two requirements, the Commission has endeavoured to submit to the Council in this document an overall view of the practical action to be taken, together with a timetable making due allowance for the urgency of the measures to be taken and the need to avoid wasted work or duplication with the work of international organizations to which Member States belong and in the activities of which the Community participates.

One special aspect of the environmental problem, and a fundamental one in the Commission's view, the question of the nuisances to which industrial workers are exposed in factories, is not covered in detail in this document. The Commission is, however, giving it its full attention and it has already been referred to in document EEC "Preliminary guidelines for a social policy programme in the Community". The Commission considers that the Community should give much greater priority to the implementation of its social policy.

The Commission also realises that the questions covered in this document and the proposals, recommendations or draft resolutions accompanying it represent only some of the aspects of a much vaster problem on which the survival, if not of humanity, then at least of western civilization depends. Protection of the environment is inseparable from efforts to check the wastage of natural resources and curb population growth on a world scale, while ensuring a fairer distribution of wealth. The Commission considers that the enlarged Community will have more authority to take far-reaching action in the years ahead, especially if real progress is made towards strengthening the institutions and towards political union.

Part two

**A EUROPEAN COMMUNITIES' PROGRAMME
CONCERNING THE ENVIRONMENT**

The Commission presents below a plan of campaign for the European Communities regarding the environment.

This programme comprises *firstly* a programme to reduce pollution and nuisances and to safeguard the natural environment. The problem of pollution and nuisance is today urgent because of the growing imbalance between on the one hand the quantity and increasing release into the environment of substances of biological and chemical origin, and on the other the absorption and resorption capacities of the biological world. Moreover, the resulting impairment and degradation of the environment has already reached such a pitch in certain regions of the Community and in the world that there is a danger of these phenomena modifying sometimes irreversibly, the quality of certain natural resources of primary importance and causing an appreciable deterioration in the standard of living of the peoples.

Protection of natural open space is becoming one of the priority duties of the authorities. This makes it necessary to review certain aspects of policies whose effects determine the use of rural land, in particular agricultural policy. Farming, which extends over the majority of the land and forms an integral part of the natural landscape can, if capable of adaptation, make a great contribution towards satisfying the new needs for places of leisure and relaxation in natural surroundings felt so acutely by the industrial society.

Finally, the Council should adopt as rapidly as possible the draft regulations on the improvement of the quality of foodstuffs for both human and animal consumption and the regulation on the use of certain substances used in agriculture.

The first phase of this programme of action is the subject of a *draft Council resolution* and a *draft Council recommendation to Member States signatories of the Berne Convention establishing the International Commission for the protection of the Rhine against pollution*.

Secondly, to harmonize national measures and the proper progress of the work undertaken at Community level, the Commission is submitting a *draft agreement by Member State Governments meeting in the Council on information to the Commission with a view to the possible harmonization throughout the Community of urgent measures regarding the environment*.

Thirdly, to enable the Community to participate actively in the work of international organizations and to ensure that account is taken in this work of the original and specific features of the Community, the Commission considers that, apart from cases where the Community is empowered to act, Member States should work together and take joint action regarding the environment within these organizations in application of the provisions of the EEC Treaty.

Fourthly, independently, of what is said in the preliminary guidelines on a programme of Community social policy, the Commission is proposing various actions designed to improve the working environment inside factories and works.

Finally, to improve and disseminate knowledge and information on the environment, the Commission plans a series of actions to support and extend the programme to control pollution and nuisances and to safeguard the natural environment. This work should provide further scientific and technical knowledge on protection of the environment, improve the processing and dissemination of this knowledge and of general information, help in education and training and encourage forward-looking thinking about the civilization problems raised by the growth of the industrial society in Europe.

Programme to reduce pollution and nuisances and to safeguard the natural environment

The actions described in this chapter are designed to enable the Communities and Member States to take the necessary measures to reduce pollution and nuisances and at the same time to ensure proper functioning of the common market and to safeguard natural surroundings in the context of the agricultural policy.

Reduction of pollution and nuisances

The following proposals are designed to form a common framework for evaluation, action and where appropriate regulations, to which the Communities, Member States and local authorities can refer in their decisions.

It is a matter of:

1. establishing an objective basis for assessment of the risks to human health and the environment resulting from pollution,
2. establishing common health standards and defining common quality objectives for the environment,
3. ascertaining the consequences of applying these standards and objectives to sources of pollution (economic activities and products) and taking special measures in certain areas of common interest and in respect of certain pollutants,
4. defining jointly the principles, methods and conditions of assessing and apportioning the costs of pollution control,
5. ensuring application of and effective compliance with the regulations and limits set.

This work should make it possible to improve the harmonization of legislation and control of aid, already in progress, by supplementing them with new activities directly designed to protect and environment.

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

To combat pollution it is first essential to have an objective knowledge of its effects. With this knowledge, limits on the presence of pollutants in the environment and in products can be set without risk of being arbitrary: health limits to protect human health, ecological limits to protect the environment, social limits to improve human welfare by reducing or eliminating the nuisances to which people are exposed.

Determination of these limits, representing values which cannot be exceeded without significant risk to man or the environment, necessitates a critical and objective evaluation of the relations between the concentration of pollutants in the environment and their effects.

Differences in the methods of evaluation and the establishment of dissimilar limits in different Member States are bound to affect the measures taken in respect of the activities or products causing pollution, thus creating barriers to trade or distortion of competition.

This is why the Commission deems it necessary for the Communities and Member States to adopt a common methodology and approach to the objective evaluation of the risks resulting from pollution of the environment. This procedure, followed where appropriate by the issue of Community rules, should in the Commission's opinion accompany any Community or national standardization work.

The Commission therefore proposes that the following steps should be taken as rapidly as possible for each environmental pollutant, taken separately or in combination with others, starting with the pollutants considered to be the most dangerous:

1. selection and establishment of criteria¹ defining the nature and importance of its effects on man and his environment. These effects may be harmful to human health, to organisms other than man, to natural resources or to materials used by man,
2. determination of guide levels giving numerical values for concentration, length of exposure or rate of absorption of pollutants or other nuisances, relating to the previously determined criteria.

¹ These criteria refer to:

- the effects of the pollutants on human health (e.g., for sulphur dioxide one health criterion is the worsening of symptoms in patients with chronic lung diseases. Effects of noise on the autonomic nervous system and auditory system),
- harmful effects on organisms other than man,
- unfavourable influences on natural resources (e.g., reduction of exposure to sunlight or of the clearness of water),
- unfavourable influences on materials used by man (corrosion).

This action should be accompanied by efforts to harmonize methods and instruments used to measure different pollutants taken individually or in combination. This harmonization is necessary to define the criteria and guide levels, to make the results of pollution measurements comparable in Member States and to enable compliance with the health standards and quality objectives for the environment referred to below to be verified.

The Commission propose that alongside the above actions the following should be done for each pollutant, taking account in particular of its special physical and chemical properties (phase, particle sizing, etc.):

- (a) harmonization of the biological tests for definition of the effects of pollutants according to the doses considered and for determination of pollution levels,
- (b) harmonization of methods and techniques for sampling and analysing pollutants.

Where the work done by Member States or in international organizations¹ does not give results that can be used by the Community, the Commission will organize suitable meetings to define the criteria and guide levels applicable to each pollutant and to harmonize or make compatible the measurement methods and results for these pollutants.

In addition, after an examination of the available scientific data, it may prove necessary to undertake studies and research to fill gaps in scientific knowledge (see Chapter IV below).

These criteria and guide levels and the health standards resulting from them should then be periodically revised to allow for the advancement of knowledge. Likewise, the quality objectives for the environment referred to below may be revised to allow for the advancement of knowledge and new social, economic or aesthetic requirements.

The work referred to above should also make it possible to determine the pollutants calling for immediate conservationist measures throughout the Community.

Institution at Community level of quality health standards and common definition of quality objectives for the environment

As progress is made in the work described in the preceding chapter, the Commission will propose to the Council the adoption or recommendation of quality health standards and quality objectives for the environment; these may vary from region to region in accordance with the ecological, economic and social characteristics peculiar to each.

¹ In particular the work of WHO and OECD.

The health standards will lay down for each pollutant (taken individually or in combination with others) in the environment concentration limits that cannot be exceeded without a significant health risk.

Apart from these health standards, the quality objectives for the environment will consider factors other than health criteria: protection of natural surroundings (ecological criteria), the economic and social needs of the regions, which vary according to the type of existing or planned economic activities in the regions concerned, their state of development, the social characteristics and the natural conditions in these regions.

In the first stage, the Commission will undertake the following work to improve the quality of fresh water and air in certain regions.

Fresh water

— Rivers and streams

Most States specify for different parts of their river systems quality objectives that vary according to the use of the water.¹ To avoid creating distortion of competition, the efforts to reach a common objective evaluation of the risks resulting from water pollutants, the harmonization of measurement methods, and the application of common principles for the allocation of the costs entailed in combating water pollution must be accompanied by a common definition of the physical, chemical and biological factors that determine the quality of waters for different uses.

This definition is particularly necessary for rivers and streams flowing through more than one Member State, for which special measures up to and including the application of common standards for effluent discharge must be studied. Local, regional and national authorities should retain the widest possible freedom of judgment regarding the use of their waters that is compatible with the observance of minimum quality objectives for the different types of water courses or lakes.

The objectives should be gradually strengthened as time passes.

— Lakes and underground water

To protect lakes and underground water it is necessary to apply special provisions to prohibit or limit in certain areas the use of noxious products and the disposal in the soil of effluent and waste liable to pollute underground water. These provisions should be defined jointly on the basis of criteria also fixed by joint agreement, with priority given to water and lakes in frontier areas.

¹ Based on the work in progress, the Commission will produce as soon as possible a comparative study of the measures taken in Member States to protect their waters.

Air

As for water, the objective evaluation of risks resulting from air pollution must be accompanied by the definition of factors that determine the quality objectives for air in built-up areas and industrial concentrations and in areas for leisure and relaxation.¹

Special action regarding sources of pollution in certain areas of common interest and certain pollutants of a special nature

The adoption and application of health standards and the determination of quality objectives will have consequences on the economic activities and products that cause pollution. It will be necessary to take special measures on which, in many cases, there will have to be joint or concerted action at Community level to avoid the creation of barriers to trade or distortions of competition.

Products

General programme to eliminate technical barriers and its extension

The EEC has already started to examine the pollution and nuisance problems caused by the marketing and use of certain products in the context of the General Programme of 28 May 1969 on the elimination of technical barriers to trade resulting from disparities in legislation, regulations and administrative action in Member States.

The Commission is continuing its efforts with a view to early and full implementation of this programme. In drafting the directives, it takes account not only of the objective of free movement of goods but also of the desirable improvement in the level of security and protection of the environment. In order to extend its scope in this field, it is also proposing an extension of this programme to the Council in a separate document.² The Commission proposes inclusion of the following products in the general programme: motorcycles, aircraft, railway rolling stock, construction plant, packagings and fuels.

The results of the objective evaluation of the risks resulting from pollution and the health standards applicable through the Community (see above) will be taken into account in preparing directives to ensure free trade.

In addition, the measures to be taken to ensure continuous verification of compliance with the standards incorporated in the directives should be agreed between the responsible authorities in Member States.

¹ Based on the work in progress, the Commission will produce as soon as possible a comparative study of the measures taken by Member States to protect the atmosphere.

² See Bulletin 5-1972, Part Two, sec. 7.

Waste: The special problem of waste must be considered from several aspects: a reduction in waste can be obtained either by limiting or prohibiting the manufacture of certain products or by directing production processes towards greater recovery and use of scrap not used in current production cycles or by establishing dumps. In addition, the techniques and processes of waste recovery should be improved.

As already mentioned in its First Communication (Chapter III "Priority Action" Section 3 "Specific Studies"), the Commission considers it necessary to conduct a survey on this problem. This survey would primarily cover the ways of solving the problems raised by:

- the increase in packaging of consumer products,
- bulky scrap (motor vehicles, discarded electrical domestic appliances),
- purification, storage, and re-use of waste containing petroleum or tar.

Economic activities

Industry: Although industry is not the sole or even the main cause of the present state of environmental pollution, the high concentration of production activities in certain regions of the Community oblige Member States and public opinion to devote special attention to certain types of pollution caused by some industrial sectors.

The measures taken by the authorities with regard to the environment often face industrial companies in general and certain branches in particular with difficult problems related to the technical, economic and commercial conditions under which these industries operate.

The obligations imposed on industry should be harmonized at Community level, allowing some differentiation as a result of the diversity of natural and regional conditions applicable to industry, in order to avoid distortion of competition between adjacent countries that are members of the same customs union. Failing such harmonization, there could be serious consequences, for example Member States might be tempted to attract capital and investment by means of less strict pollution control.

The establishment at Community level of quality standards for health, the common definition of the methods of preparing quality objectives, the harmonization of measuring methods, the institution of joint emergency measures to control pollution, the harmonization of standards on the composition of products, the adoption of common principles for the allocation of costs and the harmonization of verification and repressive measures, will contribute towards this general harmonization of the constraints on industry.

In addition, the Commission will study practical ways of applying the principle that industries should incorporate in their new investment schemes the most recent technical process and equipment causing least pollution. The application of this principle at Community level raises problems regarding information and industrial property which the Commission intends to examine before submitting practical proposals.

The special situation of certain industrial sectors also required coordination of sectoral policies and generally speaking a common study of the problems encountered by these branches of industry from the technical, economic and commercial aspects.

Accordingly the Commission will study, in conjunction with the responsible national authorities and with the assistance of the industries concerned, the problems raised by the technical and economic constraints resulting from pollution control that face certain branches of industry and the power sector.

The aim of these studies will be:

- to determine the exact nature of the pollution problems to be solved for each type of industry,
- to draw up a balance sheet or inventory of existing technologies and research projects,
- to determine the measures to be taken: regulations, research, development work, recycling of products causing pollution, installation of purification stations, search for suitable sites, etc.
- to assess the respective costs of the various systems envisaged and to study ways of financing them.

When it has the results of these studies, the Commission will make suitable proposals to the Council: regulations and directives, research projects and development contracts, licence agreements, formation of joint undertakings, etc.

The Commission proposes to carry out or continue the studies on certain industrial sectors, for example:

- metallurgical and steel industries (to extend the work already done in the ECSC),
- paper and pulp industries (using the results of the OECD work),
- chemical industries,
- food industries (sugar mills, starch factories, canning, dairies),
- textile industries (combing, washing, dyeing),
- leather industry (tanneries).

In addition the Commission thinks it advisable to study the technical, economic and social consequences on the motor industry of the anti-pollution provisions on pollution control and protection of the urban environment (traffic in towns) and social environment (safety problems).

Agriculture and food: Since 1963 several regulations on colouring matters, preservatives and anti-oxidants in foodstuffs and additives in animal feedingstuffs have been adopted by the Council.

Draft regulations on insecticide residues in fruits and vegetables and undesirable substances in animal feedingstuffs have been submitted by the Commission to the Council and are now under discussion. The Commission deems it necessary and proposes in the attached draft resolution that the Council should act on these proposals before 31 December 1972.

Other drafts concerning insecticide residues in cereals, regulations on the use of oestrogenic and thyrostatic substances and the approval and marketing of phytopharmaceutical products are now being studied by Commission working parties with a view to submission to the Council.

The Commission is currently examining the possibility of using certain rapidly degrading insecticides in place of certain persistent pesticides and of using biological control, integrated control and cultivation techniques enabling the use of chemical insecticides to be reduced. It intends to submit to the Council a directive prohibiting, apart from duly controlled exceptions, the use of certain persistent chemical insecticides, in particular DDT.

Veterinary regulations going back to 1964 have been adopted for the major types of animals and meat traded; these regulations lay down at Community level the conditions to be met by these products so that they can be traded with minimum risk to human and animal health. Proposals now being studied are intended to provide similar guarantees for other animal products (in particular milk and meat-based products) and to determine, for most of these products, the health conditions required for imports from non-member countries.

All these texts have been drafted in the context of the harmonization of legislation, with the idea not only of eliminating technical barriers to trade but also of improving the quality of foodstuffs marketed in the Community.

Protection of the consumer's health is considered of vital importance. All the standards adopted or proposed on additives, undesirable substances, insecticide residues and veterinary measures were based on the acceptable daily doses evaluated by FAO and WHO technical committees and the eating habits peculiar to the different Community countries. All the proposals put before the Council are submitted to the Consumer Associations in the Community for their opinion.

The tolerances proposed by the Commission for insecticide residues are often lower than those currently authorised in North America.

Water pollution by fertilisers raises problems that are difficult to solve because of their complexity. The use of fertilisers depends greatly on the various agricultural uses to which the land is put, which in turn depend on the general trend of the agricultural policy as a whole. Moreover, the use of fertilisers is difficult to supervise or control.

To limit the consequences that may result from the use of fertilisers, it is necessary both to improve training and information for users and to encourage the increased production of fertilisers offering the least possible risk to the environment.

The economic repercussions resulting a reduction in the yield of certain farm products or an increase in their prime costs owing to compulsory restrictions on the use of existing products or their replacement by more costly methods, and resulting also from the capital to be invested in the development of new methods of controlling parasites and enriching the soil are difficult to foresee at the present time and much thought must be given to them. Account must also be taken of the fact that farm incomes receive government support by way of a market and price policy applying to the great majority of farm products.

For industrial products too, it is necessary to speed up procedures so that these regulations can be adopted rapidly. The Council has before it many drafts directives or regulations on which it has not yet taken a decision despite the timetable it had set for this purpose.

(Council Resolution of 12 March 1968 on the Community measures to be taken in the veterinary sector and Council Resolution of 28 May 1969 establishing a programme for the elimination of technical barriers to trade in foodstuffs resulting from disparities in the legislation, regulations and administrative action of Member States).

Power production: In the power sector, the Commission agrees with the Memorandum from the French Government and points out that it has undertaken or proposes to give priority to:

- 1) a comparison of national experiments in progress on special fuel use strategies,
- 2) efforts to standardize fuel categories according to their sulphur content,
- 3) increased dissemination of information on research into sulphur removal processes,
- 4) projective studies on the evolution, according to various hypotheses of the sulphur content of hydrocarbon supplies,
- 5) consultation of experts to collect data for a comparative economic survey on the consequences of sulphur reduction in fuels and sulphur removal from waste gases in fixed installations,
- 6) a survey of the economic and health consequences of reducing or eliminating lead compounds in motor fuels,
- 7) an examination of the problems in disposing of used lubricating oils,

- 8) an inventory of national regulations on the installation and operation of refineries, oil pipelines and service stations,
- 9) a study of the technological development of refinery plant and its economic incidences,
- 10) the lines to be followed by Member States in action regarding refineries,
- 11) a study, in consultation with experts, of the effects of the discharge of cooling water by stations and the ways of remedying harmful consequences. Alternative techniques of dissipating the residual heat should be examined, including means of utilizing it,
- 12) study of the advisability of endeavouring to strengthen the thermal insulation of new buildings with a view to either reducing fuel consumption or facilitating the use of electricity for space heating.

Areas of common interest

Protection of the waters of the Rhine basin against pollution. The growing pollution of the water of the Rhine and its tributaries is causing increasing concern to those using the water or living near the river. This concern has been very emphatically expressed in the European Parliament. On 16 December 1971 it unanimously adopted a resolution on the subject which has been put before the Council and the Commission.¹

The report (Doc. 161 of 11 November 1970 of the European Parliament) by Mr Boersma contains much pertinent information on the state of pollution of the Rhine water and on the measures taken and projects prepared to date by the Rhine countries and international organizations. The report states in particular that figures of 110 kg chloride per second were found at Mannheim, 122 kg per second at Mainz, 181 kg per second near Leverkusen and 268 kg per second at the Dutch/German frontier.

In a report by the Italian Lower House to the Interparliamentary Conference on Water Pollution meeting in Rome in 1971, Dr J.H. Lamberts gives the following additional data: of the sodium chloride contained in the Rhine water when it reached the Netherlands, 41% is from potash works, 25% from miscellaneous industrial waste, 20% from coal mines and the remaining 14.5% are of natural origin.

In addition, according to this report, 80 tons of arsenic, 300 tons of copper, 20 tons of cadmium, 10 tons of mercury and 900 kg of insecticides enter the Netherlands in the Rhine each month.

¹ See Bulletin 2-1972, Part Two, sec. 155.

The Commission has started a preliminary study of the water pollution in the Rhine basin and the progress of the measures taken to combat them.¹

The first international discussions on the problem were started in 1948 in the Central Commission for the Navigation of the Rhine, on the occasion of an international conference on salmon. Governments participating in this conference nominated delegates to handle matters concerning water pollution in the Rhine. These delegates met for the first time on 11 July 1950, forming the "International Commission for protection of the Rhine against pollution". Not until 1960 did this Commission decide to prepare an international agreement giving it a legal status and powers. This convention was signed in Berne on 29 April 1963 by the Governments of the Federal Republic of Germany, the French Republic, the Grand Duchy of Luxemburg, the Kingdom of the Netherlands and the Swiss Confederation.

This convention defines the task of the International Commission in Article 2:

(a) This Commission shall:

1. prepare, and have carried out all the research necessary to determine the nature, importance and origin of Rhine pollution and utilise the results of this research,
2. propose to the signatory governments measures suitable to protect the Rhine against pollution,
3. prepare the way for arrangements between signatory governments concerning the protection of the Rhine waters.

(b) It shall also be competent to carry out any other tasks assigned to it by the signatory governments by joint agreement.

The International Commission consists of delegations from the five signatory Governments. Each Government may nominate a maximum of four delegates, one of whom is the head of its delegation. The Chair is taken by each delegation in turn for a period of three years. Since 1 January 1972, the Dutch delegation has provided the Chairman.

The Convention provides that the International Commission shall set up a working group for current research and that it may, where appropriate, set up others for special purposes. The Commission has at present a "permanent working group for current research" and other groups for agriculture, water supply and health, hydrology and water economy, technical measures, economic and financial matters, legal matters, radioactive substances and cooling waters.

¹ A study of radioactivity in the Rhine basin has already been made and published by the Commission (Doc. EUR 3741/1-2 F).

The International Commission for the protection of the Rhine against pollution cooperates with the international commissions for the protection of the Moselle, the Saar and the Lake of Constance and with the Central Commission for Rhine Shipping.

Despite the importance and interest of the studies and research carried out under the auspices of the International Commission, there is no doubt that the quality of the Rhine water is constantly deteriorating. It must be admitted that the International Commission has no adequate powers of intervention to combat Rhine pollution effectively. In addition, for obvious reasons, the campaign in the Rhine basin has to be harmonized with pollution control in other European river systems.

That is why the Commission submits in the attached documents a communication containing a draft Council recommendation calling on Member States signatories of the Berne Convention to instruct the International Commission to prepare a crash programme for the improvement of the Rhine water.

The Commission also thinks it necessary to set up a European Agency for the Rhine Basin in which Member States so desiring would be invited to participate, together with Switzerland. It will prepare a proposal for joint undertaking status which could be adopted when the Council decides to extend this status beyond the nuclear sector.

Pollution of the seas along the Community coastline: Of all forms of pollution, that of the sea is undoubtedly the most dangerous in the long run because of the degree of degradation already reached and the difficulty of controlling it.

The Community possibilities of action are limited as far as pollution of the high seas are concerned. This problem is mainly the responsibility of world or regional organizations. However, Western Europe, because of its intended coastline and its situation at the hub of ocean shipping lines, has a greater interest than any other part of the world in seeing effective action taken at world level against marine pollution and more particularly against the dangers inherent in the prospection, production and transport of petroleum.

Consequently the Commission hopes that, at the forthcoming conferences in Stockholm and of the Inter-Governmental Maritime Consultative Organization, Member States will propose, if possible jointly, the constitution of an international organization specializing in pollution control at sea, having adequate powers of action in particular as regards policing of the seas. Until such an organization is established, the Commission asks Member States to do all in their power to ensure that international regulations are observed, especially in the seas around the Community shores.

There is however one aspect of marine pollution that calls for special and priority action on the part of the Community: the discharge of effluent from the coast. The Commission welcomes the measures already taken in respect of the North Sea and the Mediterranean. However, it considers that these measures

should be coordinated at Community level to avoid any unjustified disparity in the regulations applicable on the different sea coasts of the Community or the absence of provisions on this subject.

The Commission will study, where appropriate with third countries and the international organizations concerned, the identification and classification of the various pollutants coming from land activities: discharge from built-up areas on the coast, pollution due to pleasure ports, industrial waste disposal and pollutants carried to the sea by rivers and streams. The Community is also interested in studies undertaken on the dumping of hydrocarbons and waste of all kinds from ships at sea, the exploitation of undersea resources and the evaluation of the risks of serious contamination due to accidents.

Discharge of pollutants is mainly concentrated near the coast in the shallow waters of the continental shelf and in an area where activities are most intense and most diversified. That is why marine pollution may have important economic consequences for certain countries and categories of industry, in particular the tourist industry.

The origin of coastal pollution is so varied that different legal formulae must be used to cope with it: pollution coming from the land is the responsibility of national legislations, while international conventions needs to be improved and above all implemented to deal with pollution coming from the high seas.

Disparities between national provisions for the coastline are liable to distort competition and divert investment. Consequently the Commission will propose to the Council that it should adopt in due course the most suitable provisions with regard to:

1. deliberate dumping of industrial waste at sea,
2. direct discharge into the sea of domestic and industrial affluent from coastal installations.

Pollution of frontier areas: The problems raised by pollution in frontier areas have aspects similar to those of marine and coastal pollution.

Here again it is a matter of the conservation of joint resources forming part of the same geographical and economic area, but subject to different and sometimes contradictory regulations.

The common definition of the factors involved in the preparation of the quality objectives should, in these frontier regions, be supplemented by efforts to harmonize these objectives as far as the physical autonomy of the area concerned permits, without at the same time creating a harmonization problem on a national scale in the countries concerned. This is necessary to prevent the industrial activities in these regions, where natural and geographical conditions are generally identical, from being subjected to restricting regulations of varying severity and hence to different conditions of competition.

The Commission will call meetings of national experts to identify these regions and to study, with the Commission, the quality objectives for the environment that should be attained in these regions according to their own economic and social vocation. On the basis of the results of the studies, the Commission or the Council may recommend the Member States concerned to take suitable measures for these regions.

Pollutants of a special nature

Radioactive pollution: The Euratom Treaty makes provision for the prevention and control of risks arising from existing nuclear installations. The radiation doses from nuclear installations are in any case a very small proportion of the maximum dose laid down for individuals. However, the foreseeable increase in the number of nuclear reactors in the electricity generating sector will increase the potential sources of risk and may give rise to serious problems in protecting the environment against radioactive contamination.

Consequently efforts must be made to find technological methods of limiting even more strictly the emission of radiation or radioactive substances both inside and outside nuclear plant. Special attention should be paid to the problem of the final storage of radioactive waste containing highly active and very long life elements coming mainly from the nuclear fuel reprocessing works. It will be particularly advisable to develop a technology ensuring that the storage systems installed on suitable sites will remain sealed for very long periods.

The Commission considers it desirable for the following work to be carried out jointly by at least all the Community countries:

- definition of basic criteria for management and long-term storage ensuring safety and pollution control,
- study of suitable sites for such storage,
- preparation of a system for the management of storage sites and definition of responsibility for the materials stored.

Noise pollution: To combat noise, it is first necessary to have as precise as possible a knowledge of the effects of noise on the human autonomic nervous and auditory systems at various levels of loudness, pitch and frequency and in relation to the length of exposure. It will consequently be necessary to take stock of existing knowledge and to coordinate and supplement it (see Chapter IV 1 below). Specific action to reduce the noise made by certain industrial machines, site plant and transport equipment are also proposed in the general programme on the elimination of technical barriers. The Commission is planning a study of the possibility of reducing noise in urban built-up areas caused by traffic on the main roads, air terminals and overhead lines of trains, metropolitan railways and trams.

The reduction or neutralization of the effects of noise should be envisaged:

- at source, either by technical and instrumental improvement of the installation causing the noise (e.g. erection of excessively noisy machines on purpose-designed insulators, bearings, counterbalances, etc.) or by insulation by means of screens, panels, or by a better layout,
- in transmission paths, by using construction materials allowing absorption, insulation and sound-proofing of premises,
- by stricter and more effective supervision of the provisions applicable to noise, especially regarding overflying by aircraft.

Common definition of the principles for apportionment (and harmonization of their means of application) of the costs of pollution control

Harmonization of methods of evaluation and methods of financing these costs

Apart from the harmonization efforts proposed above, the rules of free competition and free trade can only be observed if all Member States of the Community follow the same principles for the apportionment of the costs of pollution control and endeavour to harmonize the ways of applying these principles.

In a market economy system, all costs including social costs should in principle be apportioned to the products or activities causing them.

This means that, as far as pollution control is concerned, the individual or corporate body responsible for the appearance of a nuisance should bear its costs.

At its last meeting on 9 to 11 February 1972, the OECD Environment Committee approved a number of guiding principles concerning the economic aspects of environmental policies at international level. One of these principles relates to the apportionment of costs. The text drafted after long negotiations by the Environment Committee reads as follows:

Apportionment of costs: the "polluter pays" principle

"Available environmental resources are in general limited and that production and consumption may lead to their deterioration. When the cost of this deterioration is not taken into account in the price system, the market fails to reflect the scarcity of the resources both at the national and international levels. Public measures are thus necessary to reduce pollution, and to reach a better allocation of resources, by ensuring that prices of goods depending on environmental resources reflect more closely their relative scarcity.

In most circumstances, in order to ensure that the environment is in an acceptable state, the total elimination of pollution will not be necessary or desirable in view of the costs involved.

The principle to be used for allocating costs of pollution prevention and control measures that will encourage rational use of scarce environmental resources is the so-called Polluter Pays Principle. This principle means that the polluter should be financially responsible for the above mentioned measures decided by public authorities to ensure that the environment is in an acceptable state. In other words, the cost of these measures should be reflected in their cost of goods and services which cause pollution in the production and/or consumption processes. Such measures should not in general be accompanied by subsidies likely to cause major distortions in international business and investments.

This principle should be an objective of all member countries; however, there may be exceptions for special reasons, in particular for the transitional periods, provided this does not lead to major distortions in international business and investments”.

The Commission considers that these OECD guidelines can guide the action of the European Communities. The principle that the polluter should bear the cost incurred in repairing the damage he does to the environment should be followed in general. Consequently aid should only be granted in order to enable the companies or regional economies concerned to adapt gradually to the new conditions of competition resulting from the new constraints introduced by the pollution control measures taken by the authorities (regulations, taxes,) in accordance with the general principles followed by the EEC. Within the framework of these general guidelines, account may be taken of the problems of certain industrial sectors causing pollution which are particularly vulnerable to international competition.

However, suitable measures of adaptation to the principle of the responsibility of the polluter may be made according to the environment polluted, the types and sources of pollution and the regions concerned (some regions are more polluted, more developed or more highly populated than others).

Where pollution results from the use or disposal of products by consumers (oil products, vehicles, plastic packaging), special solutions must be found.

Consideration will have to be given to the costs that will in any case have to be borne by the authorities (technical and administrative inspection and control agencies, research and development work, etc.).

Finally, special attention will have to be given to the consequences of the increase in prime costs resulting from pollution control at the macro-economic level.

On the basis of the work done by OECD in this field, the Commission, with the assistance of a group of national experts consisting of economists specializing in environmental problems, has started to study ways and means of applying the “polluter pays” principle and to list the cases where a departure from this principle is permissible.

In the same group, other studies have been started on:

- methods of estimating the cost of pollution,
- methods and instruments for evaluating the cost of pollution control,
- methods of financing pollution control,
- the use of economic incentives to protect and improve the environment.

By extending and defining the OECD studies in accordance with the features of the Community economy, this work should make it possible to harmonize methods of estimating the costs of protecting the environment and facilitate the studies on industrial sectors proposed in the preceding chapter.

In addition, studies on ways of financing pollution control should facilitate the more general work on the harmonization of taxes and fiscal systems which the Commission has in hand.

On the basis of the results of these studies, the Commission will in due course submit proposals to the Council on all these aspects (see programme of action).

Action to ensure application of and effective compliance with the regulations and limits set

Verification and inspection of a technical nature

Compliance with the regulations and the fair application of repressive measures against polluters also necessitate a comparison, for harmonization purposes, of the various technical methods used to verify pollution. The acceptance of measuring methods and reference substances, certified jointly, will facilitate the desired harmonization. With a view to harmonization, the Commission will make a comparative study of the verification methods used in Member States.

Technical exchanges should also be organized between the centres responsible for the management of these systems, in order to improve the efficiency, precision and comparative value of the facilities used.

The Commission will in due course examine, together with the responsible authorities, the advisability of setting up a reciprocal information scheme for the data collected by these systems and making it responsible for analyzing the data collected by the national networks to ensure interpretation on common bases.

Verification of the application of provisions laid down by law, regulation and administrative action

A vital problem in the law on protection of the environment, especially for the oldest laws, arises from the great difficulties involved in applying the laws and regulations. It is not always easy to force those concerned to obey these

provisions. Man and the environment can only be properly protected if the provisions are effectively and generally applied and if all cases of non-compliance are penalised. Enforcement of the law and the observance of the prohibitions or obligations are also complicated by the fact that the law on protection of the environment often contains general clauses (for example, references to the state of the art or its development). Sometimes, too, important public interests (employment, economic growth) are involved. The authorities may then find themselves faced with particularly difficult cases of arbitration.

With regard to verification of the application of legislation, regulations and administrative action concerning protection of water and air, waste disposal and noise abatement, a preliminary survey of the law applicable in Member States shows that material law (application of "standards") is in most cases supplemented by regulations concerning the authorization procedure, verification proper and supervision. These regulations are however different in nature and scope.

Apart from the rules of civil law concerning responsibility, the following regulations are essential for practical application of the standards and efficient protection of the environment:

- 1) Powers of the administrative authorities (central government, local authorities);
- 2) Conditions for the application to carry on an activity that may be a source of pollution;
- 3) Publication of this application and possibilities of opposing it;
- 4) Effects of the authorization;
- 5) Appeal against administrative decisions;
- 6) Verification proper.

National provisions on the verification system show substantial differences, for example regarding verification (frequency) of compliance with the conditions or obligations imposed and supervision of the plant (e.g. the requirement for a person responsible within the company for protection of the environment). With regard to the verification and supervision of material law, regulations regarding actions by third parties to have the activity stopped (shutting down of the polluting firm), withdrawal of authorization (e.g. in the event of an important change in the operation of an installation) and subsequent reinforcement of an obligation are of great importance.

Harmonization and strengthening of sanctions on polluters

There is an increasing trend in legislative policy to consider the violation of provisions on protection of the environment as contrary to the public interest, i.e. a penal offence. At the same time, administrative sanctions are being

maintained or strengthened (e.g. withdrawal of authorization, shutting down of the company). Generally speaking, it is recommended that provisions aimed at protecting the environment should if necessary be enforced by compulsion and that any violation of the law in force should be punished.

In some fields there are not yet any penal provisions. The definition of violations and also the range of possible penalties differ from one State to another. Recent projects (concerning control of water and air pollution and waste disposal) provide high fines or other pecuniary penalties and even severe terms of imprisonment for particularly serious violations. Special questions may also arise because the prosecution and repression of violations are in principle limited to national situations while nuisances (danger to health, material damage) may be caused outside national territory.

A detailed examination of the general and special provisions on protection of the environment is therefore essential having regard to the sanctions (administrative sanctions, penal sanctions). This examination should include a comparison of violations (e.g. air or water pollution, non-compliance with the conditions of authorizations, charges or the obligation to make a declaration) as well as the sanctions and the range of possible penalties (fines, pecuniary penalties, imprisonment, accessory penalties). In addition, sanctions of an administrative nature related to these penal sanctions (shutting down of the establishment, automatic enforcement) should also be examined.

The national regulations on verification and control of pollution and on the punishment of violations of the law on the protection of the environment are of fundamental importance for its efficiency. Likewise, the establishment at Community level of any regulations designed to reduce certain types of pollution would imply that their enforcement was ensured by verification procedures and sanctions laid down in national law.

To take account of all these aspects, efforts to compare national legislations and their practical enforcement will be stepped up. This in itself will establish the prior conditions for certain approximations of legislation that will prove necessary.

The work already done on this subject with the aid of national experts has revealed that all member States have general or particular provisions which prohibit or ban certain behaviour in order to protect the environment. They also govern the payment and/or distribution of the costs resulting from the bans or legal obligations on the polluting companies.

The authorities have various methods of intervention. In most cases they fix values for pollution emission and/or level. In the first case, the permitted extent or nature of the emission (e.g. waste water, gas given off, noise waves) of an installation is limited. The other method consists of establishing quality standards for the environment of the installation causing pollution. In this case the purposes for which, for example, the water into which the waste is discharged or the surrounding soil is used may be taken into consideration.

The provisions also contain for the apportionment of costs resulting from compliance with these standards. The most recent laws also sometimes contain rules regarding dues (for example, for residual pollution).

Apart from the above measures regarding the harmonization of legislation, the Commission draws the attention of Member States to the need to see that national and/or Community regulations are strictly observed. The authorities are in fact under strong and frequent pressure in order to obstruct application of these regulations, especially for reasons of employment or regional difficulties.

The effect of distorting competition that may result from non-compliance with the regulations and its social consequences demand special vigilance on the part of the Community institutions.

That is why the Commission will ask every Member State to submit to the Council and the Commission an annual report on the efforts made to ensure compliance with anti-pollution and anti-nuisance regulations. Likewise, the Commission points out that every Member State, every local or regional authority and even every association or group of citizens, in particular users' or consumers' associations, has the right to notify it of cases of non-compliance with the regulations.

Conservation of the natural environment in the context of the agricultural policy

As mentioned in the introduction to the programme, for the conservation of the natural countryside it is necessary to re-examine certain aspects of the policies whose effects determine rural land use, in particular the agricultural policy.

Farmers already carry out useful functions in maintaining the soil and the countryside. The development of these functions together with adequate remuneration is in the public interest. Consideration must be given to the establishment in certain farming regions of new activities connected with the tourist industry that are likely to provide additional income for certain farmers or new jobs for farmers leaving the land. These measures will also prevent the depopulation of these regions.

Some aspects of the proposals that the Commission has put before the Council in the context of agricultural reform are already contributing towards this new aim:

- the directive on farm modernization establishes the principle that investment aid should be granted selectively to viable farms able to ensure an income comparable to that obtained from other activities. However, it does provide for an exception allowing national aid to be given to farms not meeting the criteria of viability in certain regions where there

is no assurance that a minimum population level will be maintained and where minimum farming activities are essential to conserve the natural countryside;

- the directive on the cessation of farming and use of the farmland for consolidation purposes establishes a new rule according to which EAGGF aid by way of pensions for farmers leaving the land is subject to the allocation of the released land not only for farm modernization but also for non-agricultural purposes such as reafforestation, recreation areas, national parks, etc.

It should be noted that where the land belonging to older farmers is used for modernization it would enable younger farmers (who have been leaving the land in large numbers) to continue to farm in certain depressed regions which are nevertheless of great touristic value. As for the old farmers receiving the pension they would not have to move and could continue to live normally in their own homes.

- the directive on socio-economic information and vocational training for persons working on the land gives them the opportunity to obtain the necessary training to take up jobs connected with the tourist industry under the vocational retraining scheme.
- in addition a new measure to improve farm incomes in certain regions by payment of a subsidy independent of production has been proposed by the Commission for farmers who are unable to modernize and are not old enough to receive the pension (directive on income subsidies for certain categories of farmers).
- finally the Commission has submitted to the Council a draft regulation on the financing by the EAGGF, guidance section, of projects aiding development operations in priority farming regions; the action envisaged in this proposal, to encourage the creation of non-agricultural jobs for those leaving the land, is directly intended to allow farm structures to be improved while preventing an exodus from the land.

The Commission expects the Council to adopt rapidly the various measures already proposed.

The Commission expresses its intention to step up its future activities on conservation of the natural countryside and proposes to take the following measures under the agricultural policy:

Draft directive on hill farming

The aims of these specific measures for hill farming are as follows:

- to assure hill farmers, despite the natural handicaps, of an income comparable with that obtained from non-agricultural activities and thus to avoid the depopulation of these regions owing to the departure of large numbers of young people in particular;

- to recognize and encourage the work of farmers in these regions, not only as producers of foodstuffs but also in their function of conserving the natural countryside.

Among the measures to be proposed to attain these objectives, mention may be made of the following:

- it will be possible in hill regions for the farm development plan intended to enable farmers to attain a comparable income to receive public aid with the participation of the EAGGF, even where some of this income comes from non-agricultural activities.
- financing of investment in the context of the development plan would also cover schemes necessary to develop non-agricultural activities connected with the tourist trade (country hostels, camp sites, trekking centres, crafts, etc.).
- the provision in hill regions of a grant for conservation of the natural countryside intended to provide permanent compensation for the natural handicap suffered by the farmer in difficult farming country.

Draft directive to encourage reafforestation

The objective here is to encourage the reafforestation of certain farmlands released under the agriculture reform or other suitable areas. This reafforestation scheme is designed to meet the needs of society as regards health, tourism and leisure activities, to protect the soil and to produce timber. Public grants with the participation of the EAGGF will be provided as an incentive to reafforestation for owners of agricultural land. The Commission will submit these proposals to the Council before 1 July 1972.

*

The Commission is planning to set up in the near future a study group consisting of independent and particularly well qualified individuals to advise the Commission with a view to common action to be proposed to the Council on the conservation of open spaces and natural beauty spots. This study group will consider problems resulting from the increase in the volume of farm land abandoned and left fallow which is degrading the countryside, the problems involved in establishing "protected nature reserves" with some farming, where there must in the public interest be special conditions attached to this farming, and in general all problems regarding ways of conserving the natural countryside not only in hill regions but throughout the Community.

Implementation of the above actions in successive stages

Because of the scope of the work described above and the difficulty of carrying it out, and also because of the gravity and urgency of the problems involved, this work can only be undertaken gradually and in stages. Consequently the Commission submits below a programme of action divided into three stages:

First stage

The first stage of the programme, which extends over 1972 and 1973, is described in detail in the attached draft decision. As its work progresses, the Commission will submit suitable proposals to the Council, which will be asked to decide on them before 30 June 1974.

Second stage

The second stage will see the continuation of the work done by the Commission in conjunction with Member States. As in the first stage, the Commission will in due course submit suitable proposals to the Council. These studies and works will mainly relate to the following subjects:

1. *Objective evaluation of the risks resulting from pollution*

Definition of the criteria and guide levels and harmonization or adoption of joint measures methods for the following pollutants:

- water pollutants: phenols
phosphates and nitrogenous derivatives
the following micro-pollutants: lead, antimony, copper and barium with their compounds and cyanides
chemical compounds in detergents
dyestuffs
- air pollutants: chlorine and hydrochloric acid, fluorine and its compounds
hydrocarbons and carcinogenic products
nickel and cadmium.

2. *Specific action regarding fresh water pollution*

- (a) Definition of quality criteria for water intended for recreational activities and fishing, and for industrial waste waters.
- (b) Measures concerning the protection of lake and underground waters.
- (c) Organization of Community-wide information system on water pollution.

3. *Specific action regarding air pollution*

Organization of a Community-wide information system on air pollution.

4. *Specific action regarding waste*

Measures to be taken with regard to certain bulky waste and scrap.

5. *Specific action regarding certain industrial activities*

Action concerning the steel industry, the food industries (starch factories).

6. *Specific action regarding power production*

Continuation of the work.

7. *Specific activities regarding certain areas of common interest*

- Disposal of industrial effluent in estuaries and coastal areas.
- Organization of air pollution control in frontier areas.

8. *Specific action regarding noise*

Measures to be taken to reduce noise affecting urban built-up areas, caused by traffic on main roads, air terminals and the movement of trains, metropolitan railways and trams.

9. *Economic and statistical aspects*

Continuation of the work.

Third phase

1. *Objective evaluation of the risks resulting from pollution*

Definition of criteria and guide levels and harmonization or adoption of common measurement methods for the following pollutants:

- water pollutants: the following organic solvents: benzene, toluene, carbon tetrachloride, carbon disulphide, zylenes; chlorides;
the following micropollutants: manganese, zinc and their compounds;
iron and free chlorine;
- air pollutants: hydrogen sulphide, asbestos, antimony and beryllium.

2. *Specific action regarding certain industrial activities*

- metallurgical industry;
- petrochemical industry;
- textile industry;
- food industry: dairies and canning factories.

**Information to the Commission with a view
to possible harmonization throughout the Community
of urgent measures concerning the environment**

The work on the implementation of the programme to reduce pollution and nuisances and to safeguard the natural environment may run into two difficulties if care is not taken.

On the one hand it must not prevent Member States from taking certain emergency measures when they appear necessary for urgent reasons.

On the other hand, the national measures must observe the principles and rules of the Treaties and take account of the work in progress at Community level on the environment.

The Commission therefore deems it necessary—without prejudice to the obligations on Member States under the Treaty—to set up a procedure for informing the Commission, similar to that already set up for the elimination of technical barriers to trade. It notified Member State Governments of this on 6 November 1971. The Commission proposes that, without prejudice to the obligations already undertaken under the status quo agreement of 28 May 1969 and Article 102 of the EEC Treaty, Member States should notify the Commission in advance of draft provisions laid down by law, regulation or administrative action that they plan to introduce in order to reduce or eliminate pollution or nuisances, since these provisions, not harmonized, might affect the functioning of the common market and more generally the attainment of the objective of the European Communities.

Member States should not introduce such provisions unless the Community fails to notify the Government concerned, within two months from receipt of the information, of its intention to submit to the Council a proposal to extend the envisaged provisions to the other Member States or to attain the same objective by other means. However, if within a period of five months from receipts of the said information the Commission had not submitted a

proposal to the Council, the Government could adopt the envisaged provisions immediately. The same would apply if the Council, with a Commission proposal before it, failed to act on the proposal within a period of five months from its receipt.

Attached hereto is a draft agreement by Representatives of the Governments of Member States meeting in Council on information to the Commission with a view to possible harmonization throughout the Community of urgent measures concerning the environment.

Efforts to reach a common position in international organizations concerned with environmental problems. Relations with developing countries

Very many international organizations are at present concerned in different ways with environmental problems. A non-exhaustive list of these organizations was given in Annex C of the First Communication from the Commission on the environment.

The Commission, as in the past, will continue its efforts to avoid duplication in the work of the Community and of these organizations. Whenever possible, as it has already done in drafting many directives on the elimination of technical barriers to trade, it will propose retention of methods and standards already defined at international level, where these exist. It will continue active cooperation with OECD in economic studies on nuisances and their elimination. Generally it will restrict its activities in the field of studies to complementary work and to using the results obtained by international organizations by adapting them to the specific requirements and characteristics of the Community, so that the action of the European Community will retain its originality in the implementation of practical and operational measures.

Most of the work done in this field by international organizations is of interest for the common market and is sometimes liable to affect conditions of trade. This applies in particular to some work done by OECD, the NATO Committee on the Challenges of Modern Society, the UN Economic Committee for Europe, the World Health Organization, the Council of Europe, etc.

Except in cases where the Community has powers to act, Member States must reach a consensus and where necessary engage in joint action within these organizations.

The Commission will make suitable proposals in due course.

The Commission has already submitted to the Council a proposal on the OECD notification and consultation procedure on matters concerning the environment. It will shortly produce a working document for the Committee

of Permanent Representatives on the preparation of the work for the Conference on the Human Environment to be organized in Stockholm in June 1972 under the auspices of the United Nations.

The Commission will also take account of aspects of environmental protection and improvement in its relations with the developing countries in general and the associated developing countries in particular, if they so request. The extent to which these aspects are taken into account in the latter case should depend on the closeness and scope of the relations. The following forms are possible:

- efforts to find remedies for the environmental deterioration already suffered,
- examination of development projects from the aspect of their effects on the environment,
- adaptation of measures of environmental policy to the conditions prevailing in the developing countries.

Action to improve the working environment inside factories

In the document entitled "Preliminary guidelines for a social policy programme in the Community", the Commission proposed a number of activities concerning employment, social justice and the atmosphere at work and in the home.

Following the consultations on the basis of its First Communication, in particular with trade union and employers' organizations, the Commission considers that high priority should be given to action to improve conditions at work. The measures to be taken, in the Commission's view, should mainly be the subject of collective bargaining between employers' and workers' organizations.

The Commission welcomes the discussions already held on such problems in committees representing both sides of industry in the coal, steel and farming sectors. It recommends employers' and workers' organizations to extend the discussions on conditions, safety and health in industrial employment in committees from both sides of industry set up in each sector.

In addition, apart from the guidelines in the above-mentioned document and any other steps it may take in this connection, the Commission is now planning:

- to take stock of the legislation, regulations and contractual agreements regarding the hygiene, health and safety of industrial workers, starting with the metallurgical, chemical, paper and textile industries.

On the basis of this survey, the Commission could then examine the advisability of certain harmonization projects either by way of regulations or directives or by contractual means;

- to organize a systematic exchange of information and experience on experiments in the Community aimed at reducing the monotony and repetitive nature of industrial work by replacing the system of sectorialized tasks along a continuous assembly line by new job organization methods leaving the worker more initiative and offering him a greater variety of tasks.

Action concerning the improvement and dissemination of knowledge and information on the environment

Reduction of pollution and nuisances, and in particular a joint objective evaluation of the risks involved, will require a constant improvement in scientific and technical knowledge and its dissemination. The Commission is therefore putting forward a number of suggestions which it wishes to study more thoroughly before issuing formal proposals.

The Commission also considers it desirable for public opinion in Member States to be kept informed of the measures taken or planned at national and Community level to protect and improve the environment, of the gaps still to be filled and of the efforts made. This information would be disseminated in a periodical report on the state of the environment in the Community.

The fight to secure a quality environment is no more than the requirements for a greater development of man. The decision to take account of the social and cultural aspects of the environment should underline the need to view economic development against a broader background which includes cultural and ethical choices.

These aspects and choices could, at European level, be further investigated in post-graduate studies and in a European Institute of the Environment, the establishment of which is being studied by the Commission.

Coordination or joint execution of research into pollution and nuisances: needs, general subjects, proposals

The establishment of criteria and guide levels, the institution of Community-wide health regulations and the definition of quality objectives for the environment will call for a detailed knowledge of the substances and agents causing pollution, their diffusion in the environment and their effects on man and his surroundings.

Likewise, both the introduction of these regulations and verification of observance, compliance with them will require the preparation and use of efficient, generally recognized measuring methods and the development of new equipment.

The technological fight against pollution should also, in some cases, make use of new processes for treating urban, industrial or agricultural waste and effluent and of new production processes or products causing less pollution.

To attain these objectives in the Community's plan of campaign, existing scientific and technical knowledge on protection of the environment must not only be utilized to the full but must also be extended and supplemented where it proves inadequate.

The general research subjects which the Commission considers should be coordinated at Community level are contained in the following three categories:

Work to accompany and back up the action proposed for an objective evaluation of the risks resulting from pollution:

- movement and ultimate fate of pollutants in the environment: study of the phenomena of dilution, concentration, physico-chemical modifications; transfer coefficients in the food chain; levels in continental and marine environments.
- effects of pollutants on man, particularly after chronic exposure to small doses
 - . epidemiological research
 - . metabolism: absorption, distribution in the organism, detoxication mechanisms
 - . short-term effects
 - . long-term effects — somatic
 - embryonic (teratogenic)
 - carcinogenic
 - mutagenic
- effects of pollutants on the environment: land and water, improvement of methods of evaluating ecological effects.

Research work to improve the detection and control of pollutants: micro-pollutant multi-detection techniques, remote detection, biological tests, "global" pollution tests of air and water.

Research and development work on anti-pollution technologies: sulphur removal, physico-chemical processing of liquid effluents, problems peculiar to certain industrial sectors (paper, food, textile industries, tanneries). This research will where appropriate be defined on the basis of the sectoral studies proposed in Chapter I.

The Commission draws the Council's attention to the many organizations engaged in research on the protection of the environment in Member States (see Annex D to the First Communication). An effort to concert their activities

at national level has already been made in some States in order to eliminate gaps and useless duplication. Some coordination at Community level is essential in order to meet the requirements of the Community's plan of campaign for the environment and because of the scope and cost of some of the research that is needed.

Under the ECSC and Euratom Treaties, the Communities are already organizing and partially financing research on the safety of workers in the coal and steel industry and on protection against ionizing radiation.

Moreover, some Member States and several third countries in Europe have recently started, the COST Group, to coordinate their research activities on three subjects concerning pollution: the physico-chemical behaviour of SO₂ in the atmosphere, the analysis of organic micropollutants in water and the definition of residual sludge from sewage treatment. The Commission has been asked to provide the Secretariat of the Committees set up to conduct these three campaigns.

The Council has also already approved the principle of certain research on non-nuclear pollution being carried out under contract at the Joint Research Centre in 1972.

While welcoming these first results, the Commission considers it necessary to continue the efforts already made to compare national programmes in this field as in all other fields of scientific research and technological development. Without waiting for the implementation of a general Community policy on scientific research and technological development in the enlarged Community, on which it will shortly be making proposals, the Commission proposes that some studies and research of general interest on protection of the environment should be coordinated at Community level, with the possible participation of third countries, either by contracts of association providing for partial financing by the Community or in the framework of concerted action. The non-nuclear activities of the Joint Research Centre should fit in with this.

In the first stage, the Commission proposes to study ways of coordinating research on the following subjects. It will later put before the Council precise proposals together with requests for funds where necessary.

Work to accompany and back up the studies on objective evaluation of the risks resulting from pollution

The work referred to above will indicate, as it progresses, the need to supplement and improve existing knowledge of the type, diffusion and effects of pollutants.

1. Problems concerning the *harmfulness of lead in the atmosphere* have already led the Commission to examine, together with national experts, the organization of studies on this particular pollutant:

- improvement of methods of measuring lead contamination in the environment and in man,
- determination of the respective contributions of the air inhaled and the food digested to the content of lead in the body,
- study of the metabolism of inhaled and ingested lead,
- effects of chronic exposure to low concentrations of lead in the atmosphere,
- significance of the subclinical effects observed (increase in the content of aminolevulinic acid in the blood and urine, decrease in the activity of the dehydrase of the same acid),
- toxicity of the combustion gases of fuels replacing ethylated petrol with a high octane rating,
- effects of a low level of lead contamination on primary and secondary biological productivity in surface waters.

2. The Commission considers it necessary to coordinate the work done in the Community on the consequences on the natural environment of the *discharge of cooling water* from conventional and nuclear power stations:

- establishment of a code for computer simulation to predict the thermal loads on the Community's river system depending on the site of the heat sources,
- evaluation of the effects of the temperature rise in surface and underground water: impairment of the physical, chemical and biological properties of the water, consequences on primary and second productivity of the water and self-purification processes, interaction with chemical pollution,
- exploration of the possibilities of using the heat from the cooling water (e.g., for fish farming).

3. The Commission considers that the *epidemiological surveys* made in Member States on the effects of atmospheric pollution would be more interesting and valuable on a Community scale. It therefore considers it necessary to coordinate and concert this work at Community level. A study of this type on pneumoconiosis has already been undertaken in the ECSC.

4. Since there is insufficient knowledge of the *long-term effects of micro-pollutants* in the air and water on man the Commission considers that a special effort is required. A group of tests based on modern biological techniques and applying to enzyme systems in vitro, cells in culture, tissues, perfused organs and complete organisms should be developed and used. These tests can reveal both somatic and genetic effects and allow at least partial experiments on human subjects. Special attention should be paid to mutagenic, teratogenic and carcinogenic effects.

In view of the difficulty of the subject and the high technical level required, a number of highly specialized laboratories must cooperate and share the work among them. It should be noted that some of these laboratories are already cooperating in the Commission's research programme on radiobiology and health protection. It would also be advisable to establish relations with the "European Environmental Mutagen Society" which could facilitate the desired coordination.

The first micropollutants to be studied by these methods could be certain heavy metals and certain pure and chlorinated hydrocarbons.

5. The evaluation of the *ecological effects of water pollutants* is essential in order to determine the quality objectives applicable to various parts of the river systems. The tests generally used for this purpose are not very significant and are designed for the detection of short-term lethal effects. Action on these lines is planned by the Commission. It would firstly concentrate on certain heavy metals, detergents and pesticides.

6. The advantage of a *data bank on chemical products that may contaminate the environment* is recognized by all Member State experts consulted on the non-nuclear activities of the Joint Research Centre. Not only should a catalogue of these products be prepared but also data on the production of these substances, uses, presence in the environment, chemical and physical properties detection methods, effects on man and the environment and the relations between chemical structure and toxic effects should be collected and critically evaluated.

This would be a collective effort, combining the existing national activities and designed to provide the basic information required for the evaluation of risks resulting from chemical pollution.

The Commission is studying the possibility of implementing such a scheme, which would be facilitated by the establishment of the bibliographical information system described below.

7. With regard to *noise nuisances*, the Commission intends to study the more precise definition of the effects of noise on man and the determination of "nuisance indices". In addition, it plans a systematic study of the noise caused by motor traffic, as suggested by a group of experts meeting in COST. In the first stage, a study could be made of the share of various parts of the vehicle in the total noise it generates, based on the most common types and models of vehicle. In the second stage, the relation between traffic noise and the composition and conditions of traffic flow could be considered.

The effects of traffic parameters and the state of the roads would be determined by measurement and by computer simulation. The results of these studies would facilitate the development of quieter vehicles and would enable recommendations to be issued for all countries on traffic regulations and road conditions.

8. On the important subject of *marine pollution*, the Commission, on the lines expressed in chapter I of the first part, intends to define the necessary studies and research required to evaluate the physical, chemical and biological effects of the dumping of industrial waste in the waters of the Continental shelf and the direct discharge of domestic and industrial effluent from the coast.

Research work to improve the detection and control of pollutants

— *Remote detection of atmospheric pollution* is a new subject which at present is only being studied by a few rare experts in Europe. It is therefore particularly suitable for cooperation at Community level, especially as the expected results should facilitate the study of the movements of atmospheric pollutants over great distances.

Initially, the Commission proposes to develop instrumentation (e.g., lasers, visible and infrared) for remote detection of substances such as CO, NO_x, SO₂, O₃, and certain organic compounds, to improve the specificity and sensitivity of the detectors and to study ways of using them (measurements from the ground or from aircraft).

— Study on a *large physical model of the diffusion of atmospheric pollutants* from spot or multiple sources.

Because of its high cost, an installation of this kind should serve the Community as a whole.

Research and development work on certain pollution control technologies

— In view of the importance of this problem, the Commission intends to examine the advisability of reviving a project for the evaluation of *sulphur removal processes*, long discussed in the COST Group without any agreement being reached.

— As mentioned above, the *possible research and development requirements of certain industrial sectors* will be defined by the proposed studies.

Processing and utilization of data on pollutants and pollution control

In view of the scope of the problem of environmental protection and the need to disseminate as much information as possible to the organizations concerned, it is particularly advantageous to establish a permanent index of knowledge in order to centralize, sort and disseminate more readily data on pollution and pollution control.

To facilitate implementation of its whole programme to reduce pollution and nuisances, and to ensure that all the available information is at the disposal of Member States, the Commission proposes the following:

1. Establishment of a bibliographical information system supported by the Commission staff. This system could be designed to operate in a similar

fashion to the metallurgical documentation and information system (SDIM) which the Council decided to set up on 24 June 1971. The object would be to prepare, with the cooperation of the existing national centres, an index of the scientific and technical bibliographical references on various types of pollutants, their diffusion, their effects and the techniques to eliminate or reduce them, including patents protecting these techniques.

2. A Community data bank could also be set up, using amongst other things the experience of CCR Ispra; it would be designed, at technical and structural level, to collect and interpret numerical data on the levels and effects of pollution obtained from various national research and inspection stations and laboratories in order to obtain, by centralized processing, a comparison and interpretation of results making them suitable for use by all Member States.

The first work could cover chemical products (see Chapter V).

The Commission suggests that the schemes in 1 and 2 above should be discussed in the Committee for Scientific and Technical Information and Documentation (CIDST) set up under the above-mentioned Council resolution.

Preparation of a periodical report on the state of the environment in the Community

The Commission intends to publish at regular intervals a report on the state of the environment in the Community.

In this report, the Commission will:

- explain the measures taken and work done by Member States and the European Communities to protect and improve the environment during the previous period;
- supply information on the results obtained and the planned measurements and work;
- mention any existing gaps it has found and suggest suitable measures to fill them.

Town planning studies

According to a commonly accepted definition, town planning is the art of arranging human establishments in the widest sense of the word (housing, business and industrial premises, recreational amenities, traffic and trading systems) in an urban and rural setting so as to ensure maximum convenience, maximum economy and maximum harmony in the performance of functions and in relations between people. Taken in this sense, town planning is practically the same as regional development.

As a result the requirements regarding town planning and regional development are particularly stringent at a time when the whole Community is engaged in a process of accelerated urbanization.

If properly directed and accompanied by adequate town planning, urbanization contributes towards the improvement of ecological conditions and social relations and the raising of the cultural level. In the same way, urbanization facilitates the combating of certain dangers threatening the natural environment (reduction in pollution, easier collection and recycling of waste, more efficient use of the soil, reduced power and raw material requirements, etc.).

On the other hand, if it is not properly controlled, urbanization harms the balance of economic, social and cultural life and in addition causes undesirable effects from the aspects of public health and the ecology.

Since 1970, the Community has tackled the problems of town planning and land development in the "PREST" group (Scientific and Technical Research Policy). A group of high-level experts from Member States is responsible for outlining a Community programme of research and studies on the subject. The Commission has cooperated closely in the group's work and will study its recommendations attentively.

The Commission also plans, as mentioned in its First Communication, to make a specific study of urbanization problems which should provide data on the questions involved at Community level and show ways of improving the situation.

Other action will be envisaged later, taking account of the results of the work and studies in progress.

Action concerning training and education in connection with protection and improvement of the environment

Children and adolescents should be made aware of environmental problems in primary and secondary schools. UNESCO, OECD and the Council of Europe have prepared studies, educational programmes and teaching directives. In most countries, teachers have received instructions to include environmental subjects in science, geography, technology and economics lessons, at all levels of general, technical and vocational education.

The Commission plans to support these efforts by providing teachers with teaching material in which environmental problems arising on a European scale will be simply explained by experts.

In many universities and colleges (especially agricultural ones), groups are being formed in which chemists, physicists, toxicologists, engineers and economists compare their work and experiences. Two types of courses are being developed: one leading to a degree as "environmental engineer" and the other intended for graduates in various subjects to give them an interdisciplinary training. Interdisciplinary research groups with members from several departments prepare students for their doctorate; their theses, on a subject concerning environmental matters, must require a multidisciplinary approach.

The universities and institutes that are initiating these new courses are now at a stage of preparation and experimentation. The Commission plans to assist them:

- by awarding research contracts for projects of European interest,
- by awarding scholarships to students and young researchers anxious to continue their studies, outside their own country of origin, in subjects concerning the environment,
- by giving pilot institutes in Member States an opportunity to compare their research and teaching programmes,
- by encouraging an exchange of lecturers and research workers,
- by helping establishments to organize summer courses for engineers, chemists, etc. who have to tackle environmental problems in their working life.

The Commission also thinks it necessary for Member States to coordinate in the Council the measures they are taking to introduce subjects concerning environmental protection into education at various levels. Ministers of Education could discuss and adopt suitable proposals when meeting Council.

Establishment of a European Institute of the Environment

Environmental problems are of extreme complexity. The real nature of the phenomena involved are not always adequately understood and the many research programmes on the subject are mainly justified by this lack of precise knowledge. Their interrelations and the influence they may have on the changes in society and on civilizations are not properly comprehended.

This lack of a global view of the evolution of environmental problems in the future can only be remedied by the comparison and consolidation of all the available knowledge in every sector. In this way, too, it is possible to envisage the definition of an environmental policy that will be in advance of the development of the problems.

This global, consolidating and forward-looking approach to environmental problems is still fairly recent. In Member States certain steps have been taken in this direction in recent years and the Commission has started to collect data on them.

The image it has obtained of these efforts is of a collection of relatively modest and scattered measures, generally of very limited scope and extent. Although these efforts must be considered a good thing, it is already apparent that they are by no means sufficient and that they must be coordinated and intensified.

Accordingly, considering the steps already taken in Member States, the Commission suggests the establishment of a European Institute of the Environment

which could be set up either by a decision of the Community institutions or by existing institutes which could agree to give one of their number an international status. The task of this Institute would be:

- to develop and extend the basic ideas on the improvement of living conditions in the future society, in order to prepare models of European civilization;
- to study general plans for the management and use of open space and the natural biological and mineral resources in the Community, in order to make recommendations for optimum general use;
- to collect, prepare, supplement and disseminate at Community level information and data on the improvement of the environment other than technical data on pollution control;
- to throw light on the interrelations between the different environmental problems;
- to encourage the training of university lecturers in subjects concerning the environment;
- to organize post-graduate and other courses, seminars, conferences, etc. to stimulate the basic approach to environmental problems.

The Commission is taking stock continuing its review of the steps taken in this field within the Community. It proposes shortly to call a meeting of the heads of the environment institutes that have been set up in Member States with a view to studying with them the organization of coordination of their work and the performance of the above functions.

Annex

APPENDED DOCUMENTS

Draft Council resolution on a programme to reduce pollution and nuisances and to safeguard the natural environment

COM(72) 333, 22 March 1972

The Council of the European Communities,

considering the tasks of the European Communities defined in the Treaties establishing the Communities;

considering in particular that the task of the European Economic Community is "to promote throughout the Community a harmonious development of economic activities, a continuous and balanced expansion, an increased stability, an accelerated raising of the standard of living and closer relations between its Member States" (Art. 2 of the EEC Treaty);

whereas the qualitative improvement of living conditions and the safeguarding of natural resources, especially by effective pollution control, is today a vital aspect of this task;

whereas the provisions necessary to combat pollution cannot fail to have in themselves or through their disparities important economic consequences and a direct incidence on the functioning of the common market, in particular by creating distortions of competition, obstacles to trade and inequalities regarding investment;

whereas the protection and improvement of the environment must increasingly be incorporated into the implementation of the common policies, in particular the agricultural policy;

agrees:

- 1) that to combat pollution and nuisances effectively and at the same time ensure the proper functioning of the common market, it is necessary to carry out the following action at Community level:
 - (a) to make a common objective evaluation of the risks resulting from pollution and nuisances to man and his surroundings;
 - (b) to harmonize methods of measuring pollution and nuisances and, if possible, standardize them;
 - (c) to take common measures with regard to products and economic activities causing pollution and nuisances (industry, agriculture, power production, transport), with regard to certain special forms of pollution (waste, noise) and areas of common interest (international river basins, sea coasts, frontier regions);
 - (d) to lay down common rules on the apportionment of the costs resulting from pollution control;

(e) to define or harmonize methods of evaluating and ways of financing these costs and economic incentives for protection and improvement of the environment;

(f) to harmonize and reinforce verification of the application of the regulations on environmental protection and measures designed to punish violations;

2) that the common agricultural policy must help to meet the new need for places of recreation and relaxation in natural surroundings felt by the industrial society and to safeguard the natural environment;

3) that the adoption of a programme to reduce pollution and nuisance and safeguard the natural environment—hereinafter called “the programme”—divided into several stages is the most suitable way of attaining these objectives, since a programme of this kind allows coordination of the efforts to be made in this field by the various Community bodies and by Member States;

4) that modifications may be introduced during implementation of this programme, in particular to take account of the commitments made by the Representatives of the Governments of the Member States meeting in Council regarding information to the Commission with a view to possible harmonization of urgent measures concerning the environment;

5) that the Commission’s proposals on plant and food products and in the veterinary and animal production field mentioned in point III of the attached programme should be examined by the Council as quickly as possible so that it can act on these proposals before 31 December 1972;

notes that the Commission undertakes to send it:

1) before 31 December 1973, suitable proposals on the subjects for action listed in point I of the attached programme;

2) before 1 July 1972, two draft directives on hill farming and reforestation incentives;

undertakes:

1) to act before 30 June 1974 on the Commission’s proposals in point I of the programme;

2) to act before 31 December 1972 on the Commission’s proposals in points II and III of the programme;

3) to release the funds and staff required by the Commission to carry out the necessary studies and work.

Programme to reduce pollution and nuisances and to safeguard the natural environment

I. *Reduction of pollution and nuisances*

Studies and work to be carried out by the Commission with a view to proposals to be submitted before 31.12.1973. Council decision before 30.6.1974.

1. *Objective evaluation of the risks resulting from pollution*

Definition of the criteria and guide levels and harmonization or adoption of joint measurement methods for the following pollutants:

- *water pollutants*¹: hydrocarbons
the following micropollutants: mercury, cadmium, chromium, arsenic and selenium and their compounds
chemical compounds found in pesticides
- *air pollutants*: sulphur dioxide and particles in suspension
lead and its compounds
nitrogen oxides and photochemical oxidisers
carbon monoxide
- *noise pollution*: physiological effects of noise on the human organism at different intensities and durations.

2. *Specific action regarding fresh water pollution*

- (a) Preparation of quality objectives for various parts of the river systems;
- (b) Definition of quality criteria for drinking water, water for food and water intended for agriculture and the watering of livestock;
- (c) organization and development of technical exchanges between national systems for the inspection and control of water pollution.

3. *Specific action regarding air pollution*

- (a) Ways of preparing quality objectives for air in urban areas, industrial concentrations and areas for leisure and relaxation;
- (b) Organization and development of technical exchanges between national systems for the inspection and control of air pollution.

¹ The criteria and guide levels will be determined in accordance with the different uses or classifications of water.

4. *Specific action regarding industrial activities*

Action concerning the paper and pulp industry, using the results of the OECD work:

- the motor industry;
- the chemical industries;
- tanneries;
- the food industries (sugar mills and starch factories).

5. *Specific action regarding power production*

Action concerning the composition of hydrocarbons and oil refining installations.

6. *Specific action regarding certain areas of common interest*

- Measures concerning marine pollution by waste from the shore;
- Action on the discharge or dumping at sea of industrial waste in the waters around the Community;
- Organization of the control of water pollution in frontier areas;
- Institution as a joint undertaking of a European Agency for the Rhine Basin.

7. *Action designed to ensure application and effective observance of the limits set*

Approximation and strengthening of regulations on the verification of the application of pollution control measures and repressive measures against polluters.

8. *Action regarding waste*

Measures to be taken with regard to:

- packagings of consumer products;
- certain residues containing petroleum and tar;
- radioactive waste.

9. *Economic and statistical aspects*

- (a) Adoption of common principles on the apportionment of the costs of combatting pollution and ways of applying these principles;
- (b) Common guidelines on ways of financing pollution control;
- (c) Harmonization of the methods of evaluating the costs of pollution control;

(d) Harmonization of economic incentives for environmental protection and improvement.

The Council undertakes to decide on the Commission's proposals on these subjects for action before 30 June 1974.

II. *Safeguarding the natural environment*

Draft directives to be submitted by the Commission before 1 July 1972. Council decisions before 31 December 1972.

- Hill farming.
- Reafforestation.

III. *Harmonization of legislation submitted to the Council on plant and food products and in the veterinary and animal production field*

Decisions of the Council before 31 December 1972:

- First draft Council regulation on the fixing of maximum contents for pesticide residues in and on fruit and vegetables (submitted to the Council on 28.11.1968 - JO C 139 of 28.12.1968).
- Draft Council regulation on the fixing of maximum contents for undesirable substances and products in animal feedingstuffs (submitted to the Council on 1.2.1971 - JO C 34 of 14.4.1971).
- Draft Council directive on the approximation of Member State legislations on emulsifying, stabilizing, thickening and gelling agents authorized for use in foodstuffs intended for human consumption (submitted to the Council on 21.2.1969 - JO C 54 of 28.4.1969).
- Draft Council directive on the approximation of Member State legislations on cocoa and chocolate (submitted to the Council on 23.7.1963 - supplement to EEC Bulletin 8-1963).
- Draft Council regulation on production and trade in sugars (saccharoses), glucose syrup and dextrose (submitted to the Council on 3.12.1969 - JO C 1 of 6.1.1970).
- Draft Council directive on the approximation of Member State legislations on dietetic foods and
- Draft Council directive on the approximation of Member State legislations on low-sodium dietetic foods (submitted to the Council respectively on 15.4.1969 and 19.1.1970 - JO C 66 of 3.6.1969 and JO C 20 of 14.2.1970).
- Draft Council directive on jams, marmalades, fruit jellies and chestnut puree (submitted to the Council on 25.6.1965 - JO 152 of 11.9.1965).

- Draft Council directive on the approximation of Member State legislations on meat extract, yeast extract, protein extracts, flavourings for soup and other dishes, meat-based soups, stocks and sauces (submitted to the Council on 31.10.1968 - JO C 136 of 19.12.1968).
- Draft Council directive on the approximation of Member State legislations on farinaceous food products (submitted to the Council on 7.11.1968 - JO C 136 of 19.12.1968).
- Draft Council regulation on production and trade in fruit juices and similar products (submitted to the Council on 7.2.1969 - JO C 39 of 22.3.1969).
- Draft Council regulation on production and marketing of margarine (submitted to the Council on 28.11.1968 - JO C 137 of 20.12.1968).
- Draft Council regulation on production and marketing of butter (submitted to the Council on 14.6.1968 - JO C 71 of 17.7.1969).
- Draft Council regulation on production and marketing of honey (submitted on 9.3.1970 - JO C 69 of 11.6.1970).
- Draft Council regulation on production and marketing of tinned milks for human consumption (submitted on 6.2.1970 - JO C 52 of 30.4.1970).
- Draft Council directive on the approximation of Member State legislations on soft drinks (submitted on 13.7.1970 - JO C 55 of 9.5.1970).
- Draft Council directive on health problems and health regulations on imports of cattle and pigs and fresh meat from third countries (submitted to the Council on 20.9.1965 - JO 56 of 26.3.1966).
- Draft Council regulation on problems concerning health regulations for intra-Community trade in fresh meat (submitted to the Council on 19.2.1970 - JO C 31 of 14.3.1970).
- Draft EEC Council regulation on health problems in intra-Community trade in meat-based products and draft EEC Council regulation on problems concerning health regulations for meat-based products (submitted to the Council on 25.3.1971 - JO C 59 of 11.6.1971).
- Draft Council regulations on the health conditions and health regulations with which full raw milk must comply as a raw material for the preparation of heat-processed milk and its derivatives and draft Council regulation on health problems concerning the production and marketing of heat-processed milk (submitted to the Council on 4.2.1971 - JO C 34 of 14.4.1971).

Draft agreement by the Representatives of the Governments
of the Member States meeting in Council on information
to the Commission with a view to possible harmonization
throughout the Community of urgent measures
concerning the environment

COM(72) 334, 22 March 1972

The Representatives of the Governments of the Member States meeting in Council,

whereas the reduction in pollution and nuisances resulting from the production, consumption and transport of products and foodstuffs is an integral part of the tasks of the European Communities; whereas measures should be taken urgently to combat such pollution and nuisances;

whereas the Commission has proposed a programme of action in this respect to the Council;

whereas such measures are being prepared in most Member States;

whereas some of these measures, if not harmonized, would be likely to affect the functioning of the common market and, more generally, the attainment of the objectives of the European Communities;

whereas nevertheless the aim of harmonization must not cause any delay in the adoption of the essential measures for better protection of the environment;

whereas the Commission must be in a position to know Member State projects in this respect in order to examine the advisability of extending them to other Member States or attaining the same objective in other ways;

whereas it is therefore necessary to establish a Community procedure for notification of the intentions and projects of Member State governments, especially when such projects are liable to affect the functioning of the common market and the attainment of the objectives of the European Communities;

whereas the information must be given as early as possible before the entry into force of the planned measures;

whereas Member State governments must always be able exceptionally to take immediate action at national level when it is urgently necessary for safety or health reasons;

have agreed:

I. (a) to inform the Commission of any projects for provisions laid down by law, regulation or administrative action concerning the protection or improvement of the environment, liable to affect the functioning of the common market and, more generally, the objectives of the European Communities;

(b) only to adopt these provisions if the Commission does not notify the Government concerned, within two months from receipt of the said information, of its intention to submit to the Council a proposal designed to extend the envisaged provisions to the other Member States or to attain the same objective in other ways. However, if the Commission does not submit a proposal to the Council within five months from receipt of the said information, the Government may adopt the envisaged provisions immediately. The same shall apply if the Council, with a proposal from the Commission before it, does not act on that proposal within five months from its receipt;

II. (a) to inform the Commission of any projects for provisions laid down by law, regulation or administrative action concerning the protection or improvement of the environment which, although not liable to affect the functioning of the common market or attainment of the objectives of the European Communities, are nevertheless of special interest from the aspect of the protection of public health or the natural environment;

(b) not to adopt these provisions until expiry of a three month period from the receipt of the said information;

III. to adopt provisions laid down by law, regulation and administrative action, notwithstanding what has been said above and as an exception, only if they are urgently necessary for serious safety or health reasons. However, such texts shall immediately be notified to the Commission, which shall inform the other Member States;

IV. to apply the information procedure covered by this agreement in cases where Member States participate, within international organizations—in particular the Organization for Economic Cooperation and Development, the United Nations Organization, the Economic Commission for Europe, the Food and Agriculture Organization and the World Health Organization—in work on the harmonization of provisions laid down by law, regulation or administrative action in the field of protection of the environment.

Draft Council recommendation to the Member States signatories of the Berne Convention establishing the International Commission for the protection of the Rhine against pollution

COM(72) 335, 22 March 1972

I. Preamble

1. To ensure cohesion between the general or specific action on water pollution set out in its communication to the Council of March 1972 on a European Communities' programme concerning the environment (doc. SEC(72)666), the Commission, in accordance with the opinion of the European Parliament, contacted the International Commission for the Protection of the Rhine against Pollution to explore the possibility of participating, as an observer, in the meetings of the Executive Committee of this Commission. The Commission informed the Council of its action.

The Commission welcomes the fact that, following the suggestion it made in the First Communication, a conference at ministerial level of the signatory states of the Berne Convention establishing the International Commission for the Protection of the Rhine against Pollution has been called by the International Commission. The Commission hopes to be represented at that conference.

2. As it also stated in its communication to the Council on a European Communities' programme concerning the environment (doc. SEC(72)666, page 29), the Commission considers it necessary to set up a European Agency for the Rhine Basin, an establishment under public law responsible for implementing a pollution control programme for the Rhine waters to be prepared by the International Commission and more generally for facilitating the various activities of common interest in the Rhine Basin, and entitled to levy dues from local authorities and undertakings using the waters of the Rhine and its tributaries or contributing to their pollution.

The Commission draws the attention of Member States to the advantage to be gained from the status of Joint Undertaking, a status which it proposed to the Council (COM(71)812 final of 14 September 1971) should be extended to sectors other than nuclear, in its proposal of 22 September 1971.

This European public establishment would be set up by the Council. Having legal status, it could benefit from privileges as a public power and from financial advantages. Its operating expenses and the costs of carrying out studies and research could be financed partially by the signatory states of the Berne Convention¹ and, where appropriate, by the Community and by dues levied from users of the waters of the Rhine and its tributaries.

¹ The status of Joint Undertaking allows for participation of third states.

The status of Joint Undertaking, while establishing an organic link with the Community, would allow only those states which so wished to participate and a specific distribution key to be adopted for the costs. However, pollution control of the waters of the Rhine is of interest to the United Kingdom because of its effects on the North Sea. Italy might also be interested in benefiting from the experience gained in the Agency for the Rhine Basin. Consequently the participation of non-riparian states on suitable terms should not be ruled out.

The Commission will submit a proposal on the status of Joint Undertaking for this Agency. This status could be adopted as soon as the Council decides to extend this status to sectors other than nuclear.

*

The Commission proposes that the Council should now adopt the following draft recommendation.

II. Draft Council recommendation

The Council of the European Communities recommends to Member States signatories of the Berne Convention and members of the executive bodies of that Convention that the International Commission should be instructed to prepare as soon as possible, on the basis of the results of the studies carried out by that Commission since 1950, a crash programme for pollution control of the waters of the Rhine comprising in particular:

- (a) the definition of quality objectives for the waters in the various parts of the river system making up the Rhine basin,
- (b) the procedure to be established and the organization to be set up for precise definition of the measures to be taken to ensure that these objectives are attained within three to five years (in particular the definition of limits for the quantity and composition of domestic and industrial waste to be observed by local authorities and private bodies for that purpose),
- (c) an estimate of the funds required to attain these objectives.