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OPERATIONAL DOCUMENT FOR THE BLUE PLAN



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Intergovernmental Review Meeting of
Mediterranean Coastal States on the
Mediterranean Action Plan

Monaco, 9-14 January 1978

OPERATIONAL DOCUMENT FOR THE BLUE PLAN^{*/}

^{*/} Prepared by the Group of Co-ordination and Synthesis of the Blue Plan on the basis of the documents and recommendations of the Intergovernmental Meeting of Mediterranean Coastal States on the Blue Plan, Split (Yugoslavia), 31 January - 4 February 1977.

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^{*/} Presented separately in documents UNEP/IG.11/INF.6, annexes I et seq.

I. INTRODUCTION

1. The quality of life of the Mediterranean peoples and the satisfaction of their basic human needs are heavily dependent on the state of the environment in which they live. The dangers besetting the environment, particularly the marine environment, have now become so formidable that collective action is called for.
2. The Governments of Mediterranean coastal States, realizing that the protection of the marine environment as a life-supporting system cannot be dissociated from the priorities of economic and social development, are committed to achieving a better quality of life for present and future generations, and are deeply concerned about the possibilities and difficulties of reconciling, in both the short and the long term, the socio-economic development of their countries and the preservation of the environment.
3. The preparation of a "Blue Plan" is a response to those concerns as voiced by the Mediterranean countries in the debates and conclusions of the Intergovernmental Meeting on the Protection of the Mediterranean held in Barcelona from 28 January to 4 February 1975.
4. At that meeting, taking particular account of the need to facilitate the much-needed development of the Mediterranean countries, the Governments of the region declared themselves ready to consider proposals aimed at reconciling the demands for development with the need to protect and improve the quality of the Mediterranean environment. The Intergovernmental Meeting on the Protection of the Mediterranean accordingly requested the Executive Director of UNEP, in collaboration with the Governments of the region, the organizations of the United Nations system, and inter-governmental and regional organizations concerned, to draw up a co-ordinated programme aimed at a better utilization of resources in the interest of the countries of the region and their development in accordance with sound long-term environmental principles. 1/
5. At its third session in 1975, the Governing Council of UNEP gave its support to the Mediterranean Action Plan. 2/ During that session, and on the initiative of the Government of France, the view was expressed that UNEP should support the publication of broad guidelines and technical manuals which would serve as a basis for a programme of action to protect the Mediterranean and similar oceanic ecoregions. It was suggested that UNEP should convene an expert group to start the preparation of such publications and, in particular, to elaborate the document relating to a project for the protection and development of the Mediterranean which was referred to as the "Blue Plan". 3/
6. After further consultations between UNEP and various Governments, and in order to obtain the advice of experts on the formulation of the "Blue Plan" project, the Executive Director of UNEP convened two meetings of Mediterranean experts and

1/ UNEP/WG.2/5, Annex, paras. 2 and 3.

2/ UNEP/GC/55, para. 187.

3/ Ibid., para. 194.

representatives of specialized agencies and bodies in the United Nations system. ^{4/} The first meeting took place in Geneva on 22 and 23 January 1976. The second meeting was convened in Paris from 17 to 19 May 1976.

7. The Executive Director sought the views of experts with regard to the feasibility of the project, its geographical coverage, its long-term and immediate objectives, and the ways and means needed for its implementation.

8. The experts acknowledged the methodological, scientific, administrative and financial difficulties involved in the implementation of a project as comprehensive as the Blue Plan. However, in view of the vital need of the Mediterranean countries to protect and enhance the quality of the environment, they also recognized that no effort should be spared to formulate and implement such a plan.

9. On the basis of the opinions expressed by the experts at the above-mentioned meetings, the Executive Director issued instructions for the preparation of the background documents on the Blue Plan and convened the Intergovernmental Meeting of Mediterranean Coastal States on the Blue Plan, which was held at Split, Yugoslavia, from 31 January to 4 February 1977. ^{5/} The meeting discussed the Blue Plan Project and made

^{4/} Experts from all Mediterranean countries were invited to both meetings. Experts from the following countries attended: Algeria, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Spain, Syria, Tunisia, Turkey, Yugoslavia. The following organs of the United Nations system and specialized agencies were also represented: Economic Commission for Europe (ECE), United Nations Development Programme (UNDP), United Nations Industrial Development Organization (UNIDO), United Nations Conference on Trade and Development (UNCTAD), International Labour Office (ILO), Food and Agriculture Organization of the United Nations (FAO), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Health Organization (WHO), World Meteorological Organization (WMO), Inter-Governmental Maritime Consultative Organization (IMCO) and World Tourism Organization (WTO), as well as the International Atomic Energy Agency (IAEA). The Commission of the European Communities was also represented.

^{5/} The following Member States were represented: Algeria, Cyprus, Egypt, France, Greece, Israel, Italy, Libyan Arab Republic, Malta, Monaco, Morocco, Spain, Tunisia, Turkey and Yugoslavia. (The Governments of Albania, Lebanon and the Syrian Arab Republic had been invited but were not represented at the meeting.)

Representatives of the following also attended:

United Nations organs: Economic Commission for Europe (ECE), United Nations Conference on Trade and Development (UNCTAD), United Nations Development Programme (UNDP), Office of the United Nations Disaster Relief Co-ordinator (UNDRC), United Nations Office for Inter-Agency Affairs and Co-ordination (IAAC), United Nations Information Centre (UNIC, Belgrade).

Specialized agencies: Food and Agriculture Organization of the United Nations (FAO), United Nations Educational, Scientific and Cultural Organization (UNESCO), World Health Organization (WHO), World Meteorological Organization (WMO), Inter-Governmental Maritime Consultative Organization (IMCO).

Intergovernmental organizations: Arab League Educational, Cultural and Scientific Organization (ALECSO), Commission of the European Communities.

Non-governmental organization: Atelier Méditerranéen de Prospective (AMP).

specific recommendations as to its objectives, its implementation and the general principles applying thereto, the methodology to be used, priority areas and the institutional and financial implications of the project.

II. CONCEPTION

A. Definition

10. The Blue Plan may be defined as a programme of action-oriented prospective surveys and studies for the purpose of harmonizing socio-economic development and environmental protection in the Mediterranean region for the benefit of present and future generations.

11. The term "Plan" should not therefore, give rise to misunderstandings; the objectives of the Blue Plan are not to concentrate the decision-making process or to promote the establishment of a body that would define in technical terms what should be the rational management of natural resources and optimum socio-economic development for all the Mediterranean countries. By ensuring exchanges of experience in all relevant fields among the Mediterranean countries, the Blue Plan should create a pool of knowledge to which each of the countries concerned would have immediate access. The Blue Plan, while promoting co-operative efforts to solve common problems, would take existing socio-economic development styles into consideration and facilitate the formulation of alternative environmentally sound development styles by each country in accordance with its own options and conditions.

B. Objectives

12. The fundamental objective of the Blue Plan is to initiate a continuous process of concerted co-operation among the Mediterranean coastal States.

13. More specifically, the objective of the Blue Plan is to place at the disposal of decision-makers and planners in the different countries of the Mediterranean region information enabling them to formulate plans for optimum socio-economic development on a sustainable basis without environmental degradation.

14. The other objectives of the Blue Plan are:

- 14.1 to assist the Governments of the coastal States of the Mediterranean to gain a more accurate insight into the common problems they face both in the Mediterranean Sea and in its coastal zones;
- 14.2 to assist these Governments in reaching appropriate decisions that would promote rational management of resources and sustainable development in the Mediterranean region.

15. The Blue Plan should lead to a continuous increase of co-operation among various countries in the Mediterranean region. It is through such co-operation and mutual assistance, with full respect for national sovereignty, that economic imbalances within the region might be progressively eradicated. One of the essential conditions to reach these ends is a due appreciation of the socio-economic situation of the Mediterranean region. It is hoped that insight into the social and economic factors underlying development will lead to a progressive strengthening of international co-operation and to sectoral and general agreements, as well as appropriate juridical provisions of environmental matters. It is also hoped that activities under the Blue Plan will contribute to the consolidation of peace, which is the basic condition for the development and protection of the Mediterranean environment.

16. To sum up, the programme envisaged under the Blue Plan should contribute to the promotion of economic and social development of the whole Mediterranean region in a manner which will safeguard the natural systems on which sustained development depends. To achieve this purpose, the studies and activities to be undertaken under the Blue Plan will be conceived and implemented in such a way as to contribute to the achievement of the objective of the International Development Strategy for the Second United Nations Development Decade. The Declaration on the Establishment of a New International Economic Order and the Charter of Economic Rights and Duties of States will also influence the nature and scope of studies to be undertaken in the context of the Blue Plan.

17. A programme of studies has been prepared for attaining these objectives. It comprises three phases, each of which would make provision for sets of successive or simultaneous studies. These studies will cover fields as varied as soil protection, water resources, food and agriculture, industrialization and urbanization processes, energy production and consumption, tourism and coastal zone management ... All these studies will be based on a global conception deriving from the prospective approach adopted. The studies will therefore be interdisciplinary, intersectoral and integrated and will take into account the social and cultural characteristics and diversities of the countries concerned. In each of the fields to be examined, long-term trends will be identified and their effects on the environment analysed. In the light of that analysis, alternative development strategies and policies will be formulated wherever possible and brought to the attention of Governments for their consideration.

III. IMPLEMENTATION

A. Geographical coverage

18. The Blue Plan covers the entire Mediterranean basin, namely the Mediterranean Sea, its islands and the adjacent coastal zones in which socio-economic activities are governed largely by their relationship with the littoral. These coastal zones may vary in territorial depth from one area to another, depending on the problems to be considered and the nature of the disciplines involved. The Mediterranean region is recognized in this respect as constituting not a single ecosystem but, rather, a complex of ecosystems of varying dimensions, displaying certain comparable ecological and climatic features, but differing from one another according to latitude and altitude.

19. In all cases, the States concerned are the 18 coastal States of the Mediterranean region.

20. Among these coastal States, there are certain disparities and inequalities, in spite of a certain homogeneity which is due to the climate, soils and vegetation on their Mediterranean shores, and which makes them a genuine ecological community. These disparities and inequalities are reflected in the different priority concerns in different parts of the Mediterranean:

- on the one hand, there is a deficit in agricultural production with risks of food shortages and a newly-established industry to deal with problems of unemployment;
- on the other hand, there is excessive development of the seaboard and a rapidly expanding industry.

At different levels, all these activities impose strains on the natural environment, which is steadily deteriorating to a dangerous extent. This deterioration of the environment is a matter of concern for all Mediterranean countries.

B. General principles

21. The implementation of the Blue Plan is subject to the following general principles:

- 21.1. absolute respect for national sovereignty;
- 21.2. co-operation with national institutions and national experts;
- 21.3. co-operation with organizations of the United Nations system and regional intergovernmental organizations concerned. The Executive Director may also enlist the co-operation of competent and concerned non-governmental organizations;
- 21.4. account should be taken of the relevant activities in progress in various countries, including those undertaken with UNDP assistance and through multilateral and bilateral programmes.

C. Common methodology

22. Systems analysis and prospective research were considered by the Intergovernmental Meeting to be among the best methodological approaches for tackling the studies envisaged under the Blue Plan.

(a) Systems analysis

23. Unless the problems of the Mediterranean Basin are considered as a whole, there is a great danger that some will be singled out for detailed treatment while others will be ignored, and that the solutions envisaged will simply shift the onus for action elsewhere.

Hence the importance of using methods based on systems analysis, which makes it possible to study and understand a complex and changing reality.

Apart from the stable elements (constants) in a system, systems analysis should cover all the processes of change and adaptation.

24. Many relationships must be taken into account in such an analysis, but they can be reduced to three kinds:

- those reflecting a cause and effect sequence - in other words, causal relationships;
- those with divergent effects - i.e., conflictive relations;
- those that converge to produce identical effects, i.e., synergetic relations.

These are the relationships in terms of which the mechanisms of the system analysed can be described. This means at the same time that it may not always be possible to obtain a complete quantification and that it will be necessary to rely to a large extent on qualitative reasoning.

(b) The prospective approach

25. When a Government decides to embark on a large-scale land development scheme, such as the construction of a tourist complex or of an industrial port area, it usually becomes committed for 15, 20 or 30 years and must therefore anticipate the long-term effects of its action and assess in an uncertain future the evolution of contextual conditions that will influence the success of the operation. No Government can afford to ignore or fail to prepare for the future.

26. The prospective approach is a method for considering the future. In the context of the Blue Plan, it can be used to plan, select and take action now to protect the Mediterranean basin in the future.

This is the paradox of the prospective approach: it explores the future - usually the fairly distant future - in order to throw light on the decisions that must be taken in the short or medium term. Its ultimate aim is to understand the future which is now in gestation in the present situation and thus facilitate active intervention by man.

Essentially, therefore, it is a method of obtaining information and of aiding decision making, which takes proper account of the complexity of the evolution of societies.

In this sense it is clearly distinguishable from both forecasting and futurology.

27. The prospective approach is therefore essentially a method of over-all reflection with a view to simulating in a plausible and coherent manner the combined effect of several different trends that are leading a system to a future situation, of which it provides a general picture. It should be pointed out, however, that there is at present no precise and single method for the prospective approach. It will be necessary to employ a number of methods ranging from expert consultation techniques (Delphi, Cross impact ...) to the use of computerized mathematical models. But one approach will be used in preference to the others: this will be the elaboration of scenarios conceived as the construction of patterns of future evolution and change in complex social units.

28. As a method of investigating problems connected with the ecological evolution of the Mediterranean, the prospective approach has three main features to recommend it:

- as the work proceeds, it is possible to integrate the study of many branches of knowledge and, in particular, of data that do not lend themselves to quantification;
- it makes for action, intervention by man;
- it adapts well to an international context and respects State sovereignty.

29. The prospective approach is based on an open system of studies.

The methodology chosen is fairly strictly defined in order to lessen the risk of a juxtaposition of a number of studies which are not related to one another and are not therefore of any assistance in devising genuinely new courses of action.

However, the object of the study, in terms both of geography and of scope, is defined only in a very general manner, so that all new elements available can be incorporated in the course of work.

It is thus an open method which involves a constant interplay between the elaboration of an explanatory outline and the elaboration of specific courses of action. This constitutes no doubt the major advantage and the original feature of the Blue Plan, which calls for the establishment of close links with the Priority Action Programme.

30. This common frame of reference which the studies of the Blue Plan will gradually create may then be used for:

- national action by each country, as sole master of its development strategy. This frame of reference will make it easier to evaluate the impact of this strategy on the natural environment and the quality of development;
- the elaboration of joint action to be taken at the international level by means that will not infringe national sovereignty in any way.

(c) Common framework of analysis for the studies

31. Notwithstanding the features peculiar to each field, the common framework will consist of:

- identification of problems and definition of their present state in a situation which affects both the development and the environment of the region;
- indication of trends in the evolution of these problems and their effects on the environment;
- identification of aspects of these problems which are of the greatest importance for the environment, and formulation of proposals for remedial or preventive measures;
- formulation of proposals for reconciling development and environmental protection.

This does not mean, however, that an exclusively sectoral view should be adopted. The methodology chosen is such that each of the studies must satisfy the following requirements:

- it must indicate the most important relationships between the various characteristics of the field being studied and also the relationships between them and the characteristics of other fields;

- it must provide a well-founded opinion on the prospects for change and the courses of action envisaged;
- it must provide information both on the real impact of action being taken or contemplated and on the scope and the omissions of existing studies and research.

33. It is important to remember that the studies are not designed to produce a "sectoral prospective", but to supply the elements for producing a global prospective.

D. The sequence of work

34. The Blue Plan will be carried out in three phases. This breakdown into phases is necessary in order to enable Governments to direct and orient the course of the work.

35. In addition, the following preparatory and support activities will be initiated:

- 35.1. A listing of, and analysis of data concerning, the main development activities being carried out in the Mediterranean region and their consequences for the environment. The data concerning these activities should be compiled on the basis of a common methodology with a view to facilitating their comparability and assessment, as well as the transfer and exchange of data;
- 35.2. The preparation and up-dating of a directory of institutions and experts available in the region to participate in the studies and activities of the Blue Plan;
- 35.3. The launching of a number of interdisciplinary intersectoral studies in the priority fields indicated by Governments at the Intergovernmental Meeting on the Blue Plan;
- 35.4. The identification and analysis of the most significant and appropriate technical innovations, at present being applied or tested or planned in the Mediterranean region, that have a clearly beneficial impact on the environment;
- 35.5. The identification and analysis of a number of national or internationally supported projects aimed at satisfying basic human needs on a sustainable basis;
- 35.6. The progressive elaboration, on the basis of the data and the experience gathered through the studies and activities to be undertaken, of conceptual frameworks and methodologies for long-term environmentally sound development planning;
- 35.7. The intensification of co-operation to promote the transfer of technology and training in the fields covered by the Blue Plan, with priority for developing countries.

(a) The first phase: reconnaissance of the present situation

36. The first phase will consist of exploratory work on the entire field to be studied. The objective is to produce, after about a year, when the expert surveys have actually been undertaken, a preliminary assessment of the state of development and of the environment in the Mediterranean. The success of the Blue Plan will depend on the way this work is carried out. It will be for the Governments of the coastal States to take a decision, at an intergovernmental meeting held at the end of this phase, concerning the initiation of the next phase of the Blue Plan.

37. At that time it should be possible to evaluate the studies submitted and to determine whether two conditions essential to the success of the project as a whole are beginning to be met, namely:

- the establishment of genuinely interdisciplinary relationships between the expert surveys made, which should not be specialized inquiries conducted in isolation from one another;
- the promotion of scientific co-operation in the Mediterranean based on the decentralized mobilization of the entire range of expertise available in the coastal States.

38. What has been termed "the global approach to the Mediterranean ecosystem" should make it possible, during the first phase of the Blue Plan, to obtain a comprehensive picture of the condition and likely development of "natural environment" as they are affected by the components of socio-economic development. For this purpose, a number of expert surveys will be carried out on a series of interrelated subjects. This work should never be described as sectoral, since its purpose is precisely to ensure that a uniform and integrated analytical approach will be adopted in analysing the different topics.

(b) The second phase: preparation of scenarios

39. The second phase is pivotal for the work of the Blue Plan. Its content will not be definitely decided until the completion of the first phase.

40. This phase, which will last for 18 months to two years, will have three main goals:

- to make good any deficiencies revealed during the exploratory phase and to pursue, in greater depth, the studies already undertaken;
- to draw up a table of interrelationships and of their likely evolution, and to prepare a number of scenarios;
- to specify the conditions for taking a number of key measures of strategic importance for achieving the desired objectives for the Mediterranean.

Work in the second phase will be aimed at defining the specific action to be proposed to Governments in accordance with the objectives of the Blue Plan, but will be of a more comprehensive nature.

41. In this respect, the prospective investigation of Mediterranean problems could be carried out in respect of three types of situations and trends as follows:

- a scenario for reference purposes based on the development of major trends;
- the hypothesis of a breakdown due to serious short-term or structural dislocation;
- alternative development strategies of an optional nature.

42. The second phase of the work will conclude with an intergovernmental meeting which will be required to decide, inter alia, what studies or proposals for action should be included in the final documents of the Blue Plan.

The third phase: general synthesis

43. During the third phase a general synthesis will be prepared. This will be used by the Group of Co-ordination and Synthesis for preparing the presentation of the studies to an intergovernmental meeting on the Mediterranean Action Plan as a whole. The third phase will be relatively short (about six months).

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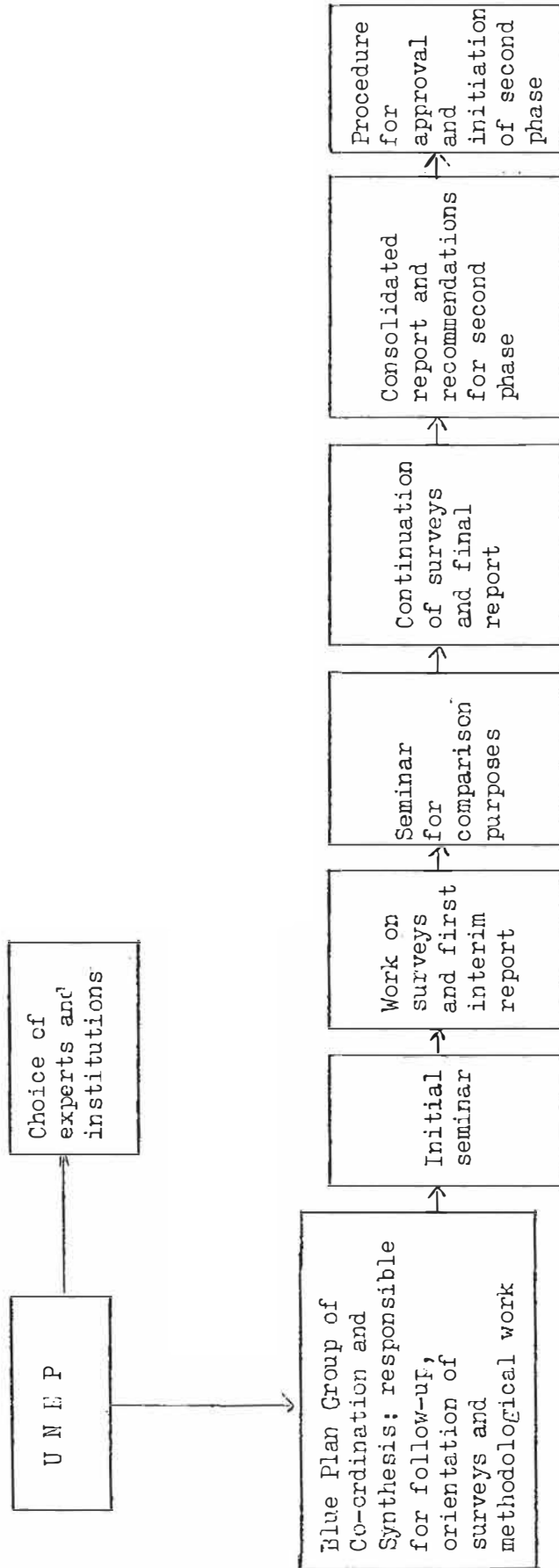


Chart 1: Organization of first phase

E. The activities of the first phase

(a) General principles of the first phase

44. The first phase is thus conceived as an exploratory phase designed to cover all the problems raised by the evolution of the Mediterranean ecosystem, and at the same time to identify rapidly a number of priority areas for reflection at the beginning of the second phase: major imbalances, short-term risks, incorrect understanding of certain problems, the need to co-ordinate action already initiated or planned ...

45. This first phase must therefore reflect a dual approach as follows:

- on the one hand, a specific approach covering a wide range of subjects and involving the services of experts;
- on the other hand, a more global and synthesizing approach, within narrower limits during this first stage but emerging from the gradually expanding activities of the Group of Co-ordination and Synthesis.

46. The enlistment of a large number of experts to work for a limited period in fields which they know well would seem to be justifiable. But in order to ensure that all these expert surveys are linked to one another, throw light on one another, do not amount to mere monographs and do contribute to the development of a general review of the problems, there must be continuing contact between the experts and the Group of Co-ordination and Synthesis, and terms of reference must be proposed for each expert.

(b) Organization of work

47. Mention must be made first of the plan which has been adopted for the first phase of the studies. A special procedure - simple but complete and decentralized - has been devised to ensure the success of the first phase, which is crucial to the entire project (see chart 1).

48. This procedure revolves around three poles:

- a series of expert surveys, covering the priority aspects which are essential for a correct understanding of the Mediterranean basin. These surveys, which are mobilizing the scientific forces of the various Mediterranean countries, are co-ordinated by a Group of Co-ordination and Synthesis;
- a Group of Co-ordination and Synthesis whose role is to prepare a synthesis of Mediterranean problems, with a view to producing scenarios (second phase); it therefore directs and monitors the work of the experts; 6/

6/ See section IV.

national co-ordination structures, which play the dual role of providing the experts with information, documentation, and local correspondents, and also of circulating to the competent authorities studies, suggestions and recommendations by the Group of Co-ordination and Synthesis. 1/

(i) A series of expert surveys

49. The series of expert surveys to be undertaken must explore everything that it is necessary to know in order to obtain a realistic and dynamic picture of the situation, and also in order to enable the Group of Co-ordination and Synthesis to prepare a preliminary global panorama of the Mediterranean basin, the trends in its evolution and the dangers it faces.

(ii) Terms of reference for the expert surveys

50. The purpose of the terms of reference for the expert surveys is to ensure that the studies undertaken by some 40 experts from various States of the Mediterranean basin are conducted in a standard framework and follow standard lines of thought. The guidelines established must therefore be included in detail in the terms of reference to be given to the experts. Apart from establishing the terms of financing and other arrangements for the studies, these terms of reference include a framework for analysis which is in each case based on a common approach.

(iii) Surveys conducted "in tandem" by one expert from the South and one from the North

51. This principle, which was proposed, discussed and finally adopted at the Intergovernmental Meeting held at Split, is designed to take into account - organically, so to speak, and from the very outset of the work - the problem of economic disparities and cultural differences in the Mediterranean basin.

(iv) A series of working seminars for the experts

52. Two working seminars are planned, as follows:

- the purpose of the initial seminar is to provide an opportunity for establishing personal contacts between the experts and the Group of Synthesis from the very outset, to initiate common thinking on the methods to be used and to draw attention to the "rules of the game";
- the seminar for comparison purposes is to be held after the experts have prepared a first draft of their study. It is intended to promote exchanges of ideas and cross-questioning between experts, and to enable the Group of Synthesis to determine the additional work to be undertaken.

1/ See section IV.

53. Each expert will be required to provide, in accordance with a timetable, three documents:

- . an annotated outline of his survey report;
- . an interim report;
- . a final report, some or all of which will be widely circulated.

The instructions or terms of reference for the surveys

(a) The table of survey topics

54. The topics for the surveys have been grouped in two major families, on the basis of two types of problem selected for the study. It must be understood that each short title - which might give the impression that the study is to be a sectoral study - should be considered in a systems analysis context. Each survey will therefore cover both the characteristics of the field being studied and at the same time the relationships between that field and the others.

55. The explanatory schema presented as table 1 is based on the concept of the Mediterranean ecosystem as a common living environment. In accordance with this concept, there are two major components:

at the base, biological resources:

Air, soil, water, terrestrial flora and fauna (only those on the immediate seaboard) and marine fauna and flora, with the emphasis placed on consumable products and the quality of the sea water;

. at the apex, the principal human activities:

In direct relationship with the Mediterranean ecosystem,

- industrialization, including thermal and nuclear power stations, agriculture, urbanization and tourism, shipping, fisheries and aquaculture;
- . between these two components, relationships are established which determine the social well-being and the equilibrium of the Mediterranean.

56. The task during the first phase will not be to study all these relationships but rather to concentrate on those that disturb the living environment with which we are concerned. In this way it will be possible to demonstrate the consequences of these relationships on the living environment, with the emphasis placed on the critical aspects of water quality and marine resources. On the basis of the analysis of trends in these relationships, proposals can then be made to Governments on courses of action to improve the quality of the marine environment and to ensure increased reproduction of all its resources. This will highlight even further the common concern, which is the protection of the Mediterranean.

Table 1: Topics of the surveys

<u>NATURAL ENVIRONMENTS</u>	<u>HUMAN ACTIVITIES</u>
<p><u>Biological resources:</u></p> <ol style="list-style-type: none"> 1. Water 2. Soil 3. Marine flora and fauna 4. Air 5. Flora and fauna of the Mediterranean littoral <p><u>Mineral and energy resources:</u></p> <ol style="list-style-type: none"> 6.- of the sea-bed and the continental shelf 7.- of the Mediterranean littoral 	<ol style="list-style-type: none"> 8. Industrialization 9. Urbanization 10. Agriculture 11. Fisheries and aquaculture 12. Maritime transport 13. Tourism 14. Soft technologies
<p>Man:</p> <ol style="list-style-type: none"> 15. Demography and health 16. Social and cultural environments, standard of living and quality of life 	
<ol style="list-style-type: none"> 17. Training, information and documentation 18. Transfer of appropriate technologies and experimentation 	

57. Parallel with the study of these relationships between the main components of the Mediterranean ecosystem, and with a view to reflecting on the future for the purpose of selecting courses of action to be taken now in order to protect the Mediterranean basin in the long term, it is necessary to undertake surveys on all the human activities and biological, mineral and energy resources in the Mediterranean basin.

There will thus be three sets of surveys:

- the first centred on environments and natural resources;
- the second centred on the main components of socio-economic development which had a direct impact on the living environment;
- the third centred on man (demography, standard of living, quality of life, health) and the social and cultural environment.

(b) Instructions for the surveys

58. In order to ensure that the work of the first phase is as effective as possible, it would seem to be necessary to give each expert a "set of instructions" explaining the aspects to be dealt with and the information to be provided. Instructions for the surveys on "components of development", and also for the surveys on "characteristics of environments", are given below in general terms. A schematic arrangement of the instructions for these two types of surveys is given in table 2. The terms of reference for other surveys are annexed to this document.

(i) Instructions for "component of development" surveys

59. The terms of reference here relate to three major questions:

- what are the essential aspects of the component of development and, on the basis of a preliminary assessment, what are the nature and the intensity of its relationships with the environment?
- in this context, what trends and prospects of change can be observed, and what are likely to be the consequences (in terms of requirements and effects) on the environment?
- to what extent are the assumptions underlying these conclusions likely to be affected by concomitant changes in the overall socio-economic situation of the areas studied, in the action of other agents, and in the state of the environments concerned?

NATURAL ENVIRONMENTS	COMPONENTS OF DEVELOPMENT
<p>1. Present situation and its historical background:</p> <ul style="list-style-type: none"> • present situation and processes under way • indications regarding the genesis of the situation: adaptations • influence of other environments <p>2. Sensitive areas and possible changes</p> <ul style="list-style-type: none"> • sensitive areas: general mechanisms, places, reasons, means of action • study of possible changes in the light of the assumptions made • testing of assumptions and of forecasts of change by reference to existing activities <p>3. Action to be initiated:</p> <ul style="list-style-type: none"> • remedial or prior control measures, in the light of the thresholds of degradation • preservation of balancing elements, and of existing and potential resources 	<p>1. Essential aspects and relationships with the context:</p> <ul style="list-style-type: none"> • general descriptive data • opinion regarding sensitive areas and strong points • past and present relationships with the environment (concept of "critical threshold") <p>2. Trends in evolution and relationships with the context:</p> <ul style="list-style-type: none"> • identification of various possible trends in the light of different internal and external assumptions • consequences on the characteristics of the environments: relationships with the critical thresholds • ideas for courses of action • ideas for crisis themes or contrasting scenarios <p>3. Extent to which assumptions may be affected by:</p> <ul style="list-style-type: none"> • socio-economic characteristics • action of other agents: concept of scarce resources as sought-after prizes • reaction of environments: nature and time of the reaction

Table 2: Schematic arrangement of the instructions for the surveys on natural environments and components of development

The component of development and its relationships with the environment:
Preliminary observations

60. The objective, during this first phase, is to obtain information and collect data of a general and descriptive nature and, in addition, to obtain an expert opinion on sensitive areas and strong points of the component concerned, thus indicating its main aspects.

What is required, however, is not a monograph-type description of a specific activity, since a mere reference to a number of existing studies would be sufficient for this purpose; it is essential rather to define the inherent dynamics of a component of development, its place in a general system and the logic of its localization in space.

61. The expert will also specify the relationships between this component and the environment, and will indicate the extent to which it has already been involved in the continuing process of the transformation of the environment. In other words, it is essential to determine the precise point that has been reached in the history of the interaction between the development of the human activity in question and the environment. This leads one to raise the question of one or more critical thresholds (understood as the limits beyond which a process becomes irreversible), of the criteria for such thresholds and of the position of certain zones and mechanisms in relation to them.

Trends in the evolution of the component and its relationship with the environment

62. The possible evolution or evolutions of a component depend not only on its inherent structure, but also on simultaneous changes in the international economic, political, and social system in which it has its place, on changes in other components and also on scientific and technological evolution.

Where an expert indicates possible trends in the evolution of a component, he must also identify each of them in relation to the others; he must indicate which is the most probable trend and must mention the internal and external assumptions on which each forecast is based.

For each of these forecasts of change, or at least for that which he regards as the most plausible, the expert must indicate what this change will call for or imply in terms of resources, both qualitatively and quantitatively.

63. At the same time, it will be necessary to determine the foreseeable effects of the evolution of this component on "environments" as defined elsewhere (soil and lands, types, water and deltas, sea, health conditions, fauna and flora ...). In particular, it is important to know the extent to which each of these changes will bring nearer or drive further away, the critical thresholds beyond which the process of transformation of all or part of the ecosystem becomes irreversible.

64. In this general context of the analysis of processes of change in the relationships between a particular development component and its environment, the expert may be led to suggest a number of possible crisis themes or contrasting scenarios which will be taken up in the second phase of the project.

At the same time, the expert will attempt to identify and list ideas for courses of action in the light of what, in his view, must be preserved in order to avoid going beyond what he regards as a critical threshold.

These ideas on courses of action, even if partial and relative, should indicate where and how action should be taken. These elements will be helpful in outlining a preliminary spatialized system for intervention in processes affecting the environment.

Extent to which assumptions are affected by other factors

65. It has already been pointed out that any change envisaged in a component of development depends on a number of assumptions. The expert must therefore ask himself whether these assumptions are well-founded:

- in the light of the socio-economic features of the zones studied, development of areas of activity being only one element in an economic and social development strategy;
- in the light of the action of other agents. Several human activities can compete ecologically both in terms of requirements and in terms of effects on the environment, and resources which are scarce then become so many sought-after prizes which may have to be allocated by arbitration;
- in the light of the reactions of environments which are subject to the demands of the development of human activities. These environments change and may in the long term constitute a new context affecting this development.

The nature of this retroactive effect of the environment, and the time it takes to develop should also be specified.

(ii) Instructions for the "environment" surveys

66. In the very wide range of problems covered, the concept of the environment is used in a rather wide sense, embracing man and his activities. In this context, the environments which are affected by developments of human activity in the Mediterranean do not have their own inherent and independent dynamics, whose direction and forms might be assessed by simulating their total independence from other elements of the global ecological system in the Mediterranean. The environment is, at any given moment, what man makes of it; and changes in it are merely the result of the action of different agents on a number of equilibria which in themselves have changed little or not at all in the course of human history.

67. The purpose of the expert's work is therefore not so much to describe the state of the various factors constituting an environment (reference to existing ecological studies would be sufficient for this purpose, as to consider the environment a support for and a stake in various activities and to identify sensitive areas - or areas in which existing equilibria are likely to be disrupted - by tracing the main lines of the establishment of new equilibria or disequilibria. Identification of the factors of change is therefore one of the main tasks of the expert.

The present situation and its historical background

68. In this first stage, the existing situation of the environment in question and the ongoing processes should be described, and some indications should be given regarding the genesis of this situation - i.e., the manner in which this environment has adapted to and has been modified by man's activities and by changes in other environments. This history may be long, in view of the time involved in certain ecological changes. It can be used to prepare a preliminary outline of relationships between the environment and other elements of the ecosystem.

Sensitive areas and possible changes

69. Sensitive areas may be geographical zones or mechanisms which are not specifically localized (for example, the interactions between several sources of pollution which produce cumulative phenomena with a multiplier effect). It is important that the expert should give the reasons for this "sensitivity" and should offer some idea of the margin of manoeuvre available.

70. On the basis of the present situation and its trends, and taking into account the sensitive areas identified, possible changes in the environment should then be considered in the light of the assumptions that can be made on the extent to which it will be used for human activities in the future, or to which it will be affected by the fall-out from such action on other environments. These changes must be evaluated quantitatively, where possible, and also qualitatively.

71. These various assumptions and the forecasts of change based on each of them must be tested by the expert, particularly by reference to the trends at present observed in the form and orientation of man's action on the environment. It must be possible to describe and distinguish between movements which seem bound to develop in any case and those which are linked to a greater extent with one or another form or intensity of human action.

Action to be initiated

72. The expert will also be required to establish a list of courses of actions which can be envisaged:

- the courses of actions must be designed to preserve what can be preserved or, whenever possible, to improve the quality (or the quantity) of the environment studied, regardless of any philosophy concerning the environment, i.e. regardless whether the environment is viewed as a stabilizing factor to be preserved in itself and a triori, or as a resource whose exploitation should be continued, or as a potential resource for which the possibilities of eventual exploitation must be safeguarded;

- one approach to be envisaged, therefore, would be to specify the thresholds of degradation which must not be reached. This negative objective (the limits which must not be gone beyond) can then be taken as a basis for proposing remedial action in respect of ongoing processes or control procedures to prevent such processes from being started.

IV. STRUCTURE OF THE PROJECT ^{8/}

A. UNEP

73. In accordance with the mission entrusted to it by its Governing Council and by the Governments of the Coastal States of the Mediterranean at the Intergovernmental Meetings held in Barcelona in 1975, and in Split in 1977, UNEP is responsible for supervising the implementation of the Blue Plan as an activity which is part of the Mediterranean Action Plan (MAP). It co-ordinates the activities of the Blue Plan with other activities of the MAP.

B. The Blue Plan secretariat

74. This is the organ responsible for the actual implementation of the Blue Plan. It is the co-ordinator of all the activities relating to the Blue Plan. It is responsible for the collection, centralization and dissemination of information on the Blue Plan.

C. The Group of Co-ordination and Synthesis

75. This Group is attached to the Blue Plan secretariat. It proposes the concepts and methods for implementing the activities of the Blue Plan. It is responsible for the co-ordination, follow-up and continuous evaluation of the implementation of the activities of the Blue Plan and of their results. It assists in the planning and organization of training courses and seminars. It is responsible for consolidating the information collected and the expert surveys relating to the Blue Plan.

D. The Scientific Advisory Council

76. A Scientific Advisory Council consisting of high-level experts from all Mediterranean countries may be convened on an ad hoc basis to give an opinion on the activities of the Blue Plan.

E. National focal points

77. The importance of national focal points was stressed at the Intergovernmental Meeting held at Split. ^{9/} The focal organization is the national organ for co-ordinating the activities relating to both the Blue Plan and the Priority Actions Programme. The meeting considered it desirable that this organ should be part of or

^{8/} See documents UNEP/IG.5/5, paras. 13-15 and UNEP/IG.5/7, as well as UNEP/IG.11/3, annex IV. For illustration, see chart 2.

^{9/} Document UNEP/IG.5/7, para. 56.

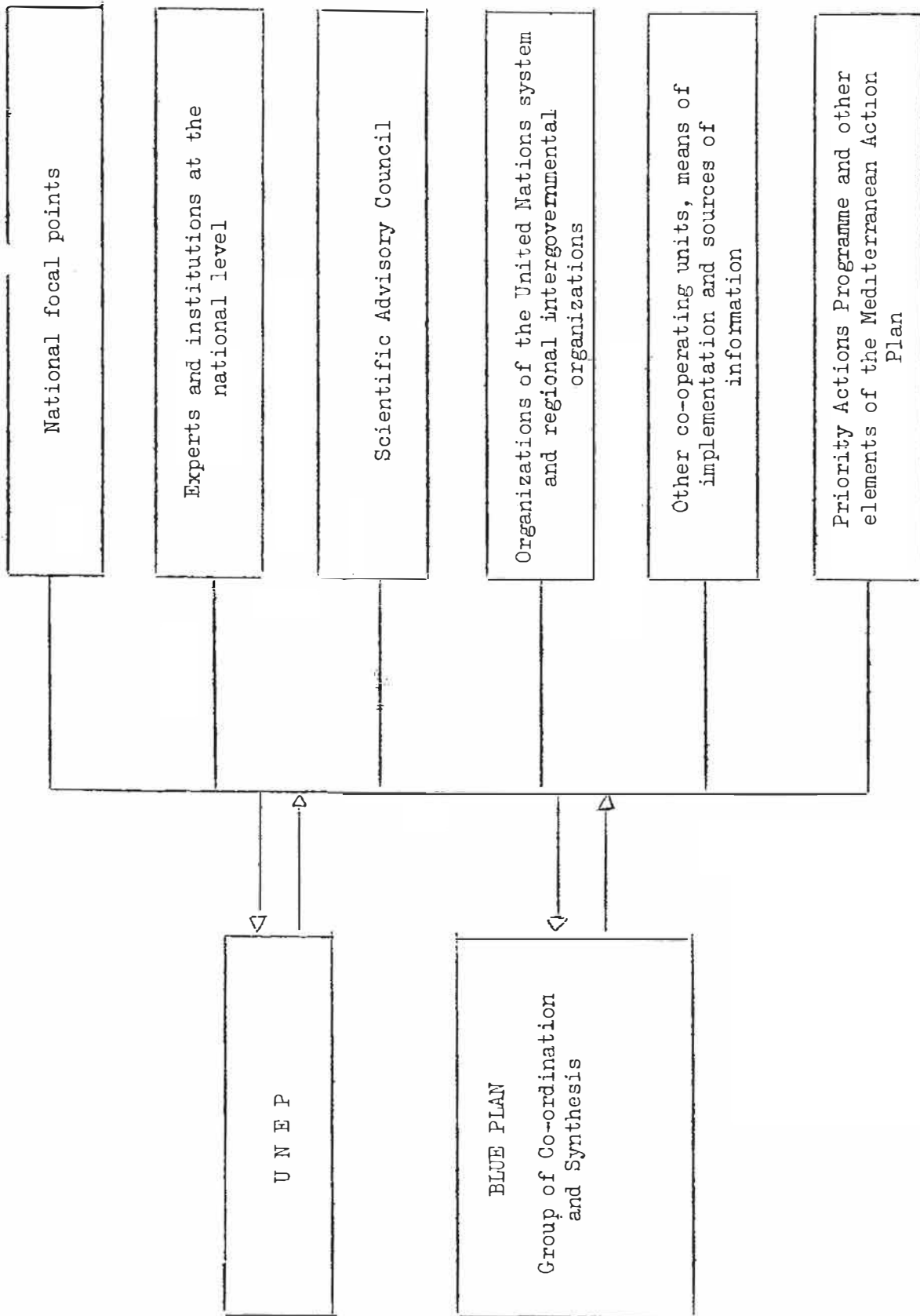


Chart 2: Simplified diagram of the structure of the Blue Plan

attached to a ministerial or interministerial organ at the highest possible level in the institutional structure of the Government, and that it should be able effectively to ensure co-ordination between national administrations and the organizations associated in the execution of the programme, and also co-ordination with other international organizations pursuing the same ends.

F. Experts and institutions

78. National experts and institutions participating in the implementation of the Blue Plan are appointed by the national focal point or, where appropriate, by the Blue Plan secretariat in consultation with the focal point of the country concerned. They may also be seconded to the Blue Plan secretariat by the Government concerned.

G. Organizations of the United Nations System and regional intergovernmental organizations

79. In accordance with the general principles approved by the Meeting at Split, the Blue Plan is being implemented in co-operation with organizations of the United Nations system and the regional intergovernmental organizations concerned. The Executive Director of UNEP may also enlist the co-operation of competent and concerned non-governmental organizations. 10/

10/ Document UNEP/IG.5/7, para. 44.3.