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Programme



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MEDITERRANEAN ACTION PLAN

Meeting of the National Focal Points for
Priority Actions Programme (PAP)

Split, 24-26 June 1987

COOPERATIVE PROGRAMME FOR SEISMIC RISK
REDUCTION IN THE MEDITERRANEAN REGION

PRIORITY ACTIONS PROGRAMME
MEDITERRANEAN ACTION PLAN

UNITED NATIONS ENVIRONMENT PROGRAMME

CO-OPERATIVE PROGRAMME FOR SEISMIC RISK
REDUCTION IN THE MEDITERRANEAN REGION

In co-operation with:
UNCHS, UNDRO, UNESCO and UNIDO

Priority Actions Programme
Regional Activity Centre
Split, May 1986

INTERREGIONAL PROJECT

PROJECT DOCUMENT

<u>TITLE</u>	Co-operative Programme for Seismic Risk Reduction in the Mediterranean Region	
<u>NUMBER</u>	INT/86	<u>DURATION:</u> Two years
<u>PRIMARY FUNCTION</u>	Institution Building	
<u>SECONDARY FUNCTION</u>	Direct support	
<u>SECTOR (ACC Class and Code)</u>	Human Settlements (09)	
<u>SUB-SECTOR (ACC Class and Code)</u>	Settlements Planning	
<u>UN EXECUTING AGENCY</u>	UNCHS (Habitat)	
<u>UN ASSOCIATED AGENCIES</u>	UNDRO, PAP/RAC(UNEP/MAP), UNESCO, UNIDO	
<u>ESTIMATING STARTING DATE</u>	January 1987	
<u>UNDP INPUTS</u>	600,000 US Dollars (\$300,000 per Regional Office: Europe and Arab States)	
<u>UNCHS, UNDRO and PAP/RAC(UNEP/MAP), UNESCO, UNIDO</u>	200,000 US Dollars	
<u>HOST COUNTRY</u>	400,000 US Dollars*	

* THIS AMOUNT WILL BE REMITTED TO UNDP BY THE HOST COUNTRY

THIS PROJECT DOCUMENT AND ITS ANNEXES CONSTITUTE THE AGREEMENT AMONG THE SIGNATORIES
Signed:

_____	Date _____
On behalf of UNCHS/Habitat	
_____	Date _____
On behalf of UNDRO	
_____	Date _____
On behalf of UNESCO	
_____	Date _____
On behalf of UNIDO	
_____	Date _____
On behalf of PAP/RAC(UNEP/MAP)	
_____	Date _____
On behalf of UNDP	
_____	Date _____
On behalf of the Host Country	

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1. Premises and development objectives of the Project

- 1.1 The Mediterranean Region belongs to one of the more active seismic zones in the world. A number of countries are frequently and regularly affected by earthquakes which cause a heavy toll in human lives, destruction of settlements and infrastructure, and losses to national economies. The level of exposure of settlements and development to earthquake disaster is continuously rising due to rapid industrialization and the concentration of population at very high densities in large, vulnerable metropolitan regions. Consequently, effective and systematic actions for the reduction of seismic risk have become imperative and urgent, as the recent Mexico earthquake has shown.
- 1.2 Following the 1963 Skopje earthquake, and the earthquakes which struck Montenegro in 1979 and El Asnam in 1980, several projects for seismic risk reduction were undertaken through the U.N. system at the regional and national levels by governments and regional institutions (such as the Programme for Assessment and Mitigation of Earthquake Risk in the Arab Region - PAMERAR). Other damaging earthquakes in Greece, Italy and Turkey should not be forgotten: Basilicata, Corinth, Erzerum, Friuli, Lice, Thessalonica, Van.

These U.N. projects include the Survey of Seismicity in the Balkan Region (REM/70/172 and REM/74/009); Earthquake Risk Reduction in the Balkan Region (RER/79/014); Building Construction under Seismic Conditions in the Balkan Region (RER/79/015); several national projects in Romania (ROM/77/003, ROM/77/004 and ROM/77/009) and Yugoslavia (YUG/68/010, YUG/75/008, YUG/77/103 and YUG/79/104). Numerous actions in seismic risk reduction have also been carried out by national governments and local authorities in the Mediterranean Region.

These projects have marked an important advance in research, scientific knowledge, technical co-operation among countries, operational and planning procedures, building, preparedness and training in seismic risk management.

Some of them are still under way in individual countries. It remains highly important to synthesize the results of these projects, to consolidate and apply these results into a single co-operative programme aimed at reducing earthquake risk in the Mediterranean Region.

- 1.3 The Priority Actions Programme of the Mediterranean Action Plan was set up in 1979 within the framework of the Barcelona Convention (1978).

In June 1985, the Priority Action Programme held an international seminar on Land use Planning in Earthquake Zones in co-operation with UNDRO and UNCHS in Cetinje, Yugoslavia. The purpose was to review problems of land use planning and emergency management in seismic-prone areas of the Mediterranean Region.

The Seminar pointed out the high level of seismic risk in the Mediterranean Region. It also provided evidence that knowledge and experience in Seismic risk management exist, and that these should be strengthened and disseminated further to reduce seismic risk in the Region.

The fourth conference of the Contracting Parties to the Barcelona Convention, held in September 1985 at Genoa, Italy, has approved, within the work plan of PAP for the 1986 - 1987 biennium, inter alia the preparation of and support for a co-operative programme for Seismic Risk Reduction in the Mediterranean Region.

1.4 Development Objectives:

Given such premises the aim of the Project, within the institutional frame provided by the Mediterranean Action Plan, is to contribute the reduction of loss of lives, community identity, income and property (social, economic and environmental) caused by earthquakes; and, consequently, to encourage the rational development, protection and enhancement of the Mediterranean environment. This objective will be achieved by the establishment of a permanent co-operation programme and a permanent system of information and exchange of experience between Mediterranean countries. The development objective is broken down as follows:

- i) to provide the basis for the formulation of appropriate national policies and programmes in seismic risk reduction, based on existing and available knowledge/experience;
- ii) to develop multidisciplinary and comprehensive approaches in seismic risk research, assessment, and management;
- iii) to introduce seismic risk reduction as an integral parts of physical planning and building;
- iv) to strengthen and develop disaster preparedness;
- v) to create public awareness and a social consciousness of seismic risk in a realistic and practical sense.

2. Strategy for Project implementation

2.1 The strategy of the Project may be summarized as follows:

- i) to assure continuity with the regional and national projects and actions for the seismic risk reduction mentioned in point 1.2; to consolidate their results and findings; to assure their incorporation in the Project;
- ii) to consider the Mediterranean Region not only as the geographic area where countries share common problems of seismic disaster, but also as an environmental, historic and cultural unity in which countries can best engage themselves in a common effort to reduce seismic risk through policies and measures at the national and regional levels;
- iii) to establish links with existing mechanisms generating relevant information as well as the results of applied research;
- iv) to produce a limited number of final outputs of wide applicability. These outputs are addressed to:
 - the decision-making level
 - the professional level
 - the public
- v) to initiate a co-operative programme, as well as a system of information and exchange of experience, between Mediterranean countries with a view to its permanent establishment;
- vi) to provide the framework for further bilateral or multilateral co-operation in areas related to seismic risk reduction.

2.2 The implementation of the Project is based on the following:

- i) Co-ordination and management of the Project as a shared responsibility of the Mediterranean countries. Countries will assume responsibility for co-ordinating and implementing selected components of the programme;
- ii) Transfer among Mediterranean countries of scientific knowledge and experience in planning, implementation and management for seismic risk reduction;
- iii) Workshops, seminars and round-tables for decision-makers as the basic tool for co-operation, exchange of information and co-ordination;
- iv) Case studies on the application of methods of assessment, planning methodologies and procedures, management systems, etc., to be reviewed and discussed in workshops and seminars by national institutions and experts;
- v) Organizing fellowships and group training programmes to reinforce the effectiveness of national policies and programmes;
- vi) The production and dissemination of guidelines, manuals and specific documents for practical use by decision-makers, professionals and institutions;
- vii) Bilateral or multilateral technical co-operation for the implementation of national projects on the basis of the results and findings of the Project.

2.3 The U.N. Agencies (UNESCO, UNIDO, UNDRO, MAP/PAP/RAC) will:

- i) Provide a supporting role for specific activities and will assist in producing a number of outputs;
- ii) Contribute to the transfer of experience and knowledge from within and beyond the Region;
- iii) Assist in the preparation and co-ordination of workshops and seminars;
- iv) Contribute to the implementation of co-operative projects between countries, and assist in the dissemination of results and findings;
- v) Co-operate among themselves in the Project according to their mandates, expertise and capabilities, as follows:
 - a) MAP/PAP/RAC in the field of environmental management and networking, acting as promotor and focal point for action and collection and dissemination of information;
 - b) UNESCO in the field seismic risk assessment;
 - c) UNDRO in the field of seismic risk management and preparedness;
 - d) UNIDO in the field of specific building technologies and construction methods suitable for earthquake-prone areas;
 - e) UNCHS in the field of integrated physical and urban planning in seismic zones.

2.4 Thematic framework and actions:

The following actions are to be organized around the thematic framework established by the Cetinje seminar of June 1985. This framework provides a logical and sequential scheme for analysis and action:

- i) Hazard:
 - Observation of seismic phenomena (instrumental networks and monitoring);
 - Seismological and seismotectonic studies/maps;
 - Seismic hazard assessment;
 - Seismic hazard mapping (macro and micro-zoning).

- ii) Vulnerability:
 - Damage analysis;
 - Vulnerability assessment of structures and systems, including life-lines.

- iii) Risk reduction and management:
 - a) Physical planning and building:
 - comprehensive physical planning (regional and local);
 - settlement planning, including land-use planning and detailed urban development planning;
 - aseismic building design and appropriate technologies
 - design of earthquake scenarios for economic, social and physical planning and disaster preparedness;
 - revision of regional economic and development plans as a function of such scenarios.

 - b) Legislation:
 - planning legislation for mitigation and reconstruction
 - seismic building codes
 - building regulations and controls
 - codes for repair and strengthening

 - c) Planning, building and engineering aspects of disaster preparedness (emergency planning and management):
 - rescue
 - shelter and related services
 - access and evacuation
 - demolition and clearance

 - d) Public awareness of earthquake hazard, vulnerability and risk:
 - public information and education
 - simulation based on earthquake scenarios, with special reference to access, rescue and evacuation.

- iv) Synthesis of Project results for the benefit of national programmes and Mediterranean co-operation (decision-making level).

Immediate Objectives:

1. To promote a systematic approach to seismic hazard, vulnerability and risk assessment for physical planning and building (development objective i).
2. To promote applied research in seismic risk reduction (development objective ii).
3. To provide methods and procedures to incorporate seismic risk reduction in the physical planning and building processes (development objective iii).
4. To promote the adoption and practise of risk management systems; and to assure the linkage of risk management organisms to planning organizations (development objective iii).
5. To promote training in seismology, engineering, aseismic construction technologies, planning and management for seismic risk reduction.
6. To promote public information on seismic hazard, vulnerability and risk and basic measures for seismic risk reduction (development objective v).
7. To synthesize knowledge in a useable and practical form for national governments at the decision-making level (for providing the basis for the formulation and implementation of relevant national seismic risk reduction policies and programmes, and for the development of permanent co-operation in the Mediterranean in this area) (development objective i).

IMMEDIATE OBJECTIVES	OUTPUTS	ACTIVITIES
<p><u>Immediate Objective 1: RISK ASSESSMENT</u></p> <p>To promote a systematic approach to the assessment of seismic hazard, vulnerability and risk; and to assure its incorporation in physical planning and building.</p> <p>Assessment includes:</p> <ul style="list-style-type: none"> a) assessment of the natural phenomenon and its modification due to local conditions; b) estimations of the vulnerability of classes of structures as a function of their design execution and maintenance; c) estimations of expected losses from varying levels of hazard and vulnerability, including losses to infrastructure and life-lines; d) estimations of secondary losses (social and economic). 	<p>1.1 Synthesis of the existing state of the art in seismic hazard, vulnerability and risk assessment.</p> <p>1.2 Application of assessment methods to selected planning and/or building programmes.</p> <p>1.3 A general methodology for the assessment of seismic hazard, vulnerability and risk, and its application to planning, implementation and management at various levels.</p>	<p>1.1.1 Collection of significant existing methods and findings and delivery to countries.</p> <p>1.2.1 Evaluation of existing methods and findings at seminars to define approaches.</p> <p>1.2.2 Preparation of studies and draft reports by countries on their selected topics.</p> <p>1.2.3 General workshop to review and discuss draft reports by countries.</p> <p>1.2.4 Preparation of studies and reports by countries.</p> <p>1.2.5 Presentation of final reports by countries at a general seminar.</p> <p>1.3.1 Preparation and dissemination of a consolidated report to countries.</p>

IMMEDIATE OBJECTIVES	OUTPUTS	ACTIVITIES
<p><u>Immediate Objective 2: RESEARCH</u></p> <p>To promote applied research in seismic risk reduction.</p> <p>Immediate objective 2 is complementary to immediate objective 1 because it provides the inputs necessary for risk assessment as a whole.</p>	<p>2.1 Inventory of the specialized institutions and scientific organizations and their programmes.</p> <p>2.2 Setting up of input data for planning, implementation and management of seismic risk reduction.</p> <p>2.3 Normalized data classification system.</p>	<p>2.1.1 Inventory of specialized institutions and research organizations and its delivery to countries.</p> <p>2.2.1 Ad hoc meeting to review above inventory to identify inputs needed by planners and risk managers.</p> <p>2.2.2 Preparation of studies and draft reports by countries on their selected topics.</p> <p>2.2.3 General workshop to review and discuss reports by countries.</p> <p>2.3.1 Preparation and dissemination of a consolidated report.</p>

IMMEDIATE OBJECTIVES	OUTPUTS	ACTIVITIES
<p><u>Immediate Objective 3: METHODS AND PROCEDURES</u></p> <p>To provide methods and procedures to incorporate seismic risk reduction in the physical planning and building process.</p>	<p>3.1 Overview of existing examples, methods and procedures in planning for seismic risk reduction.</p> <p>3.2 Provision of methods and procedures to the preparation and implementation of physical and urban plans with respect both to existing and future development. Adoption of criteria for defining acceptable seismic risk</p> <p>3.3 Provision of methods and procedures for aseismic constructions technology.</p> <p>3.4 Appropriate planning methodologies for the preparation and implementation of physical and urban plans with respect both to existing and future development at acceptable levels of risk.</p>	<p>3.1.1 Review of significant plans and projects for seismic risk reduction.</p> <p>3.2.1 Ad hoc meeting for the evaluation of the above, and to define approaches.</p> <p>3.2.2 Preparation by countries of studies and draft reports of physical and urban plans and/or implementation projects for seismic risk reduction (existing and future development).</p> <p>3.2.3 General workshop to review and discuss draft reports by countries</p> <p>3.2.4 Preparation of final studies and reports by countries.</p> <p>3.2.5 Presentation of final reports by countries at general seminar.</p> <p>3.3.1 Review of appropriate aseismic building technology.</p> <p>3.3.2 Ad hoc meeting for the evaluation of the above and the definition of approaches (jointly with 3.2.1)</p> <p>3.4.1 Preparation and dissemination of a consolidated report to countries.</p> <p style="text-align: right;">.../...</p>

IMMEDIATE OBJECTIVES

Immediate Objective 3: (CONTINUED)

OUTPUTS

3.5 A glossary of conceptual and practical terms in the areas of seismic hazard vulnerability and risk which can be used to develop activities and projects on a common basis in the Mediterranean Region.

ACTIVITIES

3.5.1 Preparation of a glossary of conceptual and methodological terms, and technical terms in risk reduction (inter-agency)

IMMEDIATE OBJECTIVES

Immediate Objective 4: RISK MANAGEMENT

To promote the adoption and practise of risk management systems; and to assure the linkage or risk management organisms to planning organizations.

OUTPUTS

- 4.1 Application of risk management systems to specific cases.
The output refers to emergency plans and permanent structures for their operation; the operation of seismic monitoring networks and emergency warning; design and construction controls based on building codes and regulations; funds, laws and organization for relief, recovery and rehabilitation; etc.
- 4.2 Normalized systems and measures for seismic risk management at the national and regional levels.

ACTIVITIES

- 4.1.1 Ad hoc meeting to define national and regional needs and to identify common approaches.
- 4.1.2 Preparation of studies and reports by countries on systems and means for risk reduction and management, with particular reference to the interface between prevention and preparedness.
- 4.1.3 General workshop to review proposals.
- 4.2.1 Preparation and dissemination of a consolidated report to countries.

IMMEDIATE OBJECTIVES

OUTPUTS

ACTIVITIES

Immediate Objective 5: EDUCATION AND TRAINING

To promote training in seismology, engineering, aseismic construction technologies, and planning and management for seismic risk reduction.

5.1 Training programmes and curricula.

5.1.1 Preparation of the fellowship programme and training courses.

5.2 Increase in trained personnel.

5.2.1 Implementation of the above.

IMMEDIATE OBJECTIVES

Immediate Objective 6: PUBLIC INFORMATION AND AWARENESS

To promote public information and awareness on seismic hazard, vulnerability and risk and basic measures for seismic risk reduction.

OUTPUTS

- 6.1 Public information and awareness programme.
- 6.2 Implementation of the programme.

ACTIVITIES

- 6.1.1 Preparation of a regional programme of public information.
- 6.2.1 Implementation of the programme.

IMMEDIATE OBJECTIVES

OUTPUTS

ACTIVITIES

Immediate Objective 7: DECISION-MAKING

To synthesize knowledge in a useable and practical form for national governments at the decision-making level, for providing the basis for the formulation and implementation of relevant national seismic risk reduction policies and programmes, and for the development of permanent co-operation in the Mediterranean in this area.

7.1 Synthesis of acquired knowledge and guidelines for national policies.

7.1.1 Assembly for current knowledge on methods and techniques for policy-making in seismic risk reduction.

7.1.2 Synthesis of acquired knowledge relevant for the formulation of national policies/programmes.

7.1.3 Round-tables for decision-makers.

7.2.1 Production of guidelines for decision-makers.

7.2.2. Summary of project results.

7.2 Guidelines for decision-makers.

7.3 Summary and synthesis of project results for decision-makers.

7.3.1 Final conference at the decision-making level.

4. Workplan

4.1 The finalization and approval of the Project document are expected by the end of 1986. The Project itself will have a duration of two years (1987-1988), and will be executed in three phases.

PHASE ONE - 1987 (six months):

- a) A review of relevant national and regional experiences, projects and activities.
- b) Identification of relevant institutions in the Mediterranean Region and securing of their co-operation with the Project.
- c) Identification of needs in the field of seismic risk assessment and management at the national and regional levels in the area of prevention and preparedness, and assessment of appropriate approaches.

PHASE TWO - 1987/1988:

- d) Execution of activities by objectives.
- e) Training programmes.
- f) Round tables and expert meetings.
- g) Preparation of guidelines, manuals and audio-visual material for the follow-up of the Project.

It is expected that the achievements of the Project will constitute the basis for future permanent co-operation between Mediterranean countries in the area of seismic risk reduction.

PHASE THREE - 1988/1989:

- h) Evaluation of outputs and results of the Project.

ACTIVITIES	1987			1988			1989												
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	
<u>I. OBJECTIVE 5 (EDUCATION/TRAINING)</u>																			
5.1.1 Preparation of fellowships programme																			
5.2.1 Fellowships																			
5.3.1 Synthesis of Project's results																			
5.3.2 Final conference for follow-up																			
<u>I. OBJECTIVE 6 (PUBLIC INFORMATION)</u>																			
6.1.1 Preparation of public information programme																			
6.2.1 Implementation of the programme																			
6.3.1: Summary of results																			
<u>I. OBJECTIVE 7 (DECISION-MAKING)</u>																			
7.1.3 Round table for decision-makers																			
7.3 Final conference																			

Phase 1: Review of needs at national and regional levels

Phase 2: Implementation

Phase 3: Evaluation and reporting

7th

8th

5. INPUTS

Description of the inputs to the Project (duration of 24 months), with reference to the budget lines, is the following:

10 PROJECT PERSONNEL

11.01 U.N. Chief Technical Adviser (24 man-months)

Under the leadership of a Co-ordinating Committee he will fulfill the following tasks:

1. Assist in implementing the decisions of the Co-ordinating Committee; prepare work-plans; assist in the co-ordination of the Project's activities in co-operation with the participating countries; monitor the progress of the Project; assist in the evaluation and dissemination of the outputs of the Project;
2. Liaise with the participating UN agencies and co-ordinate their inputs;
3. Advise national authorities and national Project Co-ordinators on matters related to the programming and implementation of the Project;
4. Support the national institutions and experts in the field of methodology, interdisciplinary approaches, exchange of information and experience for the implementation of national projects;
5. To supervise the administrative and technical operations of the Project;
6. Act as Secretary to the Co-ordinating Committee

He will be a highly qualified planner and senior expert in the areas of physical and urban planning, multidisciplinary projects of development and seismic risk reduction; and will have a wide experience of administration and management of training programmes.

5. INPUTS (continued)

17.01 Host Country Project Manager (24 man-months)

In close connection with the Chief Technical Adviser his tasks will be:

1. To assist the Co-ordinating Committee, and national personnel in scientific matters related to seismic hazard, vulnerability and risk assessment, interdisciplinary approaches and their application to the activities to be carried out in the Project and the national projects;
2. To monitor the needs of the countries for the design and implementation of national projects and proposals at the regional level;
3. To prepare and carry out programmes for the review of the existing state of the art and experience in research, planning and management for seismic risk reduction;
4. To prepare the programmes of workshops and seminars, education, training and public information, and to assist in evaluating their results; and to arrange records and documentation for delivery to countries;
5. To assist in the co-ordination of the activities in the Project for the exchange of information and experience;
6. To define specific profiles, tasks and contributions by the Consultants to the workshops and seminars and production of other outputs in the Project.

He will be a highly qualified scientist in geophysics and/or engineering seismology and/or senior structural engineer with wide experience in research and building design as function of seismic risk reduction, and familiar with training programmes and multidisciplinary projects of research and/or development.

5. INPUTS (continued)

11.60 Consultants (42 man-months)

Scientific and professional profiles of the Consultants will fill one or more of the following disciplines:

- a. Seismology, seismo-tectonics and engineering seismology (UNESCO/UNDRO);
- b. Geology and engineering geology (UNESCO/UNDRO);
- c. Earthquake engineering and control of building design and construction (UNIDO);
- d. Physical planning, land use planning, urban design and architecture (UNCHS/UNDRO);
- e. Economics, economic planning and sociology of recovery and rehabilitation (UNCHS);
- f. Protection of the environment and natural resources (UNEP);
- g. Systems' analysis (UNCHS);
- h. Preparedness (UNDRO/UNCHS);
- i. Programming of training and education (all agencies).

Tasks of the Consultant will be the following:

1. Phase 1 (preparation): to assist in the review of the existing state of the art and experience in research planning and management for seismic risk reduction, and monitoring of the needs of countries at national and regional levels;
2. Phase 2 (implementation): to participate actively in workshops and seminars, to guide work and discussions in the areas of their specific competence, to advise the national institutions and experts, and assist in evaluating the results of national projects; to prepare papers and documents for workshops and seminars; to collect data and information and prepare evaluation reports; to prepare education and training and public information programmes;
3. Phase 3 (evaluation): to assist in the evaluation of the final results of the national projects and the formulation of proposals of co-operation between countries at national and regional levels.

5. INPUTS (continued)

13. ADMINISTRATIVE SUPPORT PERSONNEL

The necessary support personnel will be provided to the Chief Technical Adviser and for meetings of the Co-ordinating Committee and National institutions and experts. It will include the personnel in charge of interpretation, translation, typing and reproduction of documents as well as of administrative operations.

15. OFFICIAL TRAVEL

The budget line covers regular advisory missions of the Chief Technical Adviser to the participating countries.

16. OTHER COSTS

The budget line covers the attendance of the representatives of the Executing Agency in the meetings of the Co-ordinating Committee.

30. TRAINING

31. FELLOWSHIPS

Thirty fellowships will be granted in the Project in decision-makers, administrators and professionals on the base of agreements between sponsor (host) countries and recipient (guest) countries. Total cost will be equal to 100,000 US Dollars (20 fellowships x 5,000 US \$).

It is expected that approximately ten Mediterranean countries will benefit from these fellowships. Fellowships will take place between 1987 and 1988 according to the programme to be approved by the Co-ordinating Committee.

Fellowships will be arranged in the following areas:

- a. Assessment of seismic hazard, vulnerability and risk and inputs to planning, implementation and management;
- b. Prevention: physical and urban planning, implementation projects, earthquake engineering, legislation;
- c. Preparedness (emergency management): relief, planning, emergency management, recovery and rehabilitation.

5. INPUTS (continued)

32. GROUP TRAINING

Workshops and seminars have been combined. The time-schedule of the workshops and seminars is the following:

1. April 1987: Ad hoc meeting (1.2.1) (2.2.1)
2. July 1987: Ad hoc meeting (3.2.1) (3.3.2) (4.1.1)
3. September 1987: Workshop (1.2.3) (2.2.3)
4. November 1987: Workshop (3.2.3) (4.1.3)
5. February 1988: Seminar (1.2.5)
6. July 1988: Seminar (3.2.5)
7. October 1988: Round Table for decision-makers (7.1.3)
8. December 1988: Final Conference (7.3)

5. INPUTS (continued)

40. EQUIPMENT

41. EXPENDABLE EQUIPMENT

Expendable equipment will include leterset, specialized drafting materials and other essential supplies required by the Project as well as technical books and publications.

42. NON-EXPENDABLE EQUIPMENT

Office equipment and tools:

Provision will be made for the following:

- two electronic typewriters (IBM or similar);
- four dictating machines and two transcribing sets;
- two micro-computers/word processor with software;
- two drafting machines and ancillary equipment;
- three desk calculators, one medium size photocopier, offset stencil copier and ancillary equipment and expendable materials.

Communications and training equipment:

Provision will be made for the following:

- overhead, 16 m/m film and 35 mm slides projectors with screens;
- complete video-equipment (camera, recorder, TV monitors);
- art work and reproduction equipment and expendable materials;
- camera equipment and accessories;
- audio-visual recorders, transcribers and associated aids and equipment.

50 MISCELLANEOUS

51 Miscellaneous

The budget line includes reporting and publication costs.

PART III : BUDGETS

1. INPUTS WITH UN CONTRIBUTIONS

1.1 PROJECT BUDGET COVERING UNDP CONTRIBUTION (IN UNITED STATES DOLLARS)

COUNTRIES : In the Mediterranean Region
 PROJECT NUMBER : INT/86/CODE NUMBER
 PROJECT TITLE : Cooperative Programme for Seismic Risk Reduction in the
 Mediterranean Region

BUDGET COMPONENTS	TOTAL		1987		1988		
	m/m	US\$	m/m	US\$	m/m	US\$	
10	<u>PROJECT PERSONNEL</u>						
11.	International professionals						
11.01							
	Chief Technical Adviser	24	144,000	12	72,000	12	72,000
11.02	Consultants:						
	A level	10	75,000	6	45,000	4	30,000
	B level	32	176,000	20	110,000	12	66,000
11.99	Sub-Total	66	395,000	48	227,000	28	168,000
13.	Administrative support personnel		30,000		15,000		15,000
15.	Official travel		19,000		9,500		9,500
16.	Other costs		5,000		2,500		2,500
17.	Host country project manager	24	72,000	12	36,000	12	36,000
19.	Component Total		521,000		290,000		231,000
30	<u>TRAINING</u>						
31	Fellowships		100,000		30,000		70,000
32	Group Training:						
	A - Decision-makers workshops		100,000		40,000		60,000
	B - Public awareness		90,000		40,000		50,000
	C - Group training		302,000		220,000		82,000
39	Component Total		592,000		330,000		262,000
40	<u>EQUIPMENT</u>						
41	Expandable equipment		20,000		10,000		10,000
42	Non-Expandable equipment		15,000		7,500		7,500
49	Component Total		35,000		17,500		17,500
50	<u>MISCELLANEOUS</u>						
51	Miscellaneous		52,000		11,000		41,000
59	Component Total		52,000		11,000		41,000
99	Project Total	90	1,200,000	60	648,500	30	551,500
100	<u>COST-SHARING</u>						
101	Cost-sharing (UNCHS, UNDRO, UNIDO, PAP/RAC)		200,000*		100,000		100,000
103	Third-party cost-sharing (Contracting Parties to Barcelona Convention)		400,000		300,000		100,000
109	Component Total		600,000		400,000		200,000
999	UNDP Total		600,000		400,000		200,000

* In cash and/or in kind

PART III : BUDGET (CONTINUED)

1.2 PROJECT BUDGET COVERING COST-SHARING CONTRIBUTION (IN UNITED STATES DOLLARS)

COUNTRIES : In the Mediterranean Region
 PROJECT NUMBER : INT/86/CODE NUMBER
 PROJECT TITLE : Cooperative Programme for Seismic Risk Reduction in the
 Mediterranean Region

Budget Line	Total	UNDP	UN Agencies	
			UNCHS/UNDRO/UNESCO UNIDO/PAP/RAC(UNEP/MAP)	Host Country
11.99	395,000	225,000	120,000	50,000
13	30,000			30,000
15	19,000	14,000		5,000
16	5,000	5,000		
17	72,000			72,000
31	100,000		50,000	50,000
32	492,000	356,000		136,000
49	35,000			35,000
51	52,000		30,000	22,000
	<u>1,200,000</u>	<u>600,000</u>	<u>200,000</u>	<u>400,000</u>
		- UNDP/ Europe: 300,000		
		- UNDP/ Arab States 300,000		

ANNEX 1

LEGAL CONTEXT

1. Reference to the Barcelona Convention of the Mediterranean countries and other Contracting Parties to the same Convention for the environmental protection of the Mediterranean Region through the Mediterranean Action Plan.
2. Reference to the Assistance Agreements between the Governments of the Mediterranean countries and the United Nations Development Programme.
3. Reference to Memoranda of Agreement between the U.N. Agencies.

SPECIAL CONSIDERATIONS

The objective of the Project being to contribute to the reduction of loss of lives, community identity, income and property (social, economic, cultural and environmental) caused by earthquakes, the Project will actively and directly contribute to the following two global achievements:

1. Preservation and improvement of the physical environment:

Through the mitigation of seismic risk the Project will promote the rational development, protection and enhancement of the Mediterranean environment. ..

2. Co-operate between countries:

In this respect the Project will contribute:

- i) to the establishment of permanent co-operation among the Mediterranean countries in the fields of planning and management for seismic risk reduction, and
- ii) to the establishment of a permanent system of information and exchange of experience on the subject between those countries.

INSTITUTIONAL FRAMEWORK1. NETWORK:

The Project: "Seismic Risk Reduction in the Mediterranean Region" will be developed as a regional network of national institutions in the areas of research, planning, implementation and management in view of the establishment of a permanent process of technical co-operation, information and exchange of experience among the Mediterranean countries for the reduction of seismic risk.

2. CO-ORDINATING COMMITTEE:

As the Programme is co-operative in nature, co-ordination and management of the Project must be a shared responsibility of the countries in the Mediterranean Region. Consequently a Co-ordinating Committee of the Project will be set-up. It will have the responsibility of planning, implementing and evaluating the technical co-operation programme among the Mediterranean countries, and in particular, to assist in developing national projects, to transmit the experience of such projects to the Mediterranean Region as a whole, and to promote specialized services for the seismic risk reduction at the regional level.

Participating Mediterranean countries will nominate their representative in the Co-ordinating Committee. He will have voting rights. The participating UN agencies will be represented in the Co-ordinating Committee, without voting right.

The Co-ordinating Committee will meet at least three times over the 2-year period. The Chief Technical Adviser will act as secretary to the Committee.

3. UN AGENCIES PARTICIPATING TO THE PROJECT:

The UN agencies, UNCHS, UNDRO, UNESCO, UNIDO and PAP/RAC (UNEP/MAP), will provide technical assistance on specific topics.

The Project will be executed by UNCHS/Habitat through the Technical Co-operation Division, AWAE Unit in the UNCHS Headquarters, Nairobi. It will be posted in a selected host country of the Mediterranean Region.

4. CONDITIONS OF IMPLEMENTATION:

Programme activities will take place in different countries participating in the Project.

The Programme staff will consist of the Chief Technical Adviser and the host country Project Manager, and administrative support personnel. The Project will also comprise a multidisciplinary team of scientists and professionals (physical urban planners, seismologists, engineers, civil protection specialists, legal experts, etc.) to work on specific assignments in the Project/countries.

MONITORING, EVALUATION AND REPORTS

1. MONITORING REVIEWS:

The Project will be subject to periodic reviews in accordance with the policies and procedures established by UNDP and in keeping with those established through the Barcelona Convention within the framework of the Mediterranean Action Plan.

2. EVALUATION:

The Project will be subject to evaluation after 18 months of operation in accordance with the policies and procedures established by UNDP. Terms of reference of the evaluation and its organization will be decided by consultations between the Co-ordinating Committee, UNDP and the UN Executing Agencies.

3. REPORTS:

The Chief Technical Adviser and the Host Country Project Manager, will prepare the periodic reports and the terminal report. A schedule of reports at six months intervals should be established from the date of inception of the Project.

TABLE 1

ALLOCATION OF CONSULTANTS MAN-MONTHS AMONG ACTIVITIES IN 1987 AND 1988

Immediate Objectives	ACTIVITIES		Duration of activities	man-months of consultants	
				1987	1988
1. Risk Assessment	1.1.1	Collection of methods	2 months	2.0	
	1.2.1	Seminars to define approaches	1 week	1.0	
	1.2.2	Preparation of studies	4 months	-	
	1.2.3	General workshop to review studies	1 week	1.0	
	1.2.4	Preparation of final studies	4 months	-	-
	1.2.5	General seminars to review final studies	1 week	-	1.0
	1.3.1	Dissemination of coordinated report	2 months	-	2.0
2. search	2.1.1	Inventory of institutes	2 months	2.0	
	2.2.1	Workshop to identify needed inputs	1 week	1.0	
	2.2.2	Preparation of studies	4 months	-	
	2.2.3	General workshop to review studies	1 week	1.0	
	2.3.1	Dissemination of consolidated report	2 months	2.0	
3. Methods and Procedures	3.1.1	Review of planning experience	2 months	2.0	
	3.2.1	Seminars to define approaches	1 week	1.0	
	3.2.2	Preparation of plans and projects	6 months	-	-
	3.2.3	General workshop to review studies	1 week		1.0
	3.2.4	Preparation of final studies	4 months		-
	3.2.5	General seminar to review final studies	1 week		1.0
	3.3.1	Review of aseismic building techn.	4 months		-
	3.3.2	AH meeting for evaluation and approaches of above with (3.2.1)	1 month		
	3.4.1	Dissemination of consolidated report	2 months		2.0
	3.5.1	Glossary of terms	3 months	3.0	
4. Risk Management	4.1.1	Workshop to identify needs and approaches	1 week	1.0	
	4.1.2	Preparation of systems	7 months	-	-
	4.1.3	General workshop to review proposals	1 week		1.0
	4.2.1	Dissemination of consolidated report	2 months		2.0
5. Education and Training	5.1.1	Programme of fellowship, study tours	2 months	2.0	
	5.2.1	Works of fellowships, study tours	16 months		-
6. Public Information	6.1.1	Programme of public information	3 months	3.0	
	6.2.1	Works of programme	14 months	-	-
7. Decision-Making	7.1.1	Programme	1 month	1.0	
	7.1.2	Synthesis of acquired knowledge relevant for the formulation of national policies	2 months	2.0	
	7.1.3	Round Tables	1 week	1.0	
	7.2.1	Guidelines for decision-makers	2 months		2.0
	7.2.2	Summary of projects results	3 months		3.0
	7.3.1	Final Conference on decision-makers level	1 week		1.0

ANNEX 6

CALENDAR OF MEETINGS

No.	Title and Objectives	Time	
1.	Ad Hoc Meeting of Experts to define related to assessment of seismic hazard, vulnerability and risk and their incorporation in planning, implementation and management for the seismic risk reduction.	April	1987
2.	Ad Hoc Meeting of Experts to define the approaches relative to: (a) practices in methodologies and procedures designed to incorporate the seismic risk factors in the preparation of physical and urban plans and projects; (b) risk management systems and linkage of risk management organisms to planning organizations; and (c) appropriate aseismic building technologies and approaches to earthquake engineering.	July	1987
3.	Workshop to review studies related to: (a) seismic hazard, vulnerability and risk; and (b) planning, implementation and management of seismic risk reduction.	September	1987
4.	Workshop to review studies related to (a) incorporation of seismic risk factors in the preparation of plans and implementaiton projects; and (b) risk management systems.	April	1988
5.	Seminar to review final studies related to the asesment of seismic hazard, vulnerability and risk, and its incorporation in the seismic risk reduction practice.	February	1988
6.	Seminar to review final studies on methodologies and procedures designed to incorporate the seismic risk factors in the preparation of plans and implementation projects.	July	1988
7.	Round Table for decision-makers to review guidelines for national policies based on the existing knowledge and practices.	October	1987
8.	Final conference for decision-makers to review the synthesis of the Project.	December	1988