ANNEX III

# STAP ROSTER EXPERT REVIEW Ray C. Griffiths Marine Scientific and Environmental Consultant

# IMPLEMENTATION OF THE STRATEGIC ACTION PROGRAMME TO ADDRESS POLLUTION FROM LAND-BASED ACTIVITIES IN THE MEDITERRANEAN REGION

## Mr Griffiths states

Since the appraisal's main purpose is to draw attention to weaknesses in the proposal (to facilitate remedy) rather than to its strengths, the following observations are inevitably in a negative tone; however, overall, the project is worthwhile, and builds on the good long-term work of the Mediterranean Action Plan. Its financing through GEF is fully justified.

# He identifies a series of Key issues which have been addressed in revising the project brief.

1. Scientific and technical soundness of the project: In which he notes that nothing is stated about data quality assurance and the scientific difficulties of assessing pathways and sinks. UNEP accepts these points and has amended the brief to accommodate the first issue raised. Regarding the difficulties of assessing pollutant sources, pathways and sinks UNEP acknowledges the difficulty of determining absolute values but comparative importance is a necessary pre-requisite for establishing the transboundary priority of hot spots and must be attempted.

2. *Overall objective*: Mr Griffiths proposals regarding the rewording o the objectives have been addressed in the revision and UNEP notes that his comments in this regard were extremely helpful in improving the clarity of the draft. A number of the reviewers comments parallel those of the GEF Secretariat regarding the preparatory nature of the proposed actions and these have been fully addressed in this revision.

Mr Griffiths further notes that:

- the project has value but also notes the difficulties associated with alternate modes of disposal of pollutants such as heavy metals;
- the project responds to the GEF objectives of sustainable development of land-based activities combined with protection of international waters by reduction of marine pollution and conservation of biodiversity;
- the collaboration achieved by UNEP since 1975 is remarkable, given that the region is one of considerable north-south, east-west, temperate-desertic, developed-developing, richpoor, cultural and religious polarities and this project must exploit that advantage, he concludes that the regional institutional context is sound.
- a very important, indirect, benefit of the proposed project, in global environmental terms, if it is reasonably successful in achieving its objectives, would be the example it would set for other regions (e.g., Caribbean, south-east Asian seas, etc.) of the feasibility of regional co-ordination and co-action of the riparian states in managing regional, land-based sources of pollution and thus in protecting the regional marine environment.
- if the project enjoys full success, GEF's strategies and policies will have been justified, at least with respect to the Mediterranean region. Mr Griffiths notes the need for objective careful monitoring and evaluation a point that UNEP has noted and will accommodate in the elaboration of the full project document.

Mr Griffiths lists a number of secondary issues which have been addressed in the revised project brief or which will be addressed during the finalisation of the full project document. These include: linkages to other focal areas; linkages to other programmes and action plans at regional and sub-regional levels: other beneficial or damaging environmental effects: degree of involvement of stakeholders in the project: capacity-building aspects: and innovativeness of the project.

Annex III

### STAP EXPERT APPRAISAL

### IMPLEMENTATION OF THE STRATEGIC ACTION PROGRAMME TO ADDRESS Project title: POLLUTION FROM LAND-BASED ACTIVITIES IN THE MEDITERRANEAN

## REGION

The following appraisal is based on the Terms of Reference for Technical Review of Project Proposals provided by UNEP/GEF Co-ordination Office, International Waters Programme. Since the appraisal's main purpose is to draw attention to weaknesses in the proposal (to facilitate remedy) rather than to its strengths, the following observations arc inevitably in a negative tone; however, overall, the project is worthwhile, and builds on the good long-term work of the Mediterrancan Action Plan. Its financing through GEF is fully justified.

### **KEY ISSUES**

Scientific and technical soundness of the project: Although the Contracting Parties decide what the 1. standards of marine environmental "quality" to be set and achieved will be, based on the best available scientific and technical knowledge and understanding, nothing is said about how this quality will be monitored to ensure that it is being "sustained". The experience of the Mediterranean Action Plan and of other international organizations, world-wide, has shown that it is practically and technically difficult to monitor environmental quality (especially of water, sediments and organisms) on a regional basis. Carcful, regular, and successful, intercalibration of analytical results is needed and is hard to ensure, even on a small regional basis.

Since the SAP MED is, essentially, a new phase of the pollution component of the Mediterrancan Action Plan, though with an emphasis on pollution control, it will certainly exploit the experience gained under MAP, but the realities of assessing pollutant sources, pathways and sinks are formidable obstacles to the evaluation of the relationship between the source (site, quantities and discharge rates) on land, and the environmental quality of the coastal sea. Although there are provisions for the monitoring of rivers among the activities proposed, estuaries and deltas are not specifically mentioned, yet are usually the sites of drastic transformations between riverine loads and coastal-sea inputs, and should be given special attention.

2. Identification of the global environmental benefits and/or drawbacks of the project: To the extent that the project substantially improves the management, and reduction, of land-based sources of pollution, it will contribute to: creating a cleaner Atlantic Ocean; improving the air quality of the region, which would have appreciable health benefits for human beings and farm/domestic animals and plants (agricultural and forestry); it would also contribute to reducing the amount of "greenhouse" gases in the atmosphere, which would be felt outside the Mediterranean region. However, many of the elemental pollutants (notably, heavy metals), whatever the shared-management applied, still have to be disposed of; in other words, good sinks have to be found for them, and undisturbed sea-floor sediments are probably one of the best, whereas discharge of nonbiological, contaminated waste into landfills may lead to leaching of some contaminants into the surrounding soil and/or water bodies, and incineration mainly discharges such pollutants into the atmosphere. Dilution in the sea is, up to a point (still not precisely known), another medium-term sink

#### 3. How the project fits within the context of the goals of GEF, as well as its operational strategies,

programme priorities, GEF Council guidance and the provisions of the relevant conventions: The project responds to the GEF objectives of sustainable development of land-based activities combined with protection of international waters by reduction of marine pollution and conservation of biodiversity.

The project is of an essentially structural/institutional/financial nature, so can be said generally to pursue GEF objectives. A reservation may be made, however: the project is said to fall within the GEF Waterbody-based Operational Programme, although the Project's aims are directed not only at the "commons" of the Mediterranean Sea (notably coastal water-quality enhancement and fisheries), but also, in practice, at the coastal zone and, indeed, the human activities (agriculture, industry, forestry, urban life etc.) in the hinterland of the Mediterranran region. However, for successful environmental management, the Mediterranean Sea must be treated as a whole, and the "national" elements should, ideally, be totally subordinated to the regional requirements. This is not the case, either in practice or within the context of this project.

4. Regional context: The regional institutional context for this project was established in 1975, with the adoption of the Mediterranean Action Plan and then the Barcelona Convention, in 1976, followed by the Land-based Protocol, in 1980. However, a useful foundation had already been laid through the Co-operative Investigations in the Mediterranean of the Intergovernmental Oceanographic Commission of UNESCO, the Food and Agriculture of the United Nations' General Fisheries Council for the Mediterranean and the International Commission for the Scientific Exploration of the Mediterranean Sea, adopted in 1967 (lasting till the appearance of UNEP and the preparations for MAP, about 1973), although all three bodies remain active in the region.

The regional geographical context is based on the fact that the Mediterranean Sea is a semi-enclosed sea with some specific characteristics: the very high proportion of sea area to the area of its drainage basin, due mainly to: (1) on the northern side, in particular, in Turkey and in the south-western part, the strong development of mountain ranges with generally steep slopes into the sea, hence with relatively little "continental" shelf (to which most of the fisherics and offshore mining are confined, for technical, financial and biological reasons), and which goes a long way to explaining many of the features of the Mediterranean culture.

The regional cultural context is based on the fact that, on the northern and eastern side, in particular, populations were historically strongly tied to ports hemmed in on the coast by the mountains, leading to dependence on maritime trade, political independence, cultural diversity; and, on the southern and southeastern side, a generally mountainless, desertic hinterland, also leading to a strong tendency for populations to prefer the coastal area and to concentrate at ports of call for Mediterranean coastal shipping and for north-south trade. This is therefore a region of considerable north-south, cast-west, temperate-desertic, developed-developing, rich-poor, cultural and religious polarities. The collaboration achieved by UNEP since 1975 is therefore remarkable, and this project must exploit that advantage, but move forward from the present level of action.

5. Replicability of the project (added value for the global environment beyond the project itself): Success in reducing marine, and possibly atmospheric, pollution in the way proposed by this project would, as noted above, have a positive, even if modest, effect on the global marine environment in the central Atlantic region. Given the fact that UNEP Regional Seas Action Plans have been relatively successful in promoting regional international co-operation, this type of project, suitably adapted to local circumstances, could possibly achieve more, quicker. The learning curve in other regions, based on the Mediterranean experience, could be much steeper.

A very important, indirect, benefit of the proposed project, in global environmental terms, if it is reasonably successful in achieving its objectives, would be the example it would set for other regions (e.g., Caribbean, south-east Asian seas, etc.) of the feasibility of regional co-ordination and co-action of the riparian states in managing regional, land-based sources of pollution and thus in protecting the regional marine environment. Success in this region would be invaluable in this sense.

6. Sustainability of the project: Sustainability of the project is taken to mean the possibility of continuing the successful operation of the mechanisms established by the project to "improve the quality of the marine environment of the Mediterranean Region through better shared-management of land-based pollution". This is the project's overall objective.

The following comments are made on the Objectives with a view to assessing the likely strength of the link between their achievement and the sustainability of the results, hence of the project. This would go a long way to convincing the countries concerned to maintain the institutions responsible for the achievement, at all levels.

<u>Overall objective</u>: The title might be made more precise if the term "shared-management" were defined; I could find no such definition. Indeed, one of the strong stresses in the project proposal is the elaboration of National Action Plans. What is likely to be shared is information and experience, but this is not management. Nor, really, is co-ordinated regional action. The text might be usefully reworded to "...through improved regional international co-operation in the management of land-based pollution.". It is risky to assert also "that will result from the implementation of the SAP MED." [this project, in fact], so I suggest deletion of the phrase.

Although objectives are always valid in the cycs of those who set them, the question is is it worth GEF's time and money to pursue the above-mentioned overall objective? Probably, yes, if there is a reasonable chance of achieving it. However, the mechanism [Logical Framework Matrix] for the appraisal of this chance of success in the proposal seems somewhat optimistic: the adoption by the Contracting Parties of a particular study (e.g., TDA) or the endorsement of the SAP or the preparation of NPAs etc., even if "objectively verifiable", is by no means a guarantee of achieving the desired outcome, let alone sustainability. Few international conventions produce more than a moderate success "on the ground", and often only after a long period of evolution of social, commercial and governmental attitudes.

It will be necessary not only to develop the [8] regional guidelines and [8] regional plans proposed, but to ensure that they are followed and carried out, respectively, if the project's sustainability is to be ensured.

<u>First specific objective</u>: This objective is not adequately focussed. Five "concepts" have to be formulated and adopted: principles, approaches, measures, timetables and priorities. And these for each major land-based source of pollution. None of these actually entails action to control or reduce pollution, only the preparation for it. On the other hand, the relevant substantive project activities (actions?), embodied in paragraphs 3.6, 3.8 and 3.10 seem more specific and more restricted than what is suggested by the first specific objective. If, as a result (of this project), each source is dealt with and controlled, no more such sources should arise, so sustainability would not be an issue.

<u>Second specific objective</u>: This is more precise, but, if completion means "most of the work has still to be done", the detailed analysis of 103 hot spots is a tall order in itself. But here too, none should remain if the objectives of the project are realized, so, again, sustainability would not be an issue.

Third specific objective: This also is not very precise, in the absence of a definition of "baseline and additional actions needed".

Fourth specific objective: This is also "iterative"; c.g., "prepare and adopt guidelines for the preparation of NAPs", whereas, in section 3.16, the "Activities envisaged.....include assistance.....in the development and implementation [does this mean only "getting set up" or "actual execution"?] of individual NAPs...".

<u>Fifth specific objective</u>: This, however, is to "prepare and adopt ......National Action Plans for each recipient country;", so I strongly suggest that the fourth specific objective be simply combined with the fifth, the real specific objective. The obvious follow-up will be to keep NPAs under review and to update them periodically, and would be essential to ensure project sustainability.

Sixth specific objective: This also is not very precise; why "potential" roles rather than real ones, for the [relevant] NGOs? And how can their effective participation be ensured in advance? The pursuit of this objective beyond the project would also probably be necessary to ensure sustainability.

7. Extent to which the project will contribute to the improved definition and implementation of GEF's

strategies and policies: If the project enjoys full success, GEF's strategies and policies will have been justified, at least with respect to the Mediterranean region. Until we know those results, little can be said in response to this term of reference. If, as is likely and not unreasonable, the project results do not match up to the high hopes placed in them initially, a thorough review of the project (from the standpoints of national development in the field of pollution control and management, regional co-operation and co-ordination of objectives and actions, pre-investment studies and consequent investment, sustainability of financing of pollution control mechanisms at national and regional levels, and so on) will be necessary to determine the project's contribution in the sense of this term of reference. Although provision is made within the project for such an evaluation, it will be, at best, only placed on an equal footing with UNEP's internal evaluation. However, UNEP is an "interested" party in the determination of GEF's strategies and policies.

### SECONDARY ISSUES

1. Linkages to other focal areas: There are possible linkages to: (a) atmospheric pollution (since reduction of land-based sources of pollutants will be felt in regional air quality), if only because a number of "non-gaseous" pollutants, notably some organic pesticides and mercury, have significant atmospheric pathways from terrestrial sources to the atmosphere; (b) coastal-zone development and management, with particular reference to direct land run-off and the siting of outfalls, (c) environmental impacts of sca-bed mining, because mining (and to some extent fish-trawling, as a form of "biological mining") reduce the sea bed's role as a pollutant sink by recirculating pollutants adsorbed onto sediments.

2. Linkages to other programmes and action plans at regional and sub-regional levels: There are several types of programmatic linkage, two strong, the others much weaker. The fundamental linkage is to the Mediterranean Action Plan/Mediterranean Pollution Monitoring and Research Programme (MAP/MED POL). which, in this field, is the only significant regional activity; the second is to the GEF Black Sea Strategic Action Plan, because the Black Sea is also a semi-enclosed sea, with some analogous problems. The others are: the European Union Regional Co-operative Agreement to Control Marine Pollution (Spain, France, Portugal and Morocco); a complementary, though weak, linkage to longstanding but passive subregional marine environmental projects --- RAMOGE (France-Monaco-Italy, in the Ligurian Sea), and the Northern Adriatic Programme (Italy-Croatia-Slovenia, at an inter-institutional level); and a weak, though not valueless, linkage to two regional occanographic initiatives sponsored by the IOC (the Physical Occanography of the Eastern Mediterranean [POEM] and the Programme de recherche international en Méditerrannée occidentale [PRIMO] (promoted by France)), the linkage being that the occanography of the Mediterranean plays a non-negligible role in determining the quality of the sea water (e.g., flushing of coastal and shelf seas); and a possible linkage with the Programme on the Environment of the Red Sea and Gulf of Aden [PERSGA] sponsored by Saudi Arabia and the Sudan.

3. Other beneficial or damaging environmental effects: By dealing with essentially all land-based sources of pollution, successfully, the project would also benefit, in general, agriculture, forestry and urban life, by reducing pollutant load. The Mediterranean is really a part of the Atlantic Ocean and therefore, indirectly, of the world ocean. So what happens in the Mediterranean or in the Atlantic) cannot, in the long run, be judged in isolation.

This central problem of disposal makes recycling of industrial, urban, agricultural, forestry and other human wastes very attractive. Nevertheless, the overall energy demand made by recycling may exceed that of disposal, naturally or artificially, to potential or proven sinks. Therefore, the wise use of the sea (as well as the land) for disposal purposes cannot be discarded out of hand. The project makes no provision for an analysis of such wise use, but should be seen at least to be leading up to it; the first drafts of NAPs and relevant regional action plans should include such a provision, otherwise, the control and reduction of land-based sources of pollution may simply lead to a "sideways" shuffle of some dangerous substances to places where they will not be easily visible - until another "hot spot" adds to the list of those to be dealt with by a future project. Studies of biogeochemical cycles of kcy elements (especially heavy metals) and dangerous substances must be promoted if the real goal of safe pollutant sinks is to be reached in the long run.

4. Degree of involvement of stakeholders in the project: The proposal defines the role of national governments, as the primary stakeholders, in this project; their degree of involvement is high and largely ensured. It is less definite about the role of their peoples (the "general public"), also major stakeholders. This role can only be ensured practically by involvement of non-governmental organizations and associations, especially of a regional nature, but also of a national nature (e.g., HELMEPA in Greece) and of an international nature (e.g., IUCN). The proposal seeks only to determine a potential role for NGOs, whereas it could be desirable to determine the respective competences and capacities of each such body, for UNEP to decide precisely the practical possibility of their real involvement. The proposal identifies many of the general weaknesses of NGOs, but apparently goes no further.

The involvement of the relevant intergovernmental organizations (i.e., those having a stakeholder interest in the region on behalf of their Member States, such as: the Food & Agriculture Organization of the United Nations and its General Fisheries Council for the Mediterranean - for fisheries, mariculture and biodiversity questions; the World Health Organization - for human environmental health questions) is clear enough and announced. More or less useful roles might also profitably be found for: the International Atomic Energy Agency and its Marine Environmental Laboratory, in Monaco - for chemical analysis and interalibration with respect to pollution monitoring; UNESCO and its International Hydrological Programme -

for river monitoring and drainage-basin questions; and the Intergovernmental Oceanographic Commission for relevant oceanographic and ocean-observing questions. This involvement should be, however, technical and specific and based on demonstrated capability (of the institutions or individuals acting on behalf of these organizations).

5. Capacity-building aspects: These are still a comparatively minor part of the project and unlikely to have a strong impact on the outcome unless participants in the proposed training courses are carefully chosen on the basis of their proven experience in pollution control and management. Otherwise, such courses are only paying lip service to meeting real national needs for competent staff, hence institutions.

Courses on the energetics and environmental advantages and disadvantages of recycling human wastes, and even on regional (if not global) biogeochemical cycles of key pollutants/elements, would be most desirable additions to the list (section 3.13).

6. Innovativeness of the project: The project cannot be said to be particularly innovative. A genuine regionwide approach (plan of action), incorporating development of national facilities, capabilities and supporting administrative/legal structures, in the regional context, might well have been tried, given the considerable experience acquired under MAP, and the fact that, in the long run, all forms of pollution have a transboundary component.

A new Project Implementation Unit is not innovative; project Implementation might better be achieved by strengthening (funding and staffing) of MAP-MEDU. This does not appear to be the intention and nothing is said on the relationship between the Project Implementation Unit and MAP-MEDU. The Secretariat of the Barcelona Convention is described as [one of? the leading?] Executing Agency, yet the MAP-MEDU, also described as the Secretariat of the Convention, is also listed as an Executing Agency. This should be made clear (or clearer).

The idea of "sustainability of the project" seems innovative, but amounts, in the present context, to ensuring funding mechanisms to address future new institutional costs for managing and protecting the Mediterranean Sea, whereas the real issue is the sustainability of economic development without compromising the environment: that is innovative, but the proposal does not go that far.

Ray C. Griffiths Marine Scientific and Environmental Consultant