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Technical Consultation on pollution
resulting from exploration and
exploitation of the Continental Shelf
and the sea-bed and its sub-soil

Athens, 22 - 26 September 1986

REPORT OF THE TECHNICAL CONSULTATION ON POLLUTION
RESULTING FROM EXPLORATION AND EXPLOITATION OF THE CONTINENTAL SHELF
AND THE SEA-BED AND ITS SUB-SOIL

Introduction

1. The Fourth Ordinary Meeting of Contracting Parties requested the secretariat to initiate preparation for a protocol to protect the Mediterranean Sea against pollution from off-shore exploration and exploitation (UNEP/IG.56/5, Recommendation A.6).
2. The secretariat invited a selected group of experts to a Technical consultation with the object of identifying:
 - (a) The extent of present exploration and exploitation in the Mediterranean sea area (concession areas, recorded on computer map; States; Companies; location of oil and gas wells);
 - (b) All sources of marine pollution resulting from off-shore operations: exploration, rig construction, drilling muds, water discharge, operational oil discharges, loading, accidental (collision, blow-up), under conditions prevailing in the Mediterranean sea area;
 - (c) Effects of pollution in (b) above on the Mediterranean marine environment under realistic off-shore conditions;
 - (d) To collect information on similar international agreements and on relevant national legislation in Mediterranean Coastal States.
3. Experts from Algeria, Italy, France, EEC, UNIDO, IMO, IJO and E & P Forum were invited. Eight experts from Italy, EEC, UNIDO, IJO and the E & P Forum accepted the invitation (see list of participants in Annex I). The IMO confirmed its interest in the matter, but was unable to be represented at this stage.

Opening of the meeting

4. The Co-ordinator of the Mediterranean Action Plan, Mr. A. Manos welcomed the participants on behalf of the Executive Director of UNEP, Dr. Mostafa K. Tolba. He briefly recalled the previous efforts by UNEP to develop a protocol on off-shore activities, in line with Art. 7 of the Barcelona Convention and expressed UNEP's satisfaction for having now been entrusted with this task.
5. He thanked the participants from Italy, EEC and the E & P Forum for attending at no cost to the secretariat and reminded all participants that they were invited in their personal expert capacity to advise UNEP, and not as representatives of their Governments or organizations.

6. Mr. Manos referred to the technical material produced under UNEP/IJO project FP 1400-77-02 (1352) and to that subsequently collected, and expressed the view that the timetable for drafting the protocol was tight but realistic. In particular he expressed thanks to the French authorities for making available the study by the Environment Commission of the Chambre syndicale de la recherche et de la production du pétrole et du gaz naturel, on off-shore exploration and exploitation and the risk of pollution (1985) and to the Blue Plan for its material on off-shore activities.
7. In view of the limited time available the secretariat intended to retain a close supervision over all steps leading to the formulation of a draft protocol in order to ensure inter alia, good co-ordination with other relevant MAP components, e.g. Environmental Impact Assessment, Monitoring and Research, floating reception facilities, Protocols on dumping and on Specially protected areas, Liability and compensation.

Organisation of work

8. In view of the small number of participants and the informal nature of the Consultation, it was suggested that Mr. J. McLoughlin, Consultant, would serve as moderator and would draft the group's report.
9. Preliminary comments, aimed at exchanging information and clarifying the scope of the meeting, were made by all participants.
10. The "Provisional List of Matters to be Covered by the Proposed Protocol" served as the agenda for the meeting. It was noted that the document prepared by the IJO/UNEP Joint Project, No. FP/1400-77-02(1352), enlisted "Background Paper No. 5" provided useful material, much of which could form a basis for discussion.

Maps showing the positions and extent of the various concession areas in the Mediterranean and the sites of operations within them, were produced and examined. Copies of international agreements relevant to the subject matter of the proposed protocol were also available and used by members during the discussion. Likewise information on national legislation was held by certain members and referred to for comparison during the meeting.

The main task lay in identifying the sources of pollution referred to the 2(b), considering their likely effect on the marine environment in the Mediterranean, and preparing suitable advice on the scope of the proposed protocol, and the kind of provisions it must contain in order to give adequate protection. The intention is this will help in establishing the main framework for the proposed protocol. More detailed scientific, technical and legal advice on the matters referred to here will be given at a later stage.

SUBMISSIONS BY THE GROUP OF EXPERTS

11. The group submits below the matters on which it would be advisable to include provisions in the proposed protocol in order to secure adequate protection of the marine environment in the Mediterranean Sea Area. Where it is possible to be reasonably confident in the present state of our knowledge and experience, the Group also submits advice in the form of control which might be the most appropriate and effective. In a few cases, members expressed the view that more work needed to be done before any firm advice could be given.

On some matters there was apparently full agreement, when the term "agreed" is used. On others "general agreement" was reached. By that term it is meant that a substantial majority expressly indicated agreement, there was no expression of dissent, but some individuals may have remained silent because the matter did not fall within their expertise, or simply because they found no reason to oppose. On other matters individuals expressed reservations, qualifications or opinions to the contrary, and those have been recorded.

12. Scope of the Protocol

12.1 Geographical Area

It is submitted that it would be advisable for the proposed protocol to cover a wider area than the Mediterranean Sea Area as defined in Article 1 of the parent Convention, in that areas of water landward of the baselines might be covered, including bays and estuaries. There was general agreement that all marine waters within the national jurisdiction and waters extending inland as far as the freshwater limit could usefully be included.

12.2 Operations to be covered

It was considered that adequate protection could not be given unless the proposed protocol contained provisions governing the following:

- (a) seismic tests used in exploration;
- (b) exploration for and exploitation of oil and gas;
- (c) storage of oil on a tanker at the offshore oil field;
- (d) loading of oil on the tanker for transport to shore, so far as the operation involves the installation from which the oil is drawn, and the pipe from that installation to its junction with the tanker;

Mr. Kaspers considered that when a tanker is loading oil at the field and is connected for that purpose to an installation, the whole of the operation should be covered;

- (e) all exploration for and exploitation of minerals, including mining and drilling, except mining conducted from shafts sunk onshore, which at no point connect with the surface of the sea bed;
- (f) dredging operations, including the dumping at sea of the dredged materials, so far as they are not covered by the Protocol on Dumping from Ships and Aircraft. (See Article 3.4(a) of that Protocol).

12.3 Installations to be covered

It was likewise considered that provisions of the proposed protocol could give adequate protection only if controls over the following installations were included:

- (a) oil and gas production platforms;
- (b) drilling rigs and drill ships (compendiously referred to as "mobile offshore drilling units");
- (c) offshore storage facilities, including tankers when used for that purpose.

The Group thought it useful to add that in view of the other measures of control already exercised, it did not advise extending controls to the following:

- (a) standby vessels

Mr. McLoughlin considered that they should be covered for certain matters such as the provision of alarm signals

- (b) crane barges
- (c) vessels laying pipelines
- (d) seismic survey vessels

That advice, however, is subject to the proviso that although the above vessels should be excluded from control under the Protocol, the operator should be under an obligation to engage such vessels only if they have been certified by a competent body as satisfactory for the work to be undertaken, or otherwise authorized by the relevant State authority for such use.

13. General Obligation

The Group agreed that a useful purpose would be served in including an obligation to protect the marine environment expressed in general terms. The kind of article envisaged would be brief, would not impose an absolute obligation to prevent pollution, but would provide for measures to prevent pollution qualified by such words as "sufficient", "satisfactory" or "acceptable". It would lay down the minimum to be required, and States would be free to impose stricter measures if they so wished.

Mr. Gutierrez would prefer it to include a reference to co-operation between States for that purpose, and to the harmonisation of policies at sub-regional level.

Mr. Kaspers produced a draft which he considered would be suitable for the purpose.

The wording of the draft is:

"The Contracting Parties to make every effort at national level to protect the marine environment of the Mediterranean sea effectively and permanently, and for this purpose to prevent, reduce and control adverse effects on the marine environment which result or are likely to result from exploration and exploitation activities."

14. Environmental Impact Assessment

There was general agreement that it would be advisable to require States always to consider the environmental impact of any offshore operation. The obligation on the State would be:

- (a) to decide on whether or not to require an environmental impact assessment for any particular operation;
- (b) if an impact statement is required, to decide what the scope of the statement is to be;
- (c) if no impact statement is required, to decide whether or not a baseline survey is to be undertaken, calling for such a survey to be the normal practice in most cases.

Further to this, the Group submitted that greater consistency in practice would be achieved if the proposed protocol required States, when carrying out their obligations under (a) and (b), to make their decisions in accordance with guidelines prepared and issued by the Organization.

The Group was in general agreement that it would be better for the assessment to cover the whole of the intended operation, eg. including satellite wells which might be drilled, so far as could reasonably be foreseen. Mr. Read preferred "so far as could reliably be foreseen".

Mr. Ceffa and Mr. Pagnotta noted that in Italy an evaluation of the environmental effects of mud and cutting discharge is made in the light of the proposed drilling programme.

On the impact statement itself, there was general agreement that there would be some practical advantage if a limit was placed on the length of the statement and if a summary in language which could be understood by the layman accompanied it. Mr. Read thought that the limit on the length could be laid down in the guidelines.

Because other Contracting States might have an interest in the probable impact, it was proposed and agreed that it would be advisable to require States to lodge with the Organisation a summary of any impact statement, to be kept there open to inspection by representatives of other Contracting States, before any decision to approve the operation is made.

Finally, Mr. Carmichael referred to a document which might be of assistance in preparing the guidelines "UNEP - Industry and Environment Guidelines Series, Volume 1, Guidelines for Assessing Industrial Environmental Impact and Environmental Criteria for the Siting of Industry".

15. Siting of Installations

The Group noted the obligations set out in Article 60, and referred to again in Article 80, of the United Nations Convention on the Law of the Sea on the right of coastal States to construct, authorise and regulate the construction, operation and use of installations and structures. Members of the Group considered that the proposed protocol might usefully impose an obligation to take account of all other lawful uses of the sea, including fishing, and require States, in having regard to shipping and the safety of navigation, to co-operate with the IMO, and to take account of established maritime practices.

It was agreed, on the other hand, that it would be better for the proposed protocol to contain no provision on compensation for possible adverse effects on fishing, such questions to be left to a separate protocol on compensation. Mr. Read suggested that other methods of resolving conflicts with fishing interests could be considered.

16. Licensing of Operations

It was generally agreed to be necessary to include some form of control over offshore operations by a system of licenses, authorisations or permits issued by State authorities. Under such a provision a State would not permit any offshore operation to be commenced or carried out in the area covered by the proposed protocol except under and in accordance with the terms and conditions of a licence, authorisation or permit issued by or under the authority of the State. Before granting such a licence, etc., the State would satisfy itself that the applicant had available to himself all the necessary expertise, and that he was of sufficient financial standing. The licence would not be transferable without the consent of the State. The licences etc. would be granted subject to such reasonable conditions for the protection of the marine environment as the State thought fit to impose.

The term "reasonable" was included so that any State could make provision for appeals against unreasonable conditions.

17. Design, Construction and Stability

It was generally agreed to be necessary for the protection of the marine environment as well as for safety, for the proposed protocol to include a provision which required a "certificate of safety and fitness for purpose" for the following installations -

production platforms,
mobile offshore drilling units,
offshore storage facilities,
offshore loading systems,
pipelines.

There was general agreement also that it would be advisable to require that such certificates be granted in accordance with codes of practice approved by the Organisation. In this context the IMO. "MODU Code" for mobile drilling units was mentioned, and the various A.P.I. codes. States would be free to apply stricter standards if they so wished.

Mr. Read felt that it would be impracticable for the Organisation to develop a detailed code for the design of production platforms unless it was willing to devote very considerable resources to the exercise. He also felt that some reliance might be placed on requiring installations to be designed "in accordance with good oilfield practice".

It was noted also that for installations to be used in mining and some other offshore operations, other codes would be needed. Such codes could be submitted to the Organisation for approval.

18. Other Safeguards

It was further agreed that other safeguards would be needed. These would include provisions which would require the State to secure the following:

- (a) Operators to be required by the State to have at all times on their installations, and maintained in good working order, equipment and devices to prevent accidental pollution, and to facilitate prompt response to an emergency, in accordance with good oilfield practice and best practicable technology.
- (b) Such equipment and devices, if not certified as part of the installation, to be subject to prior examination and approved by a competent State authority, and to periodic inspection, in accordance with good oilfield practice.
- (c) Blow-out prevention and other safety equipment should be tested periodically by the operator in accordance with good oilfield practice.

Likewise, concerning personnel, the provisions would require the State to secure the following:

- (d) The operator to appoint to the following positions only persons with satisfactory qualifications or training, and relevant experience
 - offshore installation manager,
 - driller, or any other person supervising drilling operations, or a person controlling work on the drill floor,
 - person employed in the operation of a blowout preventer.
- (e) All other persons engaged in offshore operations to have been given training in accordance with good oilfield practice.
- (f) Any person employed on an offshore installation for the first time to be given an induction course.
- (g) The offshore installation manager to be properly informed on environmental protection.
- (h) One person on each production platform to have responsibility for ensuring that proper measures for environmental protection are taken.

Additionally, it was thought advisable for the State to be required to take appropriate measures to prevent infringement of safety zones.

Mr. Read noted that the IMO. is presently discussing the necessary qualifications and training requirements for the person in charge and other key marine personnel on mobile offshore drilling units.

19. Contingency Plans

There was agreement, subject to the reservations noted below, on the need to include in the proposed protocol obligations on each State to require that:

- (a) each operator to have prepared a contingency plan for his operation, or each stage of his operation;
- (b) no work is commenced on any stage of his operation unless the contingency plan covering that stage had been approved by the relevant State authorities,

Mr. Read considered that formal approval should not be necessary, but that the operator should be required to prepare a plan "to the satisfaction of" the relevant State authority;

- (c) operators must report immediately, and to a designated authority any accident which might lead to substantial pollution of the marine environment;
- (d) each operator has available at all times, sufficient and appropriate materials and equipment to put into execution his contingency plan;

- (e) when an operator is taking action under his contingency plan, the State has power to direct him to take specified actions eg. place order for relief drilling rig;
- (f) the operator's plans should be co-ordinated with the plans of the various State authorities.

Mr. Read and Mr. Kaspers considered that, although co-ordination on some matters may be needed, the requirement should merely be for liaison between the operator and the State authorities.

There was also general agreement that the proposed protocol might usefully encourage States to co-operate with each other, on a sub-regional basis where appropriate, in the preparation and execution of contingency plans, and to enter into schemes of mutual assistance for provision of materials and equipment to deal with emergencies.

20. Operational Discharges of Waste Oil and Oily Wastes

20.1 Production Water

Note: Production water is water which was already mixed with the oil which emerged from the well. It may have been naturally in the reservoir before operations began, or water which was pumped into the reservoir to increase pressure there.

There was agreement on the need for minimum standards for discharges of these waters. This led to a submission, supported generally, on a provision for the Organisation to set a minimum standard for the area of the proposed protocol as a whole, except where a higher standard is imposed by a State.

Mr. McLoughlin suggested that the Organisation be required to set a standard which would not permit an oil content of over 40 p.p.m., expressed as an average determined by infra-red spectrometry, that being a widely used equipment performance standard.

Notwithstanding such an overall minimum, it was agreed that in areas which are particularly sensitive, such as those of high amenity, cultural interest, or which contain habitats in need of special protection, further obligations are needed. These would oblige the State or States with jurisdiction there to consider higher standards, or consider a system under which production water would not be discharged to that area of the sea eg. piped ashore with the product, separated there, and disposed of safely elsewhere.

Whatever standard applies, and whatever system is adopted, it was considered reasonable to have a further requirement that the operator uses the best available technology.

Mr. Read drew attention to certain conclusions reached and recommendations made concerning production water at a seminar in Athens during February 1985 on Aspects of the Prevention of Oil Pollution of the Mediterranean Sea organised in association with the Co-ordinating Unit and attended by experts from twelve Mediterranean States. A copy of the relevant conclusions and recommendations is appended.

20.2 Machinery Space Drainage water

There was agreement on the justification for a provision that machinery space drainage water must be treated to reduce the oil content to 15 ppm before discharge, as required by Regulation 21 of Annex I to MARPOL.

20.3 Processing Drainage and Platform Drainage

There was general agreement on the inclusion of a provision that spills of high oil content in processing drainage and platform drainage be contained, diverted, and then treated as part of the product, but that the remainder be treated to an acceptable level before discharge, in accordance with good oilfield practice.

20.4 Oily Waste and Sludges from Separation Processes

There was agreement on the inclusion of a requirement that these be transported to shore.

20.5 Oil and Condensates from Well Testing

There was likewise agreement on the inclusion of a requirement that these be flared, taking all precautions necessary to prevent losses of oil to sea.

21. Disposal of Other Wastes

21.1 Oil Based Drilling Fluids

The Group agreed on the need to have provisions governing the use of oil based drilling fluids, and recommended that the provisions have the following effects:

(a) Such fluids to be used only under a permit from the competent State authority. The permit to be issued subject to conditions governing the use of the fluid and disposal of the drill cuttings. Conditions concerning disposal to take account of the sensitivity of the area and other relevant considerations. In a highly sensitive area it would not be unreasonable, in some circumstances, to require the cuttings to be transported to shore or to some specified deep sea area.

(b) Used oil based fluids not to be discharged to the sea.

21.2 Water Based Drilling Fluids

The Group agreed that it would be reasonable to permit used water based drilling fluids to be discharged to the sea except in specially sensitive areas, or when chemical additives could cause environmental damage.

Mr. Read suggested that controls over discharges to sensitive areas need to be specially tailored to the specific resources to be protected.

It was agreed further that drill cuttings generated when water based fluids are used can reasonably be discharged to the sea, except in specially sensitive areas where the smothering effect of disposal could cause damage.

21.3 Garbage

The Group first noted that Annex V to MARPOL, dealing with the disposal of garbage, will come into effect in the near future. It was agreed to recommend that the requirement of that Annex concerning the disposal of garbage be adopted in the proposed protocol.

21.4 Sewage

It was noted that Annex IV to MARPOL contains provisions governing the disposal of sewage from ships. Mr. Kaspers considered that those provisions would not be appropriate for stationary platforms. That received general acceptance. Mr. Read stated that site specific control is more appropriate for small degradable discharges.

It was finally agreed generally to recommend the adoption in the proposed protocol of the provisions of Annex IV to MARPOL governing the disposal of sewage from ships, except that:

- (a) in all cases the regime of currents in the area would have to be taken into account, with stricter provisions laid down if necessary;
- (b) States be required to lay down stricter provisions, as appropriate, for any platforms sited near to the shore or to any specially sensitive area.

22. Use of Chemicals, sacrificial anodes and other materials

22.1 Use of Chemicals

It was agreed that some system of control over the use of chemicals which might get into the environment is needed. It was the proposed, and accepted by the majority, that a system of control on the following lines might be adopted:

- (a) Prior notice to be given of the proposed use of any new chemical
- (b) Chemicals known to be used, which might get into the environment, to be placed on three lists:

white list	-	use permitted
yellow list	-	use may be permitted, subject to any control necessary to safeguard the environment
red list	-	discharge not to be permitted

Mr. McLoughlin considered that it would be better precaution if any in the red list could not be used if it might get into the environment.

22.2 Sacrificial anodes

The Group agreed to recommend that further consideration be given to the environmental implications of the use of sacrificial anodes and methods of anti-corrosion treatment.

22.3 Materials used to cover pipelines

Mr. Kaspers noted that in some places materials which are potentially polluting are used to cover pipelines, eg. slag from ironworks. It was agreed that provision might usefully be made to control the use of materials for that purpose if that could cause significant pollution of the environment.

23. Negligent and Illegal Disposals

It was agreed that some control over such disposals could be maintained by a combination of three measures.

- (a) Provision of adequate facilities for disposal.
- (b) Instruction given to all personnel on proper means of disposal.
- (c) Penalties imposed by the operator and by the State on improper disposals.

24. Monitoring of the Marine Environment

It was agreed that monitoring and clean up provisions might reasonably be included which would have the following effects.

- (a) The operator to be required to monitor the marine environment in accordance with a scheme satisfactory to the relevant State authority.
- (b) The relevant State authority to be empowered to monitor the marine environment in the vicinity of the installation, at its discretion.
- (c) After completion of operations conducted from a mobile offshore drilling unit, the State to require a satisfactory survey of the seabed to be made, to a specified distance from the site of the installation, and to require the removal of all debris detected by the survey.
- (d) After completion of operations conducted on and from a production platform, the State to require a survey of the sea bed to be made in the vicinity of the site, and a removal of debris, where such survey and removal is considered by the relevant State authority to be justified in the circumstances.

25. Removal or Abandonment of Installations

25.1 Production Platforms

Mr. Read informed the Group that three possibilities could be considered:

- (a) no removal;
- (b) removal in accordance with Article 60 (3) of the United Nations Convention on the Law of the Sea;
- (c) complete removal of all installations.

The majority of members of the Group recommended a provision to require the complete removal of any production platform in the area of the proposed protocol after completion of operations.

Mr. Read and Mr. Ceffa preferred to recommend a requirement in accordance with (b) above.

25.2 Pipelines

It was agreed to recommend the inclusion in the proposed protocol of provisions which would have the following effects:

- (a) When an operator has ceased to use a pipeline and no other operator is using it, he must cause it to be cleaned.
- (b) When a pipeline is no longer to be used, steps must be taken to ensure that it is neither a danger to navigation nor a hindrance to fishing. Such steps could involve burial or removal.

26. Specially Sensitive Areas

It was agreed to recommend the inclusion in the proposed protocol of a provision which would provide for special measures, in addition to those in the Protocol concerning Mediterranean Specially Protected Areas, to protect areas of high amenity and areas of economic importance to fishing interests.

Mr. Gutierrez suggested that the word "social" might be used in addition to "economic".

27. Exchange of Scientific and Technical Information

It was agreed that Article 11 of the parent Convention made adequate provision for such exchange, and that no further provision is needed in the proposed protocol.

28. Relationship of the Proposed Protocol to Existing Conventions and Protocols

It was agreed that the proposed protocol could usefully include an aid to interpretation to the effect that none of its provisions are to be interpreted so as to produce a conflict with the parent Convention or any of its existing protocols, the United Nations Convention on the Law of the Sea, or MARPOL.

ANNEX

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APPENDIX

Oily Water Discharges

Extracts from the Seminar Report: Aspects of the Prevention of Oil Pollution in the Mediterranean Sea - organized by CONCAWE and E & P Forum in association with the Co-ordinating Unit for the Mediterranean Action Plan (UNEP).

Attendance

Invitations to attend the Seminar were distributed by the MED Unit to all Contracting Parties to the Barcelona Convention. Additionally, CONCAWE and the E & P Forum each alerted their member companies to the event and invited participation from companies and affiliates in the Mediterranean Region. As a result one hundred and nine participants from 12 Mediterranean States, 3 other States and the European Economic Commission took part. Specifically they were from Cyprus, Egypt, France, Great Britain, Greece, Israel, Italy, Malta, Morocco, Netherlands, Norway, Spain, Tunisia, Turkey and Yugoslavia (Annex I).

Conclusions 7-II

7. There are various types of water to be treated on offshore installations, each with its own characteristics. Compatibility problems can arise if they are mixed. The benefits of segregation should be recognised both by industry and regulatory bodies.
8. Studies on the impact of oil in production water on the marine environment indicates it is highly localised. Dilution, dispersion, evaporation, biodegradation and photo-oxidation are all important mechanisms in limiting the range of impact. Little information is available on impacts to Mediterranean waters, and caution should be exercised in extrapolating findings from other areas of the world.
9. Water discharges from oil exploration and production operations constitute a small proportion of the known total inputs of oil to the marine environment.
10. Available data suggest that the discharges of treated production water will not cause other than localized charges and these will depend on local environmental conditions. Visible oil slicks and tar balls should not result from this source.
11. There has in the past been uncertainty on the application of MARPOL 73/78 to offshore rigs and platforms. However, the situation has been recently clarified by the recommended interpretation of IMO's Marine Environment Protection Committee that of the four categories of discharge associated with the operation of offshore platforms - machinery space drainage, offshore processing drainage, production water and displacement water - only the discharge of machinery space drainage should be subject to MARPOL 73/78.

Recommendations

10. Those involved in setting limits on production water discharges should be aware that these waters exhibit wide variability in origin and character. The development of effective treatment systems requires careful consideration. Expected equipment performance should be based on real field data with comparable waters and not on the sometimes optimistic published data.
11. The form of any limit should recognise the inherent scatter that always arises from fluctuations in the feed and hence in:
 - (i) the performance of the treatment plant;
 - (ii) sampling; and
 - (iii) analysis results.

The best form for environmental protection and practical control is average limits.

12. Any specified analytical method for oil in water should, under the particular circumstances, measure oil content and nothing else.
13. Similarly, any limit set on production water discharges should take into account:
 - (i) Specific local environmental needs
 - (ii) The available technology and the space/weight/cost implications of the use of a particular equipment type.
14. The E & P Forum periodically surveys the performance of established and newly developed oily water treatment equipment. It should be encouraged to continue in this activity and make its findings known to Government Authorities and industry.
15. Discharges from offshore exploration and exploitation which could result in significant inputs of pollutants to the marine environment should be regulated by the National Authorities. Industry should be consulted on the preparation of the relevant protocol to the Barcelona Convention.
16. Biologists should be involved in contingency planning to provide expert guidances to optimise oil spill clean-up, and to provide adequate strategies for post-spill studies.

INFORMATION TO BE REQUESTED FROM MEDITERRANEAN STATES

International Agreements

Title and date of any international agreement to which the State is or may become a party and which concerns the Mediterranean Sea or any port thereof.

Please include any agreement on:

uses of the sea, eg. fishing;

exchange of information, eg. reports of pollution incidents;

mutual assistance eg. provision of materials or loan of equipment for clean up operations;

joint arrangements, eg. contingency plans.

Please indicate whether or not the State is already a party, and whether or not the agreement is already in force.

State authorities

The authorities within the State responsible for the following functions:

control of pollution of coastal waters and the sea;

licensing of offshore operations;

ensuring proper certification, approval or examination of installations and equipment used in offshore operations;

preparing or operating local, regional or national contingency plans for dealing with pollution of coastal land areas, coastal waters and the sea;

approving or checking the contingency plans of offshore operators;

requiring or approving environmental impact surveys and statements;

monitoring the marine environment, and supervising or checking any monitoring of the environment or of discharges that offshore operators are required to carry out.

Please give the name or official title of the person to be contacted, and the address and telex number.

Specially Protected and Sensitive Areas

Any areas established under the Protocol concerning Mediterranean Specially Protected Areas.

Any other areas in need of some degree of special protection from pollution eg. areas of high amenity, fish spawning or breeding grounds, fishing grounds of high economic value and traditional fishing grounds.