FIG. 5 MAIN ASPECTS OF MONITORING AND EPIDEMIOLOGICAL PROGRAMME

MONITORING	EPIDEMIOLOGY
Purpose, Scope, Priorities	Purpose, Scope, Priorities
Parameters and Media	Protocols for Trial Studies
Sampling Procedures	Amendments & Adjustments
Analytical Procedures	Full-Scale Studies
Data Processing	Data Processing, Evaluation
Information Delivery	Dissemination
Evaluation & Adjustment	Technical Cooperation
Technical Cooperation	

COMPARABILITY OF RESULTS AND SYNERGISTIC EFFECTS

TO ACHIEVE

Allocation of Resources Accordint to Priorities

Improvements in Methodology

Strengthening of Technical and Institutional Capability

Dissemination of Information on Sources, Levels & Effects

- health risks of exposure to organic chemicals in the water supply

- health effects of manmade mineral fibres

- the use of zinc protoporphyrin levels and other diagnostic tests to determine childhood exposure to lead

- the role of formaldehyde in the epidemiology of chronic nonspecific lung disease

- the health effects of chronic exposure to aromatic amines

- cadmium and mercury release from copper amalgam used in fillings in children's milk teeth

- health effects of exposure to organophosphates in community and occupational groups.

The Meeting agreed upon the type of information which is required in the preparation of protocols for monitoring and epidemiological studies, and the format for presentation. Proposals for studies (1) and (2) above were written under this agreed format to serve as examples of detailed protocols.

The Meeting made a number of specific recommendations which are included in Annex 4.

TOXIC WASTES MANAGEMENT

Improper or careless disposal of toxic waste during the previous decades is causing increasing problems in the industrialized countries of Europe and elsewhere. It has been recognized for some time that certain formerly acceptable methods for disposal of industrial waste products (for example, land disposal in a way that contaminates groundwater) are serious sources of pollution and constitute hazards to human health, making it imperative that guidelines be prepared that will help Member States to take appropriate action to reduce these hazards.

A more recent concern is the transfrontier transportation of hazardous waste and, in particular, the possibility of

exports of such waste to developing countries. The second major objective of the Group was, therefore, to consider pertinent measures to control such transportation.

A Working Group on Guidelines for the Control of Toxic and Other Hazardous Chemical Wastes was organized in Garmisch-Partenkirchen, 17-20 March 1981. The meeting was jointly convened by the WHO Regional Office for Europe and the UNEP International Register of Potentially Toxic Chemicals to discuss a code of practice and guidelines for the management of toxic and other hazardous waste.

The Group addressed both of these topics in their broadest aspects. A draft code of practice was distributed in advance and was reviewed in detail. In addition, the Group was invited to comment on and suggest topics to be included in a more general policy guidelines document, dealing int. al., with transfrontier transportation and due to be produced after the meeting.

The Working Group recommended, int. al., that the UNEP International Register of Potentially Toxic Chemicals and the WHO Regional Office for Europe should jointly produce documentation, including both executive guidelines and a code of good practice, which will serve as a guide to decision makers with responsibility for the management of hazardous waste. Many detailed recommendations on the form and content of such documentation were made by the Group. These are included in Annex 5.

LEGAL AND ADMINISTRATIVE PROCEDURES FOR CONTROL OF CHEMICALS IN EUROPE

A preliminary survey of administrative procedures for toxic chemicals control has been launched. The objective of this study is to provide a picture of the distribution of responsibilities for chemicals control in the various European countries and of the ways and means by which these responsibilities are discharged by the agencies concerned. This study is being implemented by the UNEP International Register of Potentially Toxic Chemicals and the Monitoring and Assessment Research Centre, UK, in cooperation with the Institute of Hygiene and Occupational Health, Sofia, Bulgaria.

Although the survey is not yet completed and information on several countries is missing, draft reports have been

prepared and are available. The reports outline the arrangements and procedures for the control of chemicals in European countries. Such arrangements and procedures are frequently modified, and a report on this subject could never claim to be complete or totally up to date.

The present survey provides an overview of major actions, both current and planned. It reviews the principal Acts, as well as nonstatutory schemes, in each country together with the basic regulations that have been issued under them, and the procedures that have been established to apply them. The authorities who bear the main responsibility for their implementation are also indicated. It is believed that this survey may be helpful as a guide both to the questions that must be considered by those concerned with, or affected by, the control of chemicals and to where the most recent information and detailed advice can be obtained, as necessary.

Legislative procedures, advisory mechanisms, reviews, appeals, enforcement and penalties are briefly mentioned by way of introduction to the section on each country. Laws and regulations relating to all stages of the lifecycle of a chemical have been included, whether they were introduced with the explicit aim of controlling chemicals or for a more general purpose. Emergency provisions are not included; they are covered under Section 4 of this report. It is expected that the final report of this study will be issued in summer 1981.

The report on this survey will serve as one of the main background documents to be submitted to the Working Group on Regulatory Schemes on Potentially Toxic Chemicals in Consumer Products (other than food and water) to be held in Varna, Bulgaria, 21-25 September 1981. It is expected that a guideline document on legal and administrative aspects of regulation of this type of product will be developed.

QUALITY CONTROL AND GOOD LABORATORY PRACTICE

An Expert Consultation on Quality Control in Toxicological Test Laboratories was held at the Institute of Occupational Health in Helsinki, 22-24 September 1980, with the participation of six experts from five countries of the European Region and two representatives of other International Organizations, viz., OECD and CEC.

The purpose of the meeting was to consider a series of documents on the quality of studies upon which risk assessment of chemicals to human health and the environment is based. As a general prelude to the detailed study of a document on guidelines for investigations in occupational medicine, the principles of good laboratory practice were discussed. The Consultation acknowledged that considerable efforts have been made on a document entitled Good Laboratory Practice by the Organization of Economic Cooperation and Development.

After discussion and detailed consideration, the Expert Consultation endorsed and recommended adoption of the OECD GLP document with suitable editorial amendments to adapt it for a WHO pan-European context. The OECD and CEC representatives welcomed this opportunity to open the GLP document to a wider international audience.

RISK ASSESSMENT IN TOXIC CHEMICALS CONTROL

A Seminar on Evaluation and Risk Assessment of Chemicals organized by the Institute of Occupational Medicine in Lodz, Poland, in collaboration with the Institute of Occupational Health in Helsinki, Finland, and the Institute of Radiological Health in Belgrade, Yugoslavia, was held 1-6 September 1980. As the name implies, the Seminar was centred on the process of risk assessment based on the available toxicological and epidemiological evidence, and taking into account the benefits, disbenefits, and the implied costs of the possible control actions. The Seminar was attended by senior scientists and decision makers who are faced with the difficult task of making important decisions based on imperfect information. The major elements of risk assessment are shown in Fig. 6., and these were covered in the lectures and discussions held during the Seminar. Considering the interest aroused by this activity, it is planned to organize, jointly with CEC, another seminar on this subject, to be held in Brussels in 1982.

TECHNICAL COOPERATION

The list of subject areas covered under this component of the programme is shown in Fig. 7. Some of the activities within this programme component are described in some

FIG. 6 MAJOR ELEMENTS OF RISK ASSESSMENT

DATA

- Chemical
- Toxicological
- Epidemiological
- Clinical

EXTRAPOLATION

- Animal-Man
- Occupational Exposure - Community Exposure
- Short-Term - Long-Term

RISK ASSESSMENT PROCESS

- Probability of Effects
- Severity of Effects
- Extent of Effects

DECISION-MAKING PROCESS

- Evaluation of Public Propensity for Risk Acceptance
- Evaluation of Alternatives:
  - permit
  - forbid
  - restrict
  - substitute
- Evaluation of Benefits, Disbenefits, costs

FIG. 7 TECHNICAL COOPERATION BY SUBJECT AREA

TOXIC CHEMICALS IN:

Drinking Water

Water & Wastewater Treatment Plants

Sludge Used As Fertilizer

Household Products

Building Materials

Food and Packaging

Solid & Liquid Wastes

Air (Exterior & Interior)

Working Environments

Allergens

SPECIFIC INDUSTRIES:

Asbestos

Manmade Fibres

Metallurgy (Non-Ferrous)

Rubber

Energy Generation

METHODS:

Multimedia Monitoring

Testing Programmes, Including Mutagenicity

Multiple Exposure Assessment

Good Laboratory Practice & Quality Control

Risk Assessment and other Decision Aids

AGREEMENTS ON:

Good Laboratory Practice

Quality Control (Lab)

Notification and Labelling Procedures

Regulatory Procedures

TO ACHIEVE

Expanded Technical and Institutional Capability

Optimization of Efforts and Resources

More Effective Implementation of Control Measures

Framework for Regular Information Exchange

Framework for Permanent Cooperation

detail in the preceding sections of this report. In 1980 action was begun by the:

- Working Group on Health Implications of High-Level Radioactive Waste Disposal (Bruges, Belgium, June 1980);

- Working Group on Health Implications of Accumulation of Micropollutants on River Sediments (Trier, FRG, August 1980); and

- Meeting on the Delayed and Chronic Effects of Chemicals in the Workplace (Kiev, USSR, October 1980).

A few of the activities under this component of the programme are described in more detail in the following sections.

Biological Effects of Manmade Mineral Fibres

During the late 1960's and early 1970's, animal experiments and epidemiological studies in man strengthened the evidence that the size of mineral fibres rather than their composition was the major factor governing their biological effects. It was also becoming increasingly apparent that much thermal insulation previously made of asbestos would in the future have to be made of other materials, especially manmade mineral fibres (MMMF), which clinical observation suggested were not associated with the health hazards of asbestos. However, it was considered essential to establish with as much certainty as possible whether or not there were any long-term health hazards which might have gone undetected.

The Joint European Medical Research Board (JEMRB) convened a meeting in 1976 in Copenhagen, at which plans were outlined for a multinational survey of the environmental conditions in MMMF production plants and for a retrospective (historical) study of the mortality pattern among the work force. It was evident that the research plans would include studies of the fibrogenic and oncogenic effects of current types of MMMF in animals.

The participants of the 1976 meeting agreed to hold a further meeting at the WHO Regional Office for Europe, after about five years, when the research results would be submitted. The conference scheduled to take place in April 1982 thus represents the realization of this decision.

In the intervening period there has been a constant exchange of information. It is now possible to hold a joint meeting under the auspices of the WHO Regional Office for Europe and the International Agency for Research on Cancer (IARC) and supported by JEMRB and Thermal Insulation Manufacturers Association (TIMA). WHO, through its environmental health programme at the Regional Office for Europe and its cancer research activities at IARC, has expanded its direct support for the promotion of occupational health during the last few years.

The aim of the conference to be convened in Copenhagen, 20-22 April 1982 is to consider and discuss research into the biological effects of manmade mineral fibres (MMMF), especially in relation to the following aspects:

- environmental surveys of current fibre and mass concentrations with full-size distributions of the fibres in the range of jobs involved in the manufacture of MMMF;

- development of standardized methods for the assessment of MMMF;

- studies of patterns of cancer mortality and incidence in defined groups of MMMF production workers;

- studies of respiratory morbidity among MMMF production workers;

- experimental studies in animals to measure the deposition, distribution and elimination of inhaled fibres and to assess the long-term fibrogenic and oncogenic effects; and

- in vitro studies of the effects of fibres on a wide variety of cell types.

The conference will provide a scientific basis for decisions concerning means of ensuring effective health surveillance in the future for those manufacturing and using MMMF.

Within the framework of the conference, a number of technical working parties will be arranged to discuss:

- measurement of dust and fumes;

- methods of generating aerosols of fibres for experimental research; and

- standardization of the pathological assessment of fibrosis in human and animal lungs.

Guidelines for Drinking Water Standards

WHO published the International Standards for Drinking Water in 1958; they were revised in 1963 and again in 1971 (3rd edition). Likewise, in 1961, the WHO Regional Office for Europe issued the European Standards for Drinking Water which were then revised in 1970.

It is important that standards be reviewed and updated at intervals to ensure that they reflect the most recent knowledge and experience. Since considerable new knowledge has accrued in recent years on the presence of contaminants in water supplies and their effects on human health, it has been decided to make a careful review of the International and European Standards for Drinking Water, to revise and merge them and to issue a new publication The Guidelines for Drinking Water Quality by the end of 1981.

The WHO European Regional Office's responsibility in the revision of water quality parameters concerns aspects covering the chemical constituents of drinking water. Obviously, to approach the revision systematically, the chemical constituents must be subdivided into the logical groups - inorganic and organic - and each carefully considered by a group of experts. In assembling such groups, although the medium of ingestion was water, experts from disciplines associated with health, including toxicologists, were invited to participate. Thus, in addition to deciding upon "action levels" for 11 health-related inorganic and 22 organic constituents commonly found in drinking water, supporting documentation has also been prepared to accompany the Guideline values chosen. This whole exercise is now in its final stages, and it is anticipated that publication will be available in early 1982.

Environmental Quality Criteria for Mercury in Seafood with Special Reference to the Mediterranean Area

The Mediterranean countries which have established regulations mainly place an overall limit on mercury

concentration in fish. At the international level, FAO, WHO and the OECD have been periodically involved in studying the problem of food contamination by mercury. In 1967 the Joint FAO/WHO Expert Committee on Food Additives first considered the problem and recommended that "any use of mercury compounds that increases the level of mercury in food should be strongly discouraged". In 1972 the same committee met again and recommended a provisional tolerable weekly intake (PTWI) of 0.3 ug total mercury per person of 70 kg, of which no more than 0.2 ug should be present as methylmercury (expressed as weight of mercury). It is recognized that an evaluation of health hazards through the consumption of Mediterranean seafood is difficult due to the very limited data for those populations considered likely to have an increased mercury intake.

The Consultation to Re-examine the WHO Environmental Health Criteria for Mercury (Geneva, 21-25 April 1980) and subsequent studies acknowledged that the WHO Provisional Weekly Intake of 200 ug methylmercury for a person of 70 kg body weight remains a valid recommendation in the light of presently available data. Based on present data on fish consumption in the Mediterranean area and concentration of methylmercury reported in fish, it is considered that a part of the population in the Mediterranean area may have an intake of methylmercury through seafood which exceeds the WHO PTWI. However, the major part of the population is believed to have an intake below the WHO PTWI.

The main gaps in knowledge which need to be filled for appropriate evaluation of health hazards and protection of the population at risk are as follows:

- evaluation of anthropogenic sources of mercury and other selected pollutants and their contributions to methylmercury in fish;

- methylmercury concentrations in various types of seafood in certain areas of the Mediterranean sea;

- the patterns of seafood consumption in various sectors of the Mediterranean area, including seasonal variation;

- identification of populations with relatively high methylmercury intake and estimation of their size; and

- biological monitoring data on mercury levels in populations with high methylmercury intake.

In order to fill these gaps, relevant priority studies are being included in the research and study topics of the Long-Term Programme for Pollution Monitoring and Research in the Mediterranean, MED POL - Phase II.

OPERATIONS OF UNDP-SUPPORTED PROJECT "EUROPEAN COOPERATION ON ENVIRONMENTAL HEALTH ASPECTS OF THE CONTROL OF CHEMICALS"

Historical

The first Preliminary Activities Project Document was approved on 29 January 1979 covering the five-month period from 1 February 1979 to 30 June 1979. During that phase, an international consultation was organized to advise on the contents of this project and to establish priorities as a basis for preparation of the work plan.

The budget for this phase of the Project activities was approved, and the allocated funds amounted to total US $357 000.

During this preliminary phase the following activities were performed and accomplished:

- recruitment of the Project Manager;

- nomination of 10 national focal points for collaboration on this project;

- consultation on priority problems in toxic chemicals control in Europe as a basis for preparation of the work plan; and

- Steering Committee meeting to adopt programme and the Project Document.

Apart from the above, other actions were started and have been continued beyond the phase of preliminary activities. These are the following:

- preliminary survey of administrative procedures for enforcement and implementation of control measures;

- development of professional profiles of personnel concerned with chemical safety; and

- inventory of training programmes on chemical control presently offered or planned in the European Region.

The draft Project Document prepared within the Preliminary Activities phase of the Project was presented to the Steering Committee during its first meeting in Baden, Austria, on 7 November 1980. Based on the previous consultations, the following immediate objectives were formulated in the Project Document:

(1) application of harmonized methods of testing in the solution of particular problems;

(2) application and, where necessary, development of harmonized impact assessment as decision-making aid;

(3) establishment of monitoring systems and performance of harmonized epidemiological surveys;

(4) development of contingency planning to make more effective the response by national authorities to emergencies and accidents related to chemicals;

(5) development of adequate training programmes for the various categories of personnel required for assessment and control;

(6) development of arrangements for information exchange and technical cooperation among Member States; and

(7) development of guidelines and codes of practice which could ultimately be embodied in relevant conventions or other forms of international agreements.

The members of the Steering Committee representing their Governments unanimously expressed agreement with the outlined objectives and activities. From their statements it emerged that the individual national priorities related to the problems of chemical safety were interlinked in varying degrees, being either identical or complementary, thus requiring a framework of international cooperation.

The meeting recognized the Project as an essential part of the pan-European programme on chemical safety, facilitating full participation of those European countries which are entitled to UNDP support*. The UNDP contribution to the Project budget was set at US $987 500. The participating countries pledged contributions in kind equivalent to US $5 979 850. The full report of the meeting is appended in Annex 6.

Promotion of Country Activities

Approval of the Project by UNDP has brought it into full operation. The participating Governments revised and substantially expanded the list of contributions in kind, bringing it to a total approaching the equivalent of US $8 000 000.

A total of 51 individual projects from nine countries is being implemented within the framework of this project. Several additional projects are expected to be finally defined and undertaken during the second half of 1981. The revised list of country contributions in kind is appended (Annex 6).

The distribution of country activities among the Project's immediate objectives is as follows:

immediate objective 1 -	5 projects from 5 countries
immediate objective 2 -	6 projects from 6 countries
immediate objective 3 -	32 projects from 9 countries
immediate objective 4 -	2 projects from 2 countries
immediate objective 5 -	2 projects from 2 countries
immediate objective 6 -	9 participating countries
immediate objective 7 -	4 projects from 2 countries

The full list of declared country activities in relation to the Project's immediate objectives is presented in Table 1.

* Bulgaria, Czechoslovakia, Greece, Hungary, Malta, Poland, Portugal, Romania, Turkey and Yugoslavia.

One of the main concerns of the Project is the immediate objective 6, viz., to develop an effective collaboration between the participating countries. The review of the country objectives shows that there are a number of projects of similar scope and objectives undertaken by the participating countries and hence technical cooperation in solving particular problems should be established. The following groups of subjects are suggested for cooperation:

(1) monitoring of environmental exposures to metals (Bulgaria, Greece, Hungary, Malta, Poland, Turkey, Yugoslavia);

(2) monitoring of pesticides (Bulgaria, Malta, Turkey, Yugoslavia);

(3) monitoring of food additives (Czechoslovakia, Greece, Yugoslavia);

(4) assessment of environmental exposures to polyaromatic hydrocarbons emitted from industries (Hungary, Poland); and

(5) methodological approach to biological monitoring of exposures to acrylonitrile (Poland, Czechoslovakia).

Subjects (1) and (2) deserve special attention, and in order to establish a programme of cooperation, two meetings will be organized, each devoted to particular subjects. The meetings will be attended by chief investigators from the projects involved. Subject (3) will be analysed with respect to the scope for cooperation.

Subjects (4) and (5) will require direct contacts between the investigators in order to establish a cooperation, especially concerning uniform methodological approaches.

Although the Project Document defines tasks and activities for the period 1980-81, it has become effective only at the beginning of 1981. As a result, a majority of the declared country activities have only been launched in 1981, and few of them can be accomplished before the end of 1981. Consequently, most of the present country activities will continue into the 1982-1986 planning period.

Fellowships and Supplies

In order to facilitate implementation of the declared programmes, limited funds have been made available to Member States for purchasing equipment and for short-term training fellowships.

With the exception of one country, all other participating countries have submitted requests for equipment, most of which have been ordered and some of which are being clarified and processed. The total fund to be spent for equipment delivery will amount to US $100 000. Requests for a total of 13 man/months fellowships have been submitted. Two countries (Greece and Malta) are not requesting fellowships under this project.

Future Activities

The activities being currently implemented point to the continuing interest of the Governments in the Project and to the need for planning and undertaking the second phase of the Project. This was confirmed by the Steering Committee. The Government Representatives on the Steering Committee strongly suggested that the second phase be established for the period 1982-1986 and considered that the appropriate size of the UNDP contribution to the second phase of the Project would be US $2 500 000 with the increased provisions for training and subcontracts.

Table 1 Country Activities in Relation to the Project's Immediate Objectives

Immediate Objective	Subject of Activity	Country
1. Application of harmonized methods of testing in the solution of particular problems.	1. Survey of problems in industry and community; harmonization with the EEC guidelines, 1980-1981	GREECE
	2. Comprehensive updating of list of problems in industry and the community arising from toxic chemicals, 1981-1982	MALTA
	3. Preparation of list of industrial and environmental problems	ROMANIA
	4. Identification of sources of environmental contaminations. List of priority problems, 1981-1985	YUGOSLAVIA
	5. Setting a uniform scope of procedures and methods for testing toxicity, 1981-1983	POLAND
2. Application and, where necessary, development of harmonized impact assessment as decision-making aid.	1. Development of an integrated E.I.A. system, 1981-1982	MALTA
	2. Evaluation of methods and practices in estimating chemical pollution of soil in view of their use in current practice, 1981-1985	ROMANIA
	3. Assessment of environmental impact of waste disposals from aluminium foundries (in soil), 1981-	HUNGARY
	4. Assessment of environmental pollution by metals and its impact on human health from copper mills. (recognition of health hazard and its application for planning localization of dwelling regions), 1981-1983	POLAND

Table 1 (cont'd) Country Activities in Relation to the Project's Immediate Objectives

Immediate Objective	Subject of Activity	Country
	5. Evaluation of the influence of wastes from copper mines on pollution of surface waters, plants and bottoms with heavy metals, 1981-1985	POLAND
	6. Development of impact assessment procedures for the control of chemicals.	CZECHOSLOVAKIA
3. Establishment of monitoring systems and performance of harmonized epidemiological surveys.	1. Biological monitoring of lead exposure. (establishment of monitoring system), 1981-1982	BULGARIA
	2. Biological monitoring of industrial workers exposed to lead and cadmium (epidemiology), 1981-1982	HUNGARY
	3. Influence of the urban environmental pollution on the levels of metals in body fluids of inhabiting population, 1981-1985	POLAND
	4. Assessment of food products as a source of metals intake in man, 1981-1985	POLAND
	5. Assessment of health effects of occupational exposures in aluminium metallurgy (exposure to PAH and workers morbidity), 1981-1982	HUNGARY
	6. The study of health of population exposed to environmental combined pollution by aluminium foundaries and heat power stations (PAH, soot, SO_2, fluorine), 1981-1983	HUNGARY
	7. Assessment of industrial emission and environmental impact assessment of polycyclic aromatic hydrocarbons (PAH) (combined coke and chemical plant), 1981-1984	POLAND

Table 1 (cont'd) Country Activities in Relation to the Project's Immediate Objectives

Immediate Objective	Subject of Activity	Country
3. Establishment of monitoring systems and performance of harmonized epidemiological surveys (cont'd).	8. Health and biological monitoring systems for workers exposed to pesticides, 1981-1982	BULGARIA
	9. Establishment of monitoring system for control of chemicals in industry, 1981-1984	POLAND
	10. Systems of monitoring of chemical air pollution in view of evaluation of the risk for the public health, 1981-1985	ROMANIA
	11. Methodologies for assessment of emissions from polymeric building materials, 1981	BULGARIA
	12. Environmental and health monitoring study in production of polyvinylchloride, 1981-1983	BULGARIA
	13. Monitoring of health hazard from an intake of chemical preservative agents and artificial sweeteners in food, 1981-1984	CZECHOSLOVAKIA
	14. Monitoring of health effects of occupational exposure to toluene and perchlorethylene, 1981-	HUNGARY
	15. Epidemiological studies on several groups of chemicals: inorganic fluorides (air, water, soil and food); lead, amino and nitro compounds in drinking water; petrochemicals, chlorinated solvents and asbestos; organo-chlorinated pesticides impregnation, 1981-1985	ROMANIA
	16. Monitoring of heavy metals and pesticides residues (supply and irrigation waters, fruits and vegetables, water and salt from the Tuz Lake), 1981-	TURKEY

Table 1 (cont'd) Country Activities in Relation to the Project's Immediate Objectives

Immediate Objective	Subject of Activity	Country
3. Establishment of monitoring systems and performance of harmonized epidemiological surveys (cont'd).	17. Monitoring of some metals and pesticides in air and water in Serbia, 1981-1985	YUGOSLAVIA
	18. Monitoring of a daily intake of chemicals in food in Serbia (pesticides, metals, nitrites and nitrates, mycotoxins), 1981-1985	YUGOSLAVIA
	19. Assessment of drinking water contamination with organic synthetic chemicals in Serbia, 1981-1985	YUGOSLAVIA
	20. Monitoring of pesticides, metals and organic contaminants in food, air and water (in Slovenia)	YUGOSLAVIA
	21. Development of pesticide residue monitoring system for food products, 1981-1982	MALTA
	22. Upgrading of heavy metal monitoring system (formulation of a more comprehensive system), 1981-1982	MALTA
	23. Epidemiological studies (arrangements for expanded survey of exposure to pesticides)	MALTA
	24. Monitoring systems for CO and ozone, 1981	GREECE
	25. Monitoring of exposure to lead in urban areas, 1981	GREECE
	26. Monitoring of chlorinated hydrocarbons, pesticides and metals in marine organisms, 1981-1983	GREECE
	27. Monitoring of mycotoxins in food, 1981-1983	GREECE
	28. Monitoring of herbicides in aquatic organisms (shrimp and fish), 1981-1983	GREECE

Table 1 (cont'd) Country Activities in Relation to the Project's Immediate Objectives

Immediate Objective	Subject of Activity	Country
	29. Phthalic esters, colorants and nitrates - monitoring as food additives, 1981	GREECE
	30. Development of a system for assessment of skin effects in man of cosmetics, household preparations and products of general use, 1981-1985	CZECHOSLOVAKIA
	31. Methodological approach to biological monitoring of exposure to acrylonitrile, 1981-1982	CZECHOSLOVAKIA
	32. Methodological approach to biological monitoring of exposure to acrylonitrile, 1981-1982	POLAND
4. Development of contingency planning to make more effective the response by national authorities to emergencies and accidents related to chemicals.	1. Establishment of contingency plans to meet possible accident situations involving toxic chemicals (mainly on a localized basis)	MALTA
	2. Establishment of contingency plans to meet possible accident situations involving toxic chemicals in industry, 1981-1983	ROMANIA
5. Development of adequate training programmes for the various categories of personnel required for assessment and control.	1. International course on "Health effects of combined exposures to chemicals in work and community environments," 1981	POLAND
	2. International course on toxicology of pesticides, 1981	BULGARIA

Table 1 (cont'd) Country Activities in Relation to the Project's Immediate Objectives

Immediate Objective	Subject of Activity	Country
6. Development of arrangements for information exchange and technical cooperation among Member States.	(To be developed)	
7. Development of guidelines and codes of practice which could ultimately be embodied in relevant conventions of other forms or international agreements.	1. Methods for standardization of toxic substances in soil, 1981	BULGARIA
	2. Systems for preliminary control for registration of pesticides, 1981	BULGARIA
	3. Methods for toxicological assessment of cosmetics, 1981	BULGARIA
	4. Preparation of a manual of analytical methods for determinations of industrial chemical air pollutants, 1981-1984	POLAND