This number of "Industry, Research and Technology" contains two parts, dealing respectively with the following topics:

(a) A Community programme for the protection of the environment.

(b) The conference to be organized by the Commission of the European Communities in April 1972 on "Industry and Society within the Community".

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The information and articles published in this Bulletin concern European scientific cooperation and industrial development in Europe. Hence they are not simply confined to reports on the decisions or views of the Commission of the European Communities, but cover the whole field of questions discussed in the different circles concerned.
A COMMUNITY PROGRAMME FOR THE PROTECTION OF THE ENVIRONMENT

The basic purpose of the European Community is not merely to integrate the economies of the Member States, but also to raise the standard of living and improve the living conditions of their peoples. The Community is thus directly concerned with the protection of the environment, a problem which has repercussions on costs, the free play of competition and freedom of trade, as well as the quality of life. It is therefore the Community's duty to promote and coordinate action in this matter, the need for which is becoming ever more apparent.

The Commission already emphasized this role in its first memorandum on the Community's environmental policy, drawn up in July 1971. In the light of the views put forward as a result of this memorandum, the Commission is today forwarding to the Council a Community programme for the protection of the environment which gives details of the work required in order to combat pollution and improve the quality of life. The Commission is also submitting three papers on specific projects, namely, a programme for cutting down pollution and nuisances, a draft agreement on the supply of information to the Commission with a view to harmonizing urgent measures concerning the environment, and a draft recommendation from the Council to those Member States which are signatories of the Berne Convention instituting the International Commission for the Protection of the Rhine against Pollution.

A. A Community programme on the environment

The proposals contained in this programme are intended to create a common framework to which the Communities, Member States and local bodies can refer for purposes of evaluation, action and, where appropriate, regulation. In particular they are designed to achieve the following aims:
1. To establish an objective basis for evaluating the risks to human health and the environment from pollution

For each pollutant, taken separately or in conjunction with others, criteria of noxiousness must be laid down, guide-levels determined (concentration and absorption rates, length of exposure, etc.) and sampling, analysis and measurement techniques harmonized and, if possible standardized. Priorities will also have to be agreed on.

2. To establish common health standards and harmonize the definition of objectives relating to the quality of the environment

Initially, the Commission will undertake a series of studies with the aim of defining quality standards for water for various uses, priority being given to their application to rivers and watercourses crossing several States, and also to lakes and underground frontier waters. It will also try to harmonize the definition of objectives relating to the quality of air in towns and industrial areas, and also in areas set aside for recreation and leisure.

3. To draw the consequences from the application of these standards and objectives to sources of pollution (products and economic activities) and to take specific measures in certain areas of common interest and also in relation to certain pollutants

(a) The general programme for the elimination of technical barriers to trade includes not only the aim of bringing about the free circulation of products but also that of improving the standard of safety and environmental protection. The Commission has just proposed to the Council that this programme be extended to cover such commodities as motor cycles, aircraft, railway equipment, public works equipment and machinery, packaging and motor fuels.

(b) The reduction and elimination of wastes must be governed by common regulations. In particular, the Commission deems it
necessary to study the problems raised by packagings, waste oil and bulk litter such as disused cars and appliances.

(c) The restrictions imposed on industry by the need to observe quality standards relating to the environment must be harmonized. The means of introducing the least polluting technical processes and equipment will be analysed by the Commission, which will join with the civil services and professional circles concerned in studying the measures to be taken in respect of the industrial sectors most affected, together with the costs of the proposed solutions and the means of financing them.

(d) Agriculture contributes to environmental pollution mainly through the use of certain insecticides, herbicides and fertilizers. The banning of certain persistent pesticides is shortly to be proposed by the Commission, which is at present examining the possibility of replacing them by fast-decaying pesticides and of promoting biological methods of combating pests. The production of those fertilizers which entail the least risk for the environment will be encouraged. The economic consequences of curtailing certain forms of production or increasing prices will be studied in the context of the support at present given to the majority of agricultural products.

(e) The quality of foodstuffs will continue to be the subject of increasingly complete regulations fixing the standards of tolerance for pesticide wastes and for additives used in human foodstuffs and animal fodder, and also prescribing veterinary measures. In this connection the Commission requests the Council to reach a decision on the proposals which it submitted some time ago.
(f) In the field of energy production, the Commission proposed to give priority to a series of research projects on subjects including the composition of fuels and the possibility of reducing their pollutant content (sulphur, lead, etc.), regulations on the construction and operation of refineries, pipelines and distribution stations, and also techniques for cutting down the thermal pollution of water used for cooling electrical power plants. Consideration might be given to reducing fuel consumption by various forms of rationalization.

(g) Immediate action is essential in two geographic areas which concern several states and in which a disquieting level of pollution has already been reached — the Rhine basin and the sea coasts. As regards the Rhine, the European Commission is forwarding a draft recommendation by the Council to those Member States who signed the Berne Convention so that the International Commission for the Protection of the Rhine against Pollution can draw up an urgent programme for the purification of the Rhine waters. It also advocates the creation of a European Agency for the Rhine Basin, with joint undertaking status, in which the Member States concerned and Switzerland could participate.

As regards the sea coasts, the Commission requests that the positions of the Member States within the organizations responsible for ensuring the protection of the seas be coordinated and that a common system of regulations be set up governing the dumping of industrial wastes in the sea and the direct discharge of domestic and industrial effluents into the sea from coastal installations.

The Commission will also collaborate with government experts to study the qualitative aims to be achieved in the various
frontier areas, and the appropriate provisions which might be recommended to Member States concerned.

(h) The protection of the environment against radioactive contamination, at present very severely controlled by the Euratom Treaty, will have to be further tightened as the number of nuclear reactors increases. In particular, it will be necessary to perfect systems for the final storage of radioactive wastes which are sufficiently leaktight over very long periods.

(i) The combating of noise pollution in towns and factories must be the subject of specific measures at the source (improved technology or changes in location), as regards propagation (better soundproofing of buildings) and in the form of stricter regulations and controls directed against the authors of the pollution.

4. Jointly to define the principles, methods and means of estimating and apportioning costs resulting from anti-pollution measures

In a market economy all the costs resulting from pollution, including those of a social nature, must as far as possible be borne by the products or activities which cause them. This principle favours the rational use of the limited resources of the environment, while at the same time avoiding distortions in international trade and investment. Hence aid should be granted only in order to enable undertakings, or even regional economies, to adjust gradually to the new conditions of competition resulting from the restrictions imposed in the struggle against pollution.

With the aid of a group of national experts, and basing itself on the work done by the OECD, the Commission of the European Communities has undertaken a study of the means of applying and adapting this principle.
5. To ensure the application and effective observance of the regulations and limits imposed.

The harmonization of methods of control and the creation of a data-collecting network and a system of reciprocal information are essential requirements. National provisions for ensuring that anti-pollution measures are observed must be rendered more precise and harmonized, together with sanctions applicable in case of infringement, which must be more severe.

Since the non-observance of the regulations has serious social consequences and creates distortions of competition, the Commission intends to exercise extreme vigilance; it requests each Member State to submit to it, and also to the Council, an annual report on the efforts made to ensure observance of anti-pollution regulations.

6. To safeguard the natural surroundings under the Common Agricultural Policy

Under the Common Agricultural Policy, the Commission will intensify its efforts to safeguard the natural surroundings. In particular it will propose the granting of aid to hillside farming, in order to prevent the depopulation of mountainous regions, and also of aid to afforestation projects.

B. The supply of information to the Commission with a view to harmonization of urgent measures concerning the environment

In order to reconcile national initiatives and speed up the progress of the work undertaken at Community level, the Commission proposes to initiate a system for the supply of information to the Commission with the aim of facilitating the harmonization of urgent measures of
environmental protection envisaged by one or another Member State.

C. The formulation of a common position in relations with non-Community countries and international organizations

In order to permit the Community to participate actively in the work of international organizations, the Member States must try to work out a common approach (as laid down in the EEC Treaty moreover), and where appropriate to take common action in such organizations.

D. The improvement of the working environment in factories

The Commission considers that major priority should be given to projects designed to improve the conditions, safety and hygiene of industrial work, the measures to be taken being decided chiefly by negotiation between management and labour.

Apart from the preliminary guidelines for a Community social policy programme, presented in March 1971, the Commission now intends to make an inventory of laws, regulations and contractual agreements relating to hygiene, safety and health in industry, beginning with the metallurgical, chemical, paper and textile industries, and to consider the advisability of certain harmonizations in these fields. It also proposes to organize a systematic exchange of information about the experiments made in the Community with a view to reducing the monotonous and repetitive character of industrial work by replacing the conveyor belt system by new methods leaving the worker more initiative and offering him a greater variety of tasks.

E. The improvement and dissemination of knowledge, and the promotion of training in environmental protection

The Commission proposes to publish periodic reports on the state of environment within the Community. It will also submit research topics
which could be the subject of coordination at Community level, together with certain suggestions for the improvement of the processing and dissemination within the Community of scientific or technical information on anti-pollution measures. In addition, it will study problems relating to training and instruction in environmental protection, town planning and the creation of a European Institute of the Environment.

**F. A stage by stage programme**

Owing to their magnitude and difficulty, together with the gravity and urgency of the problems they raise, the projects proposed by the Commission in the matter of environmental protection can be tackled only one at a time and by stages. For this reason the Commission wishes to define the stages through which the programme which it has presented must pass.

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The Commission is aware that the questions raised in its communication and the accompanying projects represent only a few aspects of a much wider problem: the protection of the environment is inseparable from an effort to halt the wastage of natural resources and stem the growth of the world's population, while at the same time ensuring a more equitable distribution of wealth. The enlarged Community will have more authority to take the major initiatives urgently required in this field in the next few years, particularly if it makes real progress towards strengthening its institutions and unifying its political system.
A Conference Organized by the Commission of the European Communities

INDUSTRY AND SOCIETY IN THE COMMUNITY

(Venice, 20-22 April 1972)

In the introduction to its Memorandum on the Community's industrial policy, the Commission undertook to extend and complement its work by an analysis of the problems concerning the kinds of objective that should be assigned to industrial development. Organizing the Conference on Industry and Society in the Community, which is to be held in Venice in April 1972, seemed the best way to explore the problems which have not yet been sufficiently debated at Community level and to obtain general policy lines and practical conclusions for the further work of the Community institutions.

Some 300 people are expected to attend this Conference, representing the trade unions, the employers' organizations, the European institutions and the national administrations of the Member States of the enlarged Community. The aim is to discover on a joint basis what connections exist at Community level between industrial development and certain problems of an economic, social and political nature.

From this comparison general policy lines should emerge to enable Community policies to be mapped out and suggestions should be advanced with a view to practical action to be undertaken at Community level. The result should be a clear definition of the function and responsibilities of the Community institutions in industrial development, especially from the standpoint of social consequences.

After an introductory report by Mr Toulemon, Director-General for Industrial, Technological and Scientific Affairs in the Commission of the European Communities, on the progress of work on industrial policy in the Community, the Conference debates will concentrate on three broad subjects:
1. Industrial development and the minimization of social and regional disparities

There will be three series of reports on this subject, as follows:

(a) The industrial development of the Community: problems and outlook

Rapporteurs:
Mr Lombardi (Italy), Chairman of Confindustria
Mr Ventejol (France), Federal Secretary of the Force ouvrière
Mr Boissonnat (France), Editor in Chief of "L'Expansion"

While industrial development has succeeded in eliminating many serious social tensions, it has allowed others to persist and has itself created new ones, leading sometimes to a questioning of the legitimacy of this development as a whole. Among the problems revealed by social and economic studies are the unequal distribution of the fruits of expansion (as between individuals, areas and states), the restrictions imposed on workers by industrial organization, the isolation of the individual in ever vaster structures and the imbalance between the satisfaction of private and collective needs. The gradual integration of the economic structure will make it easier to define common guidelines for social and regional policy.

While accepting the polycentric character of Europe's political, administrative, economic and cultural structure, the Community has an important part to play in coordinating and also promoting (particularly through organizations providing grants and loans) efforts to improve collective amenities, to achieve a better distribution of industrial activities over the various Community
regions, and to formulate an employment policy ensuring both security of tenure and the growth of jobs and qualifications, while at the same time reconciling the improvement in workers' living standards with the imperatives of industrial development and international competition.

(b) The human element and human conditions in business

Rapporteurs:
Mr Friedrich (Germany), Chairman of EDA
Mr Houthuys (Belgium) Chairman of CSC/ACV
Mr Fogarty (Ireland), university professor

The human element and human conditions in business, and in particular the problem of industrial relations, are at present the subject of fresh discussion and experiment in all industrial societies. This development must be harmonized throughout the Community, as excessively radical differences between one country and another could foment disunion, while positive experiments limited to one region or one country would come up against the requirements of intra-Community competition.

Better working conditions necessitate a greater equality of earnings within each country and between different countries, an upgrading of jobs, together with better professional training, the adaptation of professional services to the convenience of the individual (e.g., hours of work, holidays and retirement) and security of employment within a framework sufficiently flexible to facilitate professional mobility and readaptation.

In order to help to match work and production to the needs and desires of the individual it is essential to ascertain procedures ensuring the effective participation and control of all those
concerned at all levels of social and professional life; at the same time those procedures must be compatible with the dynamism and efficiency required of a progressive society. The Community can play a part in promoting an effective dialogue between both sides of industry with a view to working out these procedures.

(c) The conditions necessary to ensure that more of the investments of companies in the various Member States are directed towards the less-developed regions of the Community. The part played by industry and the public authorities

Rapporteurs:
Mr Ezra (Britain), Chairman of the National Coal Board
Mr Dido (Italy), Federal Secretary of the CGIL
Mr Kienbaum (Germany), business consultant

The problem of the differences in the level of development between various Community regions is aggravated by the tendency of industrialists to invest in regions which are already highly developed or in non-Community countries rather than in less-developed Community areas. Thus the effect of the free play of the market is to accentuate regional disparities, and the regional policies at present being implemented in the various Member States are proving inadequate; the enlarged Community must try to find a common approach to regional policy problems and to devise energetic measures to promote the economic development of the backward regions. A freer use of Community funds for this purpose appears desirable.

Among the measures worth consideration are an increased effort in the matter of infrastructures and professional training, decentralization of State administrations and economic incentives to investment in the less developed regions, combined with measures designed to dissuade companies from investing in already over-industrialized regions.
2. Industrial development, collective needs and the quality of life

There will be three series of reports on this subject, as follows:

(a) The development of collective and individual needs in European society: options for the future and the resultant outlook for industry

Rapporteurs:

Mr Huvelin (France), Chairman of CNPF
Lord Delacourt-Smith (Britain), Secretary General, Post Office Engineering Union
Mr Ruffolo (Italy), Secretary-General for Planning

The rapid increase in collective needs linked with population and urban growth (infrastructures of all kinds and in particular transport, social and cultural facilities, housing and town planning), and the imperfect satisfaction of these needs, constitute one of the main politico-economic problems of the advanced industrial societies, which is especially acute in that the growth in private consumption itself creates new collective needs. It is furthermore clear that the play of the market will not in itself ensure the provision of adequate infrastructures and environmental amenities, partly no doubt because social charges are not taken into account in the production process and are borne by society, either in the form of public expenditure or as individual discomfort and loss.

The population will have to play a more active part in all matters concerning the quality of life. The progress of trade unionism will favour a movement on the part of industry towards giving workers a higher standard of living and an increased say in their conditions of work.
The Community must seek to define the aims of technological progress, according special importance to the standard of living of all its citizens as a yardstick of progress. It will guide research and development efforts in the light of these aims, making use where appropriate of Community development contracts in order to back up this guidance. It will also endeavour to foresee the probable effects of technological developments.

It will therefore be necessary to create Community institutions having powers of control and initiative in these matters, to work together with both sides of industry in the Community.

The achievement of a better balance between the satisfaction of collective and of private needs opens up new perspectives to industry, and will necessitate rapid growth in some sectors (construction, transport, telecommunications, hospital equipment, etc.) and the adaptation of others to the new structure.

(b) Effects of action to improve the environment on industrial development and the siting of firms

Rapporteurs:

Mr Petrilli (Italy), Chairman of IRI
Mr Laot (France), Member of the Executive Committee of the CFDT
Mr Jürgensen (Germany), university professor

Awareness of the problem of environmental conservation is a fairly recent phenomenon, and the programmes for combating pollutions of all kinds have as yet scarcely been outlined. Furthermore, the term "environment" must be understood in a wide sense, so as to include all the qualitative aspects of the interrelations between men, the urban setting and nature.
The problem of improving the environment will not be solved until the whole direction of industrial development is challenged. Henceforward it will be necessary to change priorities, and aim first and foremost at the total fulfilment of human potentialities.

At present it is most profitable for firms to place their new investments in the most developed regions, despite the resultant waste for the economy as a whole. Similarly, profitability and industrial growth remain more favoured criteria than the quality of the environment. In order to change this situation it will be necessary to include social charges in the cost calculations. The public purse could bear some of the additional expenditure resulting from the decentralized location of firms or from the need to improve plant in order to limit nuisances (when the products concerned are of social value).

In order to combat pollution it will be necessary to define Community-wide standards of quality, which will be rigid for toxic pollutants but regionally flexible as regards the less noxious substances.

Means of control must be considerably strengthened, and this will require the more active participation of those public bodies concerned in decisions relating to town and country planning and environmental protection.

(c) The increase in the cost of public infrastructures and equipment and the problem of financing them without detriment to the harmonious development of the Community

Rapporteurs:
Mr Neuman (Belgium), Chairman of the ENI
Mr Armato (Italy), Federal Secretary of the CISL
Mr Albert (France), Inspector of Public Finance
Considerable spending will be necessary in order to cover the cost of satisfying the public needs, and in particular of improving infrastructures and equipment and protecting the environment. Present budgets reveal an irrational use of resources, together with a division into narrow compartments and a disparity and dispersion of effort. It is evident that the increase in the overall growth rate, far from stimulating the growth of collective structures, leads rather to their relative regression.

A Community body could be entrusted with the task of defining long-term social objectives and suggesting the means of achieving them. It could also be asked to harmonize and coordinate regional and national efforts concerning infrastructures and environmental protection, and to advocate solutions capable of correcting those imbalances between Member States which are prejudicial to the economic and social integration of the Community.

There could be cooperation at Community level in deciding the best way of spending the money. New methods of financing would also be necessary (revision of the taxation system; creation of a European Fund; creation of authorized savings schemes, etc.).

3. The Community and the world:

There will be three series of reports on this subject, as follows:

(a) The objectives of a European technological development policy and methods of implementing it

Rapporteurs:

Mr Bülkow (Germany), Chairman of the Board of Messerschmitt-Blohm GmbH
Mr Bremer (Germany), Chairman of IG Metall
Sir Richard Clarke (Britain), Former Permanent Secretary at the Ministry of Technology

The definition of a Community strategy for technological development will facilitate a more rational collective deployment of manpower and funds in the Community, and avoid the most wasteful forms of duplication of effort, while at the same time preserving industrial competition.

The Community is already doing much to promote the dissemination of technology (removal of technical barriers to trade, creation of a European patent and cooperation between firms). It must also assist cooperation between public service firms, and the regrouping of the processing firms which supply them. By promoting cooperation between firms in the advanced technology sector it will enable them to become more profitable and competitive. Even if it appears neither practicable nor desirable for the Community to become an economic autarchy, it must establish itself as a partner to be reckoned with in world trade.

It would be helpful if the planning of technical research programmes in the light of the agreed guidelines, and the establishment of priorities, could be decided at Community level, whether these researches take place in joint centres directly financed by the Community or in national centres or institutions enjoying the Community's financial backing.

(b) The development of multinational companies: advantages and disadvantages; the resultant economic, social and political measures and changes

Rapporteurs:
Mr Krajenhoff (Netherlands), Chairman of the Board of AKZO
Mr Simoncini (Italy), Federal Secretary of the UIL
Mr Duquesne de la Vinelle (Belgium) university professor

The development of multinational or cross-frontier companies is a potent factor in technical progress and international cooperation. At the same time it raises a certain number of economic and political problems, particularly in connection with the insertion — however gentle — of these companies into the national context, together with social problems such as the siting of head offices and problems arising from the multiplicity of social situations and trade union organizations within the company.

The economic and monetary unification of Europe, and the creation of a firm legal, fiscal and financial framework, will favour the growth of multinational companies within the Community. At the same time the adoption of the appropriate institutional mechanisms at Community level will make it possible to satisfy local aspirations to participate both in the capital and in the management of these companies; a European policy on regional organization and town and country planning and a common social policy must guide the development of these multinational companies along the path of social progress and equity.

(c) Promotion of the industrialization of developing countries; consequences to Community industry

Rapporteurs:
Mr Moussa (France), Director-General of PARIBAS
Mr Vetter (Germany), Chairman of DGB
Mr Tinbergen (Netherlands), university professor

The pursuit of more balanced development is in the common interest of both the advanced and the less developed countries. In order
to assist the industrialization of the less developed countries, their potentialities in terms of local resources and markets should be analysed and the introduction of appropriate techniques and professional training schemes promoted. It is necessary to grant these countries financial aid while at the same time preventing their national debts from reaching undue proportions, and to use this aid exclusively for the implantation of viable industries. The Community organizations will be able to exert a beneficial influence in this respect. Various measures (taxation, insurance, etc.) must be taken in order to encourage the widest possible participation of private capital.

Financial aid in the marketing of these countries' products within the Community will need further expansion. The introduction of generalized preferences already constitutes an encouraging step in this direction. National development plans will have to take into account the effects of the industrial development of the emerging countries.