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**Mediterranean  
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Meeting of the MAP Focal Points

Athens, Greece, 10-17 September 2021

**Agenda Item 5: Specific Matters for Consideration and Action by the Meeting, including draft Decisions**

**Report of the Third Meeting of the Barcelona Convention Offshore Oil and Gas Group (OFOG) Sub-Group on Environmental Impact (Teleconference, 3-4 June 2021)**

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UNEP/MAP  
Athens, 2021



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Third Meeting of the Barcelona Convention Offshore Oil and Gas Group (OFOG) Sub-Group on Environmental Impact  
Teleconference, 3-4 June 2021

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UNEP/MAP  
Athens, 2021

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## Introduction

1. In accordance with the UNEP/MAP Programme of Work 2020-2021 adopted by the 21<sup>st</sup> Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Protocols (COP 21) (Naples, Italy, 2-5 December 2019), the Secretariat, with the support of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), organized the Third Meeting of the Barcelona Convention Offshore Oil and Gas Group (OFOG) Sub-Group on Environmental Impact on 3-4 June 2021 (remote meeting).
2. The main objectives of the meeting were to:
  - a) Review and provide further guidance on the key outcomes that have been prepared or updated in the current biennium in relation to the implementation of the Offshore Protocol.
  - b) Review and approve the following documents for consideration at the 22<sup>nd</sup> Meeting of the Contracting Parties (COP 22):
    - revised Mediterranean Offshore Guidelines for the Conduct of Environmental Impact Assessment (EIA)
    - amended Annexes to the Offshore Protocol;
  - c) Inform on the progress of the implementation of the Mediterranean Offshore Action Plan and the development of a comprehensive plan of actions required for its long-term sustainable implementation process;
  - d) Support sharing of best practices and lessons learnt among the Contracting Parties to the Barcelona Convention, and other relevant international organizations, Mediterranean Action Plan (MAP) partners and the private sector regarding offshore activities.

### Agenda item 1. Opening of the Meeting

3. The meeting was opened at 0900 hours on 3 June 2021 by Ms. Tatjana Hema, Deputy Coordinator of UNEP/MAP – Barcelona Convention Secretariat.
4. The Deputy Coordinator welcomed the participants and started her opening speech by referring to recent study on trends and outlook of marine pollution, maritime traffic, and offshore activities in the Mediterranean prepared by REMPEC, in collaboration with UNEP/MAP secretariat and other MAP components. She highlighted the presence of 323 oil and gas fields in the Mediterranean Sea taking place in four major areas (i) the Southern Levantine Sea, (ii) the Channel of Sicily, (iii) the Gulf of Gabes (Tunisia) and the neighbouring Libyan marine area, and (iv) the northern Adriatic. Despite the decreasing trend in oil production in the Mediterranean Sea since 2001, the region plays a more significant global role in gas production, with the trend in offshore gas production showing a clear and marked increase since the 1980s.
5. The scope of this cooperation framework under the Offshore Protocol with the aim to ensure that these activities do not pose any risk to the marine and coastal environment remains highly important. This cooperation offers a regional platform/forum to discuss technical issues related to offshore activities, monitoring of their impact, exchange of knowledge and experience between concerned stakeholders, including industry and non-governmental organizations (NGOs). Ms. Hema stressed the importance for Contracting Parties to ratify the Offshore Protocol, if they have not done it yet, as this support is certainly required to demonstrate the regional interest in regulating such activities jointly and to enable the further implementation of the program of work resulting from the Offshore Protocol Action Plan.
6. The region should be better prepared and equipped (technically, policy, governance networks) to address new challenges for the near-future, such as the need to transition to more sustainable offshore activities and practices, and more integrated planning of offshore activities.
7. The meeting was attended by representatives from the following Contracting Parties: Albania, Bosnia and Herzegovina, Croatia, Cyprus, European Union, Greece, Israel, Italy, Lebanon, Tunisia,

and Turkey. The following organizations and associations were represented: Eni Spa, INSITE Programme, International Association of Geophysical Contractors (IAGC), International Association of Oil and Gas Producers (IOGP), OSPAR Commission and OSPAR Offshore Industry Committee (OIC), UNEP-Norway's Oil for Development (OfD) Partnership and WWF Greece. The UNEP/MAP – Barcelona Convention Secretariat was represented by the MAP Coordinating Unit and REMPEC. The full list of participants is attached as Annex I to the present report.

**Agenda item 2. Adoption of the Agenda and Election of Officers**  
*UNEP/MED WG.498/1, UNEP/MED WG.498/2/Rev.1, UNEP/MED WG.498/Inf.1/Rev.1*

8. In accordance with the Rules of procedures for meetings and conferences of the Contracting Parties, the meeting elected one (1) President, three (3) Vice-Presidents and one (1) Rapporteur from among the participants, as follows:

President: Mr Ezio Amato, Italy  
Vice- President: Ms Irene Constantinou/Mr Theodolus Mesimeris, Cyprus  
Vice- President: Mr Fred Arzoine, Israel  
Vice- President: Ms Fatima Sbai, Morocco (excused)  
Rapporteur: Ms Vlatka Vaniček, Croatia

9. During the adoption of the Agenda, the President announced the interventions of the following organizations through a short presentation: European Commission – DG GROW as part of Agenda item 4; OSPAR OIC, IOGP, UNEP-Norway's Oil for Development Partnership and INSITE Programme as part of Agenda item 6.

10. The meeting adopted the Agenda as appearing in Annex II to this report.

**Agenda item 3. Finalization of the Offshore Environmental Impact Assessment (EIA) Guidelines**  
*UNEP/MED WG.498/3*

11. Mr. Gabino Gonzalez, Head of Office of REMPEC presented the document [UNEP/MED WG.498/3 “Revised Guidelines for the Conduct of Environmental Impact Assessment \(EIA\)”](#). He provided information on the background context and timeline of the process leading to this working document.

12. The Meeting was first invited to provide general comments and feedback on the revised version. One Contracting Party noted that although the revisions resulting from the consultation process have significantly improved the previous version of the document which was presented and discussed at the Second Meeting of the Barcelona Convention OFOG Sub-Group on Environmental Impact (Athens, Greece, 27-28 June 2019), some pending points for discussion remained.

13. The Meeting was then asked to address the highlighted text, square brackets and footnotes included in the working document. These indicated the changes and comments proposed by one Contracting Party and two Partners (European Commission, IOGP and WWF-Greece) in written form following the presentation of a previous version of the guidance document at the Second OFOG meeting.

14. One important amendment in the introduction of the guidance document refers to the prevalence of the relevant EIA provisions existing in Contracting Parties' legislation and or regulatory systems over the guidelines' provisions. Amongst other important points, the Meeting had lengthy discussions on the proposed modifications to the list of activities requiring an EIA, in order to ensure that the final list can be applied to all Contracting Parties, in particular in cases where no national lists are in place.

15. After that the indicated changes were systematically discussed and cleared, the Meeting agreed upon the amended Mediterranean Offshore Guidelines for the Conduct of EIA for submission to the MAP Focal Points Meeting for its approval.

16. The Secretariat shared with the meeting participants an in-session revised version of the document reflecting the meeting discussions and the changes agreed upon (Appendix 1: UNEP/MED WG.498/3/L2).

**Agenda item 4. Amendment of the Annexes to the Mediterranean Offshore Protocol**  
*UNEP/MED WG.498/4*

17. The Head of Office of REMPEC presented the document [UNEP/MED WG.498/4 “Amended Annexes to the Offshore Protocol”](#) which highlights the proposed changes to Annexes I, II, III, IV and VII A of the Offshore Protocol.

18. He pointed out the need to amend the annexes to the Offshore Protocol that was adopted more than 25 years ago, to reflect the significant regulatory, scientific and technical developments related to offshore activities that have been achieved during this time period, both at the regional and global level. These developments are particularly relevant to the requirement of updating the chemical lists in Annex I (Harmful or noxious substances and materials the disposal of which in the Protocol Area is prohibited) and Annex II (Harmful or noxious substances and materials the disposal of which in the Protocol Area is subject to a special permit).

19. He reminded the Meeting about the mandate of the OFOG to keep under review the technical content of the annexes to the protocol and make relevant recommendations as per its Terms of Reference, and as under Specific Objective 7.c of the Offshore Action Plan.

20. He provided an overview of the related supporting key analyses and review processes that started already prior to the First OFOG Meeting held in 2017, leading to the presentation of the proposed amendments to the Meeting for its consideration and approval.

21. The meeting endorsed the amendments of the Annexes to the Offshore Protocol, as presented in document UNEP/MED WG.498/4/L3 (Appendix 2), for submission to the MAP Focal Points Meeting for its approval.

22. Ms. Katleen Hendrix, Legal Officer at the European Commission, DG GROW was invited to deliver a presentation on the EU REACH regulation. She provided relevant information on the main processes related to the restriction and authorization of chemicals. She informed that REACH is undergoing revision as part of the EU Chemicals Strategy for Sustainability, and hence a reform of REACH authorisation and restriction processes is also envisaged. The proposal for revision is foreseen by end 2022.

**Agenda item 5. Progress on the implementation of the Mediterranean Offshore Action Plan**  
*UNEP/MED WG.498/5, UNEP/MED WG.498/5/Corr.1, UNEP/MED WG.498/Inf.4*

23. Ms Claudette Briere Spiteri, Offshore consultant to REMPEC, introduced document [UNEP/MED WG.498/5 “Progress on the Implementation of the Mediterranean Offshore Action Plan”](#) and [Corrigendum](#). She provided a summary overview of the implementation of the Specific Objectives of the Mediterranean Offshore Action Plan since the last status update presented at the Second OFOG meeting in 2019.

24. She concluded that while most of the outputs’ implementation under each Specific Objective has started, a number of aspects deserve attention. These are: i. no progress has been achieved since 2019 with respect to the number of Contracting Parties that have ratified the Offshore Protocol; ii. limited progress on the provision of technical support and capacity building and iii. no progress related to the regional transfer of technology.

25. Delegates from Italy and Israel informed the Meeting that discussions on the ratification of the Offshore Protocol are currently underway within their respective administrations.
26. The Meeting acknowledged the progress in the implementation of the Mediterranean Offshore Action Plan, whilst recognizing that limited financial and human resources still remain as the main challenges for its implementation.
27. The Head of Office of REMPEC gave a short demonstration of the MEDGIS-MAR platform and proposed its use to collect data on installations reported by the Contracting Parties as part of the reporting under the Barcelona Convention Reporting System (BCRS). This, however, will require the development and use of a template with an agreed and harmonized format for reporting of installations by Contracting Parties, to allow for its direct upload in the MEDGIS-MAR platform.
28. In view of the limited reporting by Contracting Parties under the BCRS, it was not possible to fully assess the progress at the regional scale. For this reason, Contracting Parties were encouraged to provide additional information after the meeting to supplement the current information presented in UNEP/MED WG.498/5.

**Agenda item 6. Comprehensive Plan of Actions and PoW 2022-2023**  
*UNEP/MED WG.498/6*

29. Ms. Claudette Briere Spiteri, Offshore consultant to REMPEC, presented the comprehensive plan of actions, including the resource mobilization strategy under document [UNEP/MED WG.498/6](#). She reminded the Meeting that the preparation of a comprehensive plan of actions for the implementation of the Mediterranean Offshore Action Plan (2016-2024) was requested by COP 21 (Naples, Italy, December 2019).
30. The plan takes into account the outcomes of the assessment of the status of implementation of the Mediterranean Offshore Action Plan presented in the previous agenda item, and proposes alternative perspectives and operational modalities for a more effective and sustainable implementation. These include:
- a) conducting training courses using online facilities or back-to-back to the regular in-person OFOG meetings, if possible;
  - b) capitalizing on strengthened partnerships with industry parties and international organizations for the delivery of online training courses and other technical support;
  - c) development of outputs and documents e.g. guidelines etc. under the leadership of CPs through the establishment of correspondence groups;
  - d) stronger level of engagement by CPs, e.g. through a dedicated longer-term OFOG chair appointed for a minimum of two years;
  - e) securing continuity through a fixed-term staff position on the Offshore Protocol at the Secretariat
31. The Meeting agreed to the proposed design of the training programme, which gives priority to training in biennium 2022-2023 of those topics for which guidance documents have already been prepared. In addition, one Contracting Party expressed the need for training on conducting seismic surveys.
32. A number of presentations were given during this agenda item, linking to different aspects of the comprehensive plan of actions. These include:
- a) Mr. Saravanan Marappan, Chair of the OSPAR OIC, talked about the work of the OSPAR Commission in general, and more specifically on pollution from offshore sources. He highlighted the working approach adopted by OIC, which was described as: bottom-up (technical to managing level); based on practical experience; region-specific; sharing work-load; driven by consensus; and through cooperation with other organisations through arrangements (Memorandum of Understanding, agreements, projects...)

- b) Ms. Wendy Brown, IOGP Environment Director, gave a brief presentation about IOGP and its range of activities, including its role in Joint Industry Projects (JIPs) and on the Protection of the Mediterranean Environment, and activities related to decommissioning, one of the main focus topics for the next biennium 2022-2023.
- c) Ms. Marisol Soledad Estrella, UNEP -Norway's Oil for Development (OfD) Partnership, gave a presentation on the objective of the OfD Programme, with a focus on global outreach for wider dissemination of knowledge and trainings. This included information of the systematic approach to training, including lessons/reflections on training methods, such as online trainings. She informed the meeting about the Global Network on environment and oil & gas - a virtual (LinkedIn) community-of-practice focusing on strengthening environmental management in countries with oil and gas development, and organizing a global webinar series. As part of the ongoing Global webinar series – *Enabling oil and gas producing countries to transition towards a low carbon future*, two events are planned for the rest of this year:
- Available technologies that contribute to climate mitigation in upstream oil and gas production on 6 July
  - Decommissioning oil and gas fields: Best environmental practices on 14 October
- d) Mr. Richard Heard, INSITE Programme Director, provided information on the INSITE Programme (Phase 1: 2014-2017; Phase 2: 2018-2023) and its specific projects focusing on the influence of man-made structures in the ecosystem and contributing to an increased understanding of artificial substrate in the North Sea marine environment. He informed about the upcoming conference on Structures in the Marine Environment (SIME 2021) taking place online on 17-18 June 2021, in collaboration between INSITE and MASTS (Marine Alliance for Science and Technology Scotland) ([www.insitenorthsea.org](http://www.insitenorthsea.org))

33. In reaction to the proposed comprehensive plan of actions and resource mobilization strategy, one Contracting Party concurred with the way forward proposed by the Secretariat. A number of Contracting Parties shared the need to use this forum for exchanging of knowledge, experience and good practices, and raising awareness both on aspects that are well-established as well as on specific issues that may be common to other Contracting Parties. This could be done through various means, such as through the organization of an ad-hoc workshop or peer consultations. The suggestion of an ad-hoc technical workshop was welcomed by a number of observers (namely IOGP and IAGC) that offered their support and contribution.

34. Another Contracting Party highlighted the need and potential for collaboration “in between” the development guidance documents, for example through the presentation of case study by a Contracting Party on a specific issue for discussion with other national regulators.

35. One Contracting Party expressed the interest for the development of guidance and subsequent training on the chemical use plan, taking into consideration practices followed in other regional seas, in particular OSPAR in relation to the approval of new chemicals.

36. The proposal for establishing a correspondence group on specific topics, such as on decommissioning of installations, monitoring and further amendments of the annexes to the Offshore Protocol, was put forward to and welcomed by the Meeting. In this respect, IOGP expressed its interest to participate in such a corresponding group.

37. IOGP made reference to the Global Initiative for West, Central and Southern Africa (GI WACAF), a cooperation project between the International Maritime Organization (IMO) and IPIECA, the global oil and gas industry association for advancing environmental and social performance, as an example of a successful experience of collaboration and co-financing involving governments, inter-governmental organizations and the private sector. Similar ways to mobilise resources for a robust and sustainable implementation of the resource mobilization strategy should be explored for the Mediterranean region, based on funding and commitment from both Contracting Parties and industry, including other industry parties and stakeholders in the region.



38. To this end, the Meeting proposed to add a dedicated expected delivery on the implementation of the Comprehensive Plan of Action, including the Resource Mobilization Strategy in the PoW 2022-2023 (see Appendix I of Annex III). The Comprehensive Plan of Actions was endorsed by the Contracting Parties

**Agenda item 7. Conclusions and Recommendations**

*UNEP/MED WG.498/7*

39. The participants reviewed, commented and approved the draft Conclusions and Recommendations as amended by the Meeting, attached as Annex III to the present report.

40. It should be noted that additional written comments were raised on the revised and approved in-session documents UNEP/MED WG.498/4/L2 and UNEP/MED WG.498/4/L3 by two observers (IOGP and WWF-Greece) after that Agenda items 3 and 4, respectively, were declared closed. These comments shared orally under the agenda item 7, are provided in Annex IV of this report.

41. During this agenda item, one Contracting Party requested a study reservation on the document, in order to allow for more time for national consultation on the version of the document amended by the Meeting.

**Agenda item 8. Any Other Business**

42. No request for the floor by participants was made under this agenda item.

**Agenda item 9. Closure of the Meeting**

43. In his closing remarks, Mr. Gabino Gonzalez, Head of Office of REMPEC, thanked the participants for their constructive contribution to the Meeting.

44. After the expression of usual courtesies, the President of the Meeting declared the meeting closed at 1630 hours on 4 June 2021.

**Annex I**  
**List of Participants**

<b>PARTICIPANTS</b>	
<b>ALBANIA / ALBANIE</b>	<p><b>Ms. Klodiana Marika</b> Director of Development Programmes on Environment Ministry of Tourism and Environment</p>
<b>BOSNIA AND HERZEGOVINA/ BOSNIE-HERZÉGOVINE</b>	<p><b>Ms. Senida Džajić-Rghei</b> Researcher/Design engineer Hydro-Engineering Institute Sarajevo</p>
<b>CROATIA / CROATIE</b>	<p><b>Dr. Vlatka Vaniček</b> Director of Safety and Environment Protection Sector Croatian Hydrocarbon Agency</p> <p><b>Ms. Jadranka Lesko</b> Head of Petroleum and Geothermal Water Sector for Energy Purposes Ministry of Economy and Sustainable Development</p>
<b>CYPRUS / CHYPRE</b>	<p><b>Ms. Maria Loizou</b> Environment Officer Department of Environment Climate Action and Energy Unit Ministry of Agriculture, Rural Development and Environment</p> <p><b>Dr. Theodoulos Mesimeris</b> Senior Environment Officer Department of Environment, Ministry of Agriculture, Rural Development and Environment</p> <p><b>Ms. Irene Constantinou</b> Senior Environment Officer Department of Environment, Ministry of Agriculture, Rural Development and Environment</p> <p><b>Dr. Theodora Ioannou</b> Environment Officer, Environmental Impacts Assessment Unit Department of Environment, Ministry of Agriculture, Rural Development and Environment</p>
<b>EUROPEAN UNION / UNION EUROPÉENNE</b>	<p><b>Dr. Joerg Koehli</b> Team Leader - Senior Expert</p> <p><b>Ms. Katleen Hendrix</b> Legal Officer</p> <p><b>Ms. Elena De Gregorio</b> Policy Officer</p>
<b>GREECE / GRECE</b>	<p><b>Mr. Alexandros Koulidis</b> Ministry of Environment and Energy Directorate of Environmental Licensing</p> <p><b>Mr. Iosif Athanasiadis</b> Ministry of Environment and Energy</p>

	Hydrocarbons exploration and exploitation policy independent department
<b>ISRAEL / ISRAËL</b>	<p><b>Mr. Fred Arzoine</b> Deputy Head, Marine Environment Protection Division of the Ministry of Environmental Protection</p> <p><b>Mr. Yevgeny Malkin</b> Environmental Inspector for offshore activity Ministry of Environmental Protection</p>
<b>ITALY / ITALIE</b>	<p><b>Dr. Ezio Amato</b> Head of Environmental Emergencies at Sea Unit, Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA)</p> <p><b>Mr. Gianluca Vetrari</b> Adviser, SOGESID technical support to the Italian Ministry for Ecological Transition</p>
<b>LEBANON / LIBAN</b>	<p><b>Ms. Samar Malek</b> Head of Service Ministry of Environment</p>
<b>TUNISIA / TUNISIE</b>	<p><b>Mr. Samir Khedira</b> Agence Nationale de Protection de l'Environnement (ANPE) Expert Contrôleur Général Point focal Gouvernemental REMPEC</p>
<b>TURKEY/ TURQUIE</b>	<p><b>Ms. Derya Didem Ugur</b> Environmental Engineer Ministry of Environment and Urbanisation of TURKEY General Directorate of Environmental Management Marine and Coastal Management Department</p>
<b>OBSERVERS / OBSERVATEURS</b>	
<b>International Association of Oil and Gas Producers (IOGP)</b>	<p><b>Ms. Wendy Brown</b> IOGP Environment Director</p> <p><b>Ms. Marine Julliard</b> Senior Delegate – HSE Regulations</p> <p><b>Ms. Ping Teo</b> Decommissioning Manager</p>
<b>WWF</b>	<p><b>Dr. Sophia Kopela</b> Nature Policy Associate WWF Greece</p>
<b>INSITE Programme</b>	<p><b>Mr. Richard Heard</b> Programme Director</p>
<b>OSPAR</b>	<p><b>Mr. Saravanan Marappan</b></p>

	<b>Chair OSPAR OIC</b> Lead - Environmental Policy & Strategic Assessment
	<b>Ms. Laura de la Torre</b> Deputy Secretary OSPAR Secretariat
<b>International Association of Geophysical Contractors (IAGC)</b>	<b>Dr. Ross Compton</b> EAME Consultant
<b>UNEP-Norway's Oil for Development partnership</b>	<b>Ms. Marisol Estrella</b> Programme Management Officer
<b>Eni SpA</b>	<b>Mrs. Francesca Polla Mattiot</b> Major Emergency Manager

**SECRETARIAT TO THE BARCELONA CONVENTION AND COMPONENTS OF THE  
MEDITERRANEAN ACTION PLAN**

**SECRETARIAT DE LA CONVENTION DE BARCELONE ET COMPOSANTES DU PLAN  
D'ACTION POUR LA MEDITERRANEE**

<p><b>UNEP/MAP PNUE/PAM</b></p>	<p><b>Ms. Tatjana Hema</b> Deputy Coordinator</p> <p><b>Mr. Stavros Antoniadis</b> Policy and Project Expert</p>
<p><b>REGIONAL MARINE POLLUTION EMERGENCY RESPONSE CENTRE FOR THE MEDITERRANEAN SEA (REMPEC) / CENTRE REGIONAL MEDITERRANEEN POUR L'INTERVENTION D'URGENCE CONTRE LA POLLUTION MARINE ACCIDENTELLE (REMPEC)</b></p>	<p><b>Mr. Gabino Gonzalez</b> Head of Office</p> <p><b>Dr. Claudette Briere Spiteri</b> Offshore Consultant</p> <p><b>Ms. Phyllis Therdros</b> Junior Programme Officer</p> <p><b>Ms. Agnieszka Pawinska</b> Secretary/Administrative Assistant</p>

**Annex II**  
**Agenda of the Meeting**

### **Agenda of the Meeting**

- Agenda item 1.** Opening of the Meeting
- Agenda item 2.** Adoption of the Agenda and Election of Officers
- a) Rules of Procedure
  - b) Election of Officers
  - c) Adoption of the Provisional Agenda
  - d) Organization of Work
- Agenda item 3.** Finalization of the Offshore Environmental Impact Assessment (EIA) Guidelines
- Agenda item 4.** Amendment of the Annexes to the Mediterranean Offshore Protocol
- Agenda item 5.** Progress on the implementation of the Mediterranean Offshore Action Plan
- Agenda item 6.** Comprehensive Plan of Actions and PoW 2022-2023
- Agenda item 7.** Conclusions and Recommendations
- Agenda item 8.** Any Other Business
- Agenda item 9.** Closure of the Meeting



**Annex III**  
**Conclusions and Recommendations**

## Conclusions and Recommendations

The Third Meeting of the Barcelona Convention Offshore Oil and Gas Group (OFOG) Sub-Group on Environmental Impact, which was held online on 3-4 June 2021, hereinafter referred to as the “Meeting”:

1. acknowledged the consultative approach adopted, leading to extensive revisions and improvement of the Mediterranean Offshore Guidelines for the Conduct of Environmental Impact Assessment (EIA) on the basis of the comments received by Contracting Parties (CPs) and partners after its presentation and deliberation during the 2<sup>nd</sup> OFOG meeting in 2019;

2. agreed upon (with reservation from Croatia to provide more time to reflect on the document) the revised Mediterranean Offshore Guidelines for the Conduct of EIA, as amended by the Meeting and laid down in document UNEP/MED WG.498/4/L2, for submission to the Mediterranean Action Plan (MAP) Focal Points Meeting for its approval and its further submission for adoption by 22<sup>nd</sup> Meeting of the Contracting Parties’ (COP 22);

3. endorsed the amendments of the Annexes to the Offshore Protocol, as presented in document UNEP/MED WG.498/4/L3, for submission to the MAP Focal Points Meeting for its approval and its further submission for adoption by COP 22. In this respect, the Meeting acknowledged the need to keep under review the technical content of the annexes to the protocol and make relevant recommendations, in accordance with the OFOG Terms of Reference;

4. recognised the progress that has been achieved on the implementation of the Mediterranean Offshore Action Plan since the 2<sup>nd</sup> OFOG meeting in 2019, highlighting specific achievements related to the finalization of the guidance of EIA, ongoing development of the regional offshore monitoring programme and efforts by the Secretariat to mobilize resources through establishing cooperation with international organizations and associations;

5. took note of the challenges encountered in the implementation of the Mediterranean Offshore Action Plan, including limited dedicated financial and human resources, which resulted in limited progress, in particular on objectives related to the ratification of the Offshore Protocol, the provision of technical support and capacity building and the regional transfer of technology;

6. emphasised the importance of increasing the number of CP ratifications and reporting under Barcelona Convention Reporting System (BCRS), in particular by CPs that are parties to the Offshore Protocol, and by CPs with ongoing or planned oil and gas activities in their national waters;

7. recognised the importance to adopt different operational modalities to establish a more effective and sustainable process for the implementation of the Offshore Action Plan, as presented in the comprehensive plan of actions, including the resource mobilization strategy;

8. concurred with the proposed design of the training programme, as specified in the comprehensive plan of actions, and expressed priority to the following topics for training:

- a) Seismic survey
- b) Disposal of Oil and Oily Mixtures and the Use and Disposal of Drilling Fluids and Cuttings
- c) Special Restrictions or Conditions for Specially Protected Areas (SPA)
- d) Guidelines for the Conduct of EIA

9. welcomed the proposed changes in the operational modalities for the further implementation of the Mediterranean Offshore Action Plan, including:

- a) conducting training courses using online facilities or back-to-back to the regular in-person OFOG meetings, if possible;
- b) capitalizing on strengthened partnerships with industry parties and international organizations for the delivery of online training courses and other technical support;

- c) development of outputs and documents e.g. guidelines etc. under the leadership of CPs through the establishment of correspondence groups;
- d) stronger level of engagement by CPs, e.g. through a dedicated longer-term OFOG chair appointed for a minimum of two years;
- e) securing continuity through a fixed-term staff position on the Offshore Protocol at the Secretariat

10. showed its commitment to increase the level of leadership and engagement by the CPs in achieving the specific objectives of the Mediterranean Offshore Action Plan by proposing to take the lead in the development of concrete action/outputs and/or in tasks related to the organization of the OFOG work in general

11. agreed upon the activities proposed in the Programme of Work, as amended by the Meeting, i.e. definition of the training to be included in the final version of the PoW (Appendix 1) to be submitted to the MAP Focal Points Meeting for approval prior to its adoption by COP;

12. approved the establishment of a correspondence group to carry out the work on i. removal of installations, ii, monitoring and iii. review of the Annexes to the Offshore Protocol with the active participation of CPs and the support of the Secretariat;

13. thanked the chair of the Meeting, the Secretariat, and partner organizations for providing essential technical and strategic support in the preparation of the working documents for this meeting or through their interventions during the meeting, and for their interest in sustaining their support and cooperation in the further implementation of the Mediterranean Offshore Action Plan.

**Appendix 1 (to the Conclusions and Recommendations)**

**Planned offshore-related activities extracted from draft PoW 2022-2023**

**Planned offshore-related activities extracted from draft PoW 2022-2023**

Main activity (means of implementation)	Expected deliverable	Lead Component	Other Component(s)	Partners	SDG Targets	MTF/External Resources/Both
<p>4.2.4. Boost targeted actions for a sustainable and inclusive Blue economy transition at regional and national levels.</p> <p>(in-house expertise, consultancy, national consultation, webinars, side events, expert meetings, Med Forum)</p>	<p>a) State of play on integration of Circular Economy principles into key Blue Economy Sectors (i.e. fisheries, aquaculture, maritime transport, offshore etc.).</p>	<p>SCP/RAC</p>	<p>INFO/RAC, Plan Bleu and other concerned MAP components</p>	<p>Contracting Parties of the BC to be fully involved in the preparation process of the set of recommendations</p>	<p>8.3; 8.4; 8.9; 12.1; 12.2; 12.4; 12.5; 12.6; 12.7</p>	<p>DG NEAR (SwitchMed II)</p>
<p>4.4.1. Implement key targeted measures of the Offshore Action Plan.</p> <p>(in-house expertise, consultancy, online trainings, regional meeting (OFOG))</p>	<p>a) Common criteria, rules and procedures for the removal of installations and the related financial aspects reviewed by the Barcelona Convention Offshore Oil and Gas Group (OFOG) finalised.</p> <p>b) Online trainings organised on subjects from Appendix 2 of Mediterranean Action Plan as defined by</p>	<p>REMPEC</p>	<p>CU</p>	<p>IOGP</p>	<p>9.4; 14.1; 14.2</p>	<p>External</p> <p>External</p>

	2021 OFOG Meeting organised.					
	c) Meeting of the Barcelona Convention Offshore Oil and Gas Group (OFOG) organised and held; Offshore Protocol implementation and Annexes to the Offshore Protocol kept under review; sharing of best practices and latest relevant developments.					MTF
5.4.2. Strengthen participation and contribution of civil society and private sector to the work of MAP BC system  (in-house expertise, support attendance in MAP meetings, round tables)	d) Comprehensive plan of actions implemented, including the resource mobilization strategy for the effective and sustainable delivery of the Mediterranean Offshore Action Plan (2016-2024)	CU, REMPEC	-	MAP Partners, NGOs, CPs	12.6; 17.16	Both (unsecured)
6.2.3. Further develop IMAP Common Indicators	b) Offshore Monitoring strategy for IMAP and Offshore Indicators developed.	CU	IMAP Task Force, REMPEC		14.1; 14.2; 14.a	Both

(in-house expertise, consultancy, IMAP TF, CORMONs)						
6.3.17. Streamline shipping and offshore data-sharing and monitoring platform with Info-MAP Data management system  (in-house expertise, consultancy, IMAP TF, awareness raising)	a) MEDGIS-MAR linked to Info-MAP Data management system.	REMPEC	INFO/RAC, CU		14.1; 14.a; 9.4	MTF
	b) Awareness raised on a Common Emergency Communication System for the Mediterranean.					MTF
	c) Maintain, upgrade and implement REMPEC databases and data platforms.					MTF
	d) List of indicators reviewed; factsheets prepared and reviewed by the OFOG Meeting and CORMON Pollution.					MTF

<p>7.2.3.c Enhance public awareness and outreach on key MAP topics</p> <p>(in-house expertise, external expertise, Communication TF, digital campaigns, web platforms, outreach events, publications, IT services)</p>	<p>c) Awareness, information materials on marine pollution from ships and offshore produced and disseminated.</p>	<p>REMPEC</p>	<p>CU and other MAP component as relevant</p>	<p>IMO, IOGP, IPIECA and other partners</p>	<p>Cross-cutting especially SDG 14 Targets</p>	
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**Annex IV**  
**Comments received by Observers on**  
**UNEP/MED WG.498/3/L2 and UNEP/MED WG.498/3/L3**

**Comments received by IOGP on UNEP/MED WG.498/4/L2 - Revised Guidelines for the Conduct of Environmental Impact Assessment (EIA)**

4. *the formulation is strange, not consistent with the rest of the document and not appropriate to technical guidelines. Suggest a more neutral formulation such as : “Principles listed in Axx...apply”.*

41. *The paragraph is very confusing, and hardly understandable.*

45. *It is usual practice to include a summary of the scoping activities in Appendices of the EIA report, but not all the scoping activities records themselves (this may not be practical). The full records can of course be made available/ requested by the CA.*

98. *proposal to delete ‘the wider significance of the activities’ in Taking into account the wider significance of the activities and best practice, publication should take place electronically and for free (via the internet). Such a formulation is not objective and therefore do not belong to a technical guidelines. In addition, what does it mean?*

*replace with “It is best practice that publication is made available electronically and for free. “*

101 *add ‘by the COMPETENT AUTHORITIES’ Where the EIA report is considered to be inadequate by the Competent Authority, the operator will be asked to provide additional information and the consent decision process will not start until this information has been provided. There will usually be a procedure for appeal against requests for further information.*

107 *what does “and there are no environmental objections to the issue of consent for the activities” mean? Suggest to delete as this is redundant with the aforementioned paragraph, and that ultimately the decision-making framework should be well structured ; we believe that such a sentence is potentially subject to confusion on who the decision-making body is.*

**Comments received by WWF-Greece on UNEP/MED WG.498/4/L2 - Revised Guidelines for the Conduct of Environmental Impact Assessment (EIA)**

(1) *Para. 4: We welcome the reference to article I.4 of the Mediterranean Action Plan and to the principles listed therein, but we believe that this paragraph should also refer to article 4 (3) of the Barcelona Convention and the obligations of contracting parties to apply the principles listed*

*therein. Furthermore, explicit reference should be made to the precautionary principle which is a fundamental principle of international and EU law. This principle is explicitly provided for in article 4 (3) (a) of the Barcelona Convention, and is directly relevant to the carrying out of EIAs in terms of assessing the adverse effects and authorizing an activity in cases of scientific uncertainty.*

(2) *Para. 41: The sentence reading “when national EIA provisions do not require EIA based on previous screening and/or threshold approach, this is considered as a negative screening” in para. 41 should be further clarified with the view to ensuring consistency with subsection 2.1 of the Guidelines and article 5 (1) of the Protocol. It needs to be explicitly stated that “previous screening and / or a threshold approach” should take into account the criteria set out in para. 36. If the ad hoc screening process (paras. 34-36 of the Guidelines) should use the criteria listed in para. 36, the same should apply to “previous” screening to ensure that there is consistency of the processes and equal treatment of states with respect to the implementation of their obligations.*

(3) *Para. 42: Given that this paragraph recommends the “assessment of the impacts” (and not an EIA) “after the fact”, the proviso introduced in the last sentence, namely “if the activities undertaken during the emergency meet the screening criteria provided in paragraph 32”, is not relevant and is thus redundant. The “screening criteria” set out in para. 36 relate to the decision whether an EIA is required, and should not be used in the case of the “assessment of impacts” (which is a different process). We also think that further clarification is required concerning what the “assessment of the impacts” should entail, and explicit mention should be made to monitoring and restoration actions.*

(4) *Subsection 3.2.1: The reliability and validity of data are of critical significance for assessing the environmental impacts of an activity and subsequently deciding on its authorization. The Guidelines should explicitly state that the EIA report should not be constrained by specific data sources and should use the best available science. It should also be based on public, possibly open-source, data*

*sources and not on proprietary, such as unpublished, “grey” or not publicly available standards, or proprietary studies compiled by the operator. This is very important for ensuring transparency of the process and reliability and validity of the data concerning the environmental impacts of the activity, and for providing the competent authorities with the appropriate information to decide on its authorization (article 4 (1) and (2) of the Offshore Protocol).*

*(5) Para. 101 This paragraph should include further clarification concerning the existence of “data gaps” as was suggested in para. 100 of the draft guidelines presented to the OFOG meeting, and in particular the following: “Data gaps should in every case prevent consenting. If it cannot be shown that the submitted information is adequate, then it should be considered inadequate, and consent should be refused”. This is an important aspect of the EIA process that relies on article 4 (2) of the Offshore Protocol and the precautionary principle (which permeates the Offshore Protocol and the Barcelona Convention), and should be explicitly mentioned in the Guidelines to ensure that the contracting parties implement their obligations from the Protocol properly and effectively*

### **Comments received by IOGP on UNEP/MED WG.498/4/L3 - Amended Annexes to the Offshore Protocol**

- *First, we would like to clarify the exact meaning and implications of statement in paragraph B at the bottom of Annex I:*
  - ***B. Annex I does not apply to discharges which contain substances listed above that are below the limits defined jointly by the Parties and, in relation to oil, below the limits defined in Article 10 of this Protocol.***
  - *Does this mean that discharge of the substances in the list can be made if they are contained in a permitted discharge – Article 10 covers drill cuttings, produced water, drainage waters.....?*
  - *For substances that may be discharged does this mean that the limits must be included in Annex I?*
  
- ***Discrepancies and Repetitions in Annex I***
  - *Why are exceptions and limits for some substances provided e.g. mercury - with the exception of mercury within drilling mud/fluids and drilling cuttings up to a maximum of 1 mg/kg dry weight in stock barite;*
  - *But not for others, for example, produced water (see below)*
  - *n°7 Oil & grease in production water, with the exception of permitted process discharges and n°14 Aliphatic hydrocarbons, also known as non-aromatic compounds = not clear because OIW corresponds to aliphatic HC. So n°7 means we can discharge up to international agreed threshold (30 ppm) but n°14 means we cannot discharge = discrepancy*
  - *Repetition : N°9 and n°25 mean the same thing: n°9: Non-aqueous drilling fluids (NAFs), with the exception of NAFs associated with drill cuttings and n°25: Non-aqueous drilling fluids (NAFs), with the exception of NAFs associated with drill cuttings*
  - *Repetition: 16 and 28 repeat ‘formation oil’. These repetition makes the document appear messy and confusing.*
  
- ***Produced Water***
  - *CPs should be aware that produced water contains concentrations of Mercury, Cadmium, Zinc, Copper, Lead, PAHs, Phenols, and Aliphatics.*
  - *Prohibiting disposal of these substances practically means prohibition of produced water discharge.*
  - *We would therefore suggest that a similar reference to discharge of produced water as made in point 7 (oil and grease) is made for 1 mercury, 2 cadmium, 6 PAHs, 10 copper, 11 lead, 12*

*zinc, aliphatics (14), organohalogens (17), phenols (22), formation oil (28) with reference to risk based approach*

- *Instead of zero discharge for such substances (and others on the list) a risk-based approach should be followed focusing on zero harm instead of zero discharge. We strongly urge to consider the objective of zero harm instead zero discharge. This is in addition fully consistent with the recently published vision of the Zero Pollution Action Plan of the EU Commission*
- ***Zinc** is also widely used for corrosion protection using sacrificial anodes and not only within our industry but also in shipping, offshore wind, harbour constructions etc. Likewise, there are other industries/ activities that can be sources of PAHs etc. A prohibition could have greater consequences.*

**Appendix 1.**  
**Revised Guidelines for the Conduct of Environmental Impact Assessment (EIA)**  
**(UNEP/MED WG.498/3/L2)**

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## List of Abbreviations / Acronyms

<b>ALARP</b>	As Low As Reasonably Practicable
<b>BAT</b>	Best Available Techniques
<b>CP</b>	Contracting Party
<b>EBS</b>	Environment Baseline Survey
<b>EIA</b>	Environmental Impact Assessment
<b>EIS</b>	Environmental Impact Statement
<b>EMP</b>	Environmental Management Plan
<b>IMAP</b>	Integrated Monitoring and Assessment Programme
<b>IOGP</b>	International Association of Oil and Gas Producers
<b>MAP</b>	Mediterranean Action Plan
<b>MEBS</b>	Marine Environment Baseline Survey
<b>OCF</b>	Operator Compliance Factsheets
<b>OFOG</b>	Barcelona Convention Offshore Oil and Gas Group
<b>ROV</b>	Remotely-operated vehicle
<b>SEA</b>	Strategic Environmental Assessment
<b>SPA</b>	Specially Protected Areas
<b>SPA/BD</b>	Specially Protected Areas/Biological Diversity
<b>SPR</b>	Source-Pathway-Receptor

## **1. Introduction**

1. The aim of this document is to provide guidance on practical methods and approaches to assessing impacts and effects on the environment of activities as provided for in Article 1.d points (ii) and (iii) of the Offshore Protocol. The guidelines are not intended to be formal or prescriptive and are designed to support the development of an approach which is appropriate to an individual activity, and to consider subsequent impacts and effects as an integral part of the Environment Impact Assessment (EIA) process.
2. Relevant EIA provisions existing in Contracting Parties' legislation and or regulatory systems prevail.
3. The guidance provides advice on the EIA process and suggests methods and tools for identifying and assessing impacts, effects and risk to the environment. It is recommended that the relevant Competent Authority undertakes Strategic Environmental Assessment (SEA) prior to licensing oil and gas activities. The SEA is important as an assessment tool for area-based planning, formulation of governmental strategies and identification of data gaps at an early stage prior to licensing.
4. It should be emphasized that the principles listed in Article I.4 of the Mediterranean Action Plan permeate the Offshore Protocol and the current guidelines.

### **1.1. The EIA Process**

5. This section describes the key stages in the EIA process, including the principles of EIA and the approach taken to identify baseline conditions and to evaluate the potential environmental impacts and effects associated with a proposed activity.
6. The EIA guidance in this document follows common legislative requirements and has drawn on a number of established guidance documents and best practice publications, as provided for in Annex I to this document. This includes a clear and transparent determination of the magnitude of impacts of the proposed activities, the sensitivities and resilience of the receptors, and the impact receptor pathways. This is key to a successful and clearly auditable EIA process supporting statutory decision making.
7. EIA must be initiated in an early stage, in order to conclude before the final permit has been granted.
8. The EIA process is a series of assessments undertaken to ensure environmental issues are captured and considered throughout all stages of the activity development, from the initial plans through to the construction and the operation/monitoring/decommissioning stages. The EIA process is presented in a schematic way in Annex II. Wherever possible, assessments should use an evidence-based approach that is systematic and auditable to evaluate and interpret the potential marine, terrestrial and socio-economic impacts of proposed activities on physical, biological and anthropogenic receptors.
9. An EIA is an effective tool to determine mitigation measures for activity-specific impacts and effects. The views and concerns of consulted stakeholders, environmental authorities and the public concerned form an important part of any recommendations. The EIA should follow all relevant best practice throughout the process, ensuring appropriate mitigation recommendations are developed to minimise the activity's adverse effects and to maximise positive environmental effects, wherever possible.



10. The aim of the EIA process is to identify, describe, assess, reduce or eliminate potential adverse impacts or effects wherever possible. It is a process that is informed by the best understanding of the baseline environment and the corresponding body of scientific knowledge and is focused on identifying the most effective mitigation solutions, and subsequently reassessing the potential residual environmental effects. The ALARP (As Low As Reasonably Practicable) methodology may also be considered.

11. The Competent Authority, environmental authorities, the public concerned, and stakeholder consultation are key factors in determining important data sources, the survey scope and design of the supporting technical studies, and the recommendation of mitigation measures. Consultation is crucial to understanding the limitations of the existing body of science and knowledge within relevant topics. Those limitations and the corresponding uncertainty in predictions of impacts and effects should be clearly exposed in the Environmental Impact Assessment report (EIA report). The Environmental Impact Statement (EIS) is the most common name given to the printed report which documents the results of the EIA process.

12. The EIA report to be provided by the operator for an activity should include a description of reasonable alternatives studied by the operator which are relevant to that particular activity, including, as appropriate, an outline of the likely evolution of the current state of the environment without implementation of the activity (baseline scenario), as a means of improving the quality of the EIA process and of allowing environmental considerations to be integrated at an early stage in the activity's design.

## 1.2. EIA Terminology

13. This section defines terms (in alphabetical order) that are relevant to the EIA methodology framework. Technical studies may use topic-specific terminology that differs from these definitions and these should be clearly defined.

14. **Activity:** concerning exploration and/or exploitation of the resources in the Protocol Area, including:

- (i) Activities of scientific research concerning the resources of the seabed and its subsoil;
- (ii) Exploration activities:
  - Seismological activities; surveys of the seabed and its subsoil; sample taking;
  - Exploration drilling;
- (iii) Exploitation activities:
  - Establishment of an installation for the purpose of recovering resource, and activities concerned therewith;
  - Development drilling;
  - Recovery, treatment and storage;
  - Transportation to shore by pipeline and loading of ships;
  - Maintenance, repair and other ancillary operations.

15. **Baseline:** the current state of the environmental, socio-economic (related to population and human health) or cultural domain prior to project construction or operation. The baseline incorporates the specific area of the activity and the surrounding, interconnected areas and components of the environment.

16. **Baseline scenario:** a description of reasonable alternatives studied by the operator which are relevant to the activity, including, as appropriate, an outline of the likely evolution of the current state of the environment without implementation of the activity.

17. **Effect:** the environmental, ecological, socio-economic (related to population and human health) or cultural consequences of activity-related impacts upon receptors of concern. Consequences

are defined as beneficial or adverse. Predictions should be relative to the baseline, and incorporate any natural variability:

- a. Beneficial: a beneficial effect is one that improves the baseline conditions of receptors of concern e.g. increases in populations of rare or protected species, increases in the area or quality of habitats, or increases in local and regional economic activity;
- b. Adverse: an adverse effect is one that worsens the baseline conditions of receptors of concern e.g. decreases in populations of rare or protected species, reductions in the area or quality of important or protected habitats or sites, or decreases in local and regional economic activity;
- c. Direct: an effect that is the direct consequence of an activity-related impact;
- d. Indirect: an effect that is an indirect or secondary consequence of an activity-related impact. Indirect effects are likely to be spatially or temporally removed from the direct impacts;
- e. Temporary effect: an effect that is lasting for only a limited period of time and is not permanent;
- f. Permanent effect: an effect that is lasting or intended to last or remain unchanged indefinitely;
- g. Reversible effect: an effect that can be reversed either by the regenerative power of the environment or by mitigation measures;
- h. Irreversible effect: an effect that cannot be reversed either by the regenerative power of the environment or by mitigation measures.

18. **Environmental assessment:** a concise review document that describes the proposed development and identifies any impacts it is likely to have on the receiving environment together with any measure to reduce the significance of any impact.

19. **Impact:** the predicted, measurable changes in environmental conditions as a direct result of an activity-related action. Impacts are frequently constrained to the physical and chemical domains, but may also include biological aspects. Changes should be measurable, quantified or estimated in relevant units where possible, and defined as positive or negative. Predictions should be relative to the baseline and should incorporate any natural variability:

- a. Positive: a positive impact will cause an increase to the baseline condition of a receptor, such as an increase in the number of jobs in a given area;
- b. Negative: a negative impact will cause a decrease to the baseline condition of a receptor, such as a decrease in the area of a given habitat;
- c. Direct: an impact that is the direct result of an activity-related action. Direct impacts are likely to be spatially or temporally concurrent;
- d. Indirect: an impact that is an indirect or secondary result of an activity-related action. Indirect impacts are likely to be spatially or temporally removed from the direct impacts;
- e. Temporary impact: an impact that is lasting for only a limited period of time and is not permanent;
- f. Permanent impact: an impact that is lasting or intended to last or remain unchanged indefinitely;
- g. Reversible impact: an impact that can be reversed either by the regenerative power of the environment or by mitigation measures;
- h. Irreversible impact: an impact that cannot be reversed neither by the regenerative power of the environment nor by mitigation measures.

20. **Interacting Effects:** multiple effects upon a single receptor may interact in a number of ways, including:

- a. Additive Effects: the sum of all effects e.g. multiple impacts which would individually cause a population reduction, add together to produce a larger population reduction;
- b. Synergistic Effects: an interaction of effects upon a single receptor that causes an overall effect that is greater than the sum of the individual effects;
- c. Antagonistic Effects: an interaction of effects upon a single receptor that causes an overall effect that is less than the sum of the individual effects;

- d. **Combination Effects:** effects arising from an individual development in combination with effects from other plans or projects;
  - e. **Cumulative Effects:** the incremental effects caused by the combined effects of past, present or reasonably foreseeable activities and the development itself. This includes the combined effects of this activity in combination with other activities generating similar effects both temporally and spatially. Predictions should be relative to the baseline and incorporate any natural variability.
21. **Likelihood:** probability of occurrence, which does not imply that something is necessarily probable or certain. However, all potential impacts and effects must be considered in the EIA process and their environmental risk should be evaluated in terms of evaluation of their consequences and likelihood of occurrence.
22. **Magnitude:** the degree and importance of the change to the baseline conditions, and subsequent effects. Assessment of magnitude must consider all the relevant ecological, socio economic or other aspects of the receptors concerned, including the legal aspects.
23. **Mitigation:** measures to avoid, cancel, reduce, ameliorate or abate adverse activity impacts or effects. Subcategories include:
- a. **Avoidance:** avoidance is the process of eliminating possible activity impacts at source, either through designing them out or through implementation of alternative methods. Also known as built-in mitigation;
  - b. **Minimisation:** minimisation is conceptually similar to avoidance but aims to reduce activity impacts at source where eliminating them may not be possible. Again, this may be through design considerations or through alternative methods;
24. **Offset:** compensation through measures to improve other sites undertaken where activity-specific mitigation is not possible or is unlikely to be effective. Offsetting activity is meant to target the same category of species/habitat, albeit in a different location, the replacement area.
25. **Pathway:** a mechanism or series of interactions (e.g. deposition of sediment, chemical reactions, or airborne noise) that results in an impact upon a final receptor (e.g. benthic organisms, terrestrial habitats or nearby residential properties). Pathways may be physical, chemical, biological or ecological or socio-economic processes or interactions, and may include intermediate stages.
26. **Receptor:** a specific component of the baseline environment or socio-economic domain that will be, or is 'likely' to be, affected by the impacts or effects of the activity. This could be a single entity such as a species or community, or a conceptual grouping such as a population or subset of an ecosystem or an ecosystem itself. A receptor may be affected only by the specific activity proposed, or by the proposed activity and other relevant activities in combination.
27. **Residual Effect:** the remaining effect after mitigation measures have been applied to reduce predicted activity-related effects.
28. **Sensitivity:** the sensitivity of a receptor is the degree to which it may be affected by activity - related impacts or effects. Sensitivity is a component characteristic that will determine the magnitude of effects and is independent of value or legal status.
29. **Source:** the origin of an impact. This will be an aspect of the activity, and will typically be activity-related actions, or a direct result of the development of the activity (e.g. ground preparation and construction activities).
30. **Source-Pathway-Receptor Analysis:** a formal approach to assessing the flow of changes and consequences from a source of impacts to all final receptors. Analysis incorporates the best current scientific understanding of the processes involved, logical cause-and-effect, and considers the relevant characteristics of all receptors and interactions.

31. **Study area:** Made up of the i. site area/project site where the project is located and ii. impact area/zone of influence. The site area will include at least the maritime area that is up to 2 km away of all the components of the project (except piping, 300 meters from piping in deep water and 1 km on the continental shelf). The impact area/zone of influence includes the wider area that might be impacted as a result of ongoing operation or an incident during drilling or production.

32. **Transboundary effects:** Those caused beyond the limits of one Contracting Party's jurisdiction from activities exercised under its jurisdiction, in line with the Barcelona Convention Article 4.3.(d) and Offshore Protocol (Article 26).

33. **Value:** the intrinsic worth or importance of a receptor. This may be characterised by different factors according to the receptor considered e.g. species rareness or legal protection, financial worth, aesthetic beauty, or historic importance.

## 2. EIA Screening

### 2.1. When is an EIA Required?

34. An obligation to undergo an EIA can be linked either to a particular activity type / category (see Section 2.3) or it might be determined through a screening process by a given set of criteria or thresholds (see paragraph 36) or on a case-by-case examination. Determination through screening depends on applicable regulatory provisions and it should be required for activities with likely significant effects on the environment in the absence of any legal provision specifically requiring an EIA-or foreseeing that no EIA is required.

35. Screening is a process that determines whether an EIA is required for a particular activity, including project changes, license modifications and renewals. It is carried out by the Competent Authority based on the information provided by the operator and other available information, such as results of preliminary verifications or assessments of the effects on the environment. The process of screening occurs in the initial development stages of the activity.

36. During the screening process, the following criteria should be used to determine whether an EIA is required:

- a. Physical presence;
- b. Production of wastes and relevant emissions, discharges and expected residues;
- c. Production of underwater noise;
- d. The characteristics of the activity (e.g. size and design of the whole activity, use of natural resources, production of waste, pollution and nuisances, risk of major accidents and/or disasters which are relevant to the activity concerned, risks to human health etc.);
- e. The cumulation with other existing activities and/or approved activities;
- f. Location of the activities, close to or within an environmentally sensitive geographical area (including relative abundance, availability, quality and regenerative capacity of natural resources in the area and its underground and absorption capacity of the natural environment);
- g. Type and characteristics of the potential impacts (e.g. magnitude and spatial extent, nature, transboundary nature, intensity and complexity, probability, expected onset, duration, frequency and reversibility, cumulation of the impact with the impact of other existing and/or approved activities, possibility of effectively reducing the impact).

### 2.2. Obtaining a Screening Opinion

37. A formal screening opinion is required from the Competent Authority concerning the need for an EIA. The Competent Authority will identify whether or not an activity is likely to have significant effects on the environment. If significant effects are considered likely, then an EIA will be required.

Each individual activity should be reviewed on their individual merits, whereby the Competent Authority will determine the requirements for an EIA, as part of the screening decision.

38. Where a formal screening opinion has been made by the Competent Authority, the screening opinion, including a statement of the main reasons for the requirement or not of an EIA, should be recorded and made available to the public.

39. In the case of an environmental assessment not necessarily through the EIA procedure (hereinafter referred to as environmental assessment), the Competent Authority reserves the right to request an EIA, following the outcomes of the environmental assessment. Guidelines on the conduct of an environmental assessment can be found in Section 4.

### **2.3 Activities requiring an EIA**

40. The list of activities requiring EIA presented below applies in cases where there are no national lists in place. The list includes but is not limited to:

- a. The extraction of 500 tonnes or more of oil per day or 500,000 m<sup>3</sup> or more of gas per day other than as a by-product of the drilling or the testing of any well;
- b. The construction of transportation pipelines, where the pipeline is more than 40 km in length and the diameter of the pipeline is more than 800 mm;
- c. Any change to or extension of the above activities, where the change or extension itself meets the thresholds, and renewals of licences / permit expiry / renewal of the above activities in accordance with Article 5 of the Offshore Protocol;
- d. Activities which could have significant effect on a formally designated protected area (e.g. Specially Protected Area), including the use of airguns or explosives.

41. No screening is required in the case of the above list of activities requiring EIA and for activities included in national lists for which EIAs are required without prior screening or when national EIA provisions do not require EIA based on previous screening and/or threshold approach, this is considered as a negative screening.

### **2.4 Exemptions for Undertaking an EIA**

42. Where the sole purpose of the activity is that of national defence or a response to civil emergency and, in the opinion of the Competent Authority complying with the EIA requirements would have an adverse impact on that purpose, an activity may be exempt from undertaking an EIA on a case-by-case basis and if so, provided under the national law. However, it is recommended to conduct an assessment of the impacts after the fact, if the activities undertaken during the emergency meet the screening criteria provided in paragraph 36.

## **3. EIA Guidance for Offshore Activities**

### **3.1. Scoping**

43. Scoping is the process of determining the scope and level of detail of the environmental information to be covered in the EIA report.

44. Depending on the activity and local sensitivities, it is advised to consult with relevant stakeholders during the scoping process to determine the scope of the EIA report. The stakeholders include a range of statutory and non-statutory consultees.

45. Generally, the Competent Authority (responsible for authorizing EIAs and administratively separate from authorities promoting offshore economic development) will provide feedback on key environmental matters which should be addressed in the EIA report. The Competent Authority shall

consult the environmental authorities before providing this feedback. All scoping activities should be recorded and included as appendices to the EIA report.

46. Key regulators and stakeholders should be consulted on the scope of desk-based assessments, survey design and sample analyses, modelling studies and impact assessments to be undertaken, where necessary. Further consultation should be ongoing throughout the development of the EIA report to ensure all relevant available data sources are identified and incorporated. Details of the consultations with the relevant Competent Authority and stakeholders should be summarised in the relevant chapters of the EIA report.

47. During the scoping process, it is important to identify potential data gaps or uncertain datasets and acknowledge limitations of datasets, and to attempt to fill those gaps or find alternative datasets to support scoping assessment. Where alternatives cannot be found, it is important for the assessment to characterise any uncertainty within the supporting data or the underlying body of scientific knowledge, and to recognise and communicate any corresponding uncertainty in predictions of impacts and effects.

### **3.2. Baseline Data Collection**

48. A methodology guidance for monitoring set out in the list of parameters document (UNEP(DEPI)/MED WG.434/4), outlines the requirement for operators to undertake an evaluation of the baseline marine environmental conditions of the area of potential impact from the planned activities, conducted via a desktop review and supplemented by field-based studies if required, based on the lifecycle stage of the planned activity and the availability of existing information.

49. For activities which require an EIA, recently obtained site-specific environmental data, and a summary of the results of physical environmental baseline surveys should be presented in the EIA report.

50. Additional information on a recommended standard for seabed sampling programmes is provided in UNEP/MED WG.476/Inf.5 Rationale for the Common Standards and Guidance on the Disposal of Oil and Oily Mixtures and on the Use and Disposal of Drilling Fluids and Cuttings.

#### **3.2.1. Desktop Data Gathering**

51. A desktop evaluation of the baseline conditions of the marine environment should be conducted prior to commencing activities, documenting the condition of the marine environment for the area of potential impact from the activities. Environmental baseline data should be sufficient to characterise the area of potential impact, including regional and local biodiversity, locations of sensitive habitat and resources, and impact from other users of the resource (e.g. fishermen), so that potential impacts from the activities on all components of the marine environment can be adequately assessed within the EIA and monitored by the operator over the duration of the activities.

52. Gap analysis of the desktop data identified will provide advice on which additional data is to be collected to augment the data gaps during subsequent field studies to the appropriate level of detail required for the EIA.

#### **3.2.2. Environmental Baseline Surveys**

53. In order to be able to assess and monitor any future change, a scientifically robust data set should be collected to determine the present environmental conditions (i.e. the baseline) of the activity location.

54. A well-designed environmental baseline survey will allow any changes in environmental conditions in the local area to be observed in the future, as well as to determine whether these changes are the result of the proposed activities or are due to natural variation or other external factors.

55. The environmental baseline survey should collect geophysical data (bathymetry, seabed features, etc.), as well as an adequate number of seabed samples for faunal identification, sediment characterisation and chemical analysis (e.g. particle size analysis, organic contaminants, heavy metals, etc.). The use of stills photography and drop-down video is a non-destructive method, which can be used for habitat assessment.

56. Additional baseline data that may be useful to collect include local hydrodynamic, metocean and water quality conditions in the area (e.g. local wind, currents, seawater and air temperatures, salinity and sediment transport).

57. Further guidance on Environment Baseline Survey (EBS) is provided in the list of parameters document (UNEP/DEPI/MED WG.434/4) submitted to the 1<sup>st</sup> OFOG Meeting held in Loutraki Greece, in April 2017, in which a number of Operator field environmental monitoring (including baseline environmental evaluation) criteria are proposed as follows:

- a. A field marine environment and seafloor surveys be undertaken to supplement the desktop-sourced baseline data where there are gaps found within desktop-sourced information and/or where the activity warrants such further evaluation;
- b. A pre-activity Marine Environment Baseline Survey (MEBS), gathering data regarding the baseline marine environment within the area of potential impact from the activity e.g. water and sediment, from sufficient sampling locations over the full area of potential zone of impact in order to provide a statistical representation of the baseline conditions in the area, as well as from sampling locations further afield for use as points of regional reference.
- c. Pre-activity Seafloor Survey (such as high resolution side scan sonar survey, 3D shallow hazards assessment, Remotely Operated Vehicle (ROV) video survey, etc. including the use of updated surveying future technologies) should be undertaken documenting site area and impact area seafloor conditions. The survey results will provide a reference for potential spatial and temporal changes in environmental conditions on the seafloor which may result from the activity.

58. All surveys should be designed in consideration of the Integrated Monitoring and Assessment Programme (IMAP) Common indicators described in UNEP/MED WG.476/Inf.4 Rationale for the Guidelines for the Conduct of Environmental Impact Assessment (EIA). More information on environmental survey strategies and the methodologies can also be found in UNEP/MED WG.476/Inf.5 Rationale for the Common Standards and Guidance on the Disposal of Oil and Oily Mixtures and on the Use and Disposal of Drilling Fluids and Cuttings.

59. The Operator Compliance Factsheets (OCF) should be used when collecting environmental data for the relevant common and candidate indicators. The completed OCFs (UNEP/DEPI/MED WG. 434/inf.6) should be submitted to the Competent Authority of each country for authorisation and/appropriated corrective action, if necessary.

### **3.3. Impact Assessment Methodology Framework**

#### **3.3.1. Describing and Valuing the Baseline**

60. A thorough understanding of the environment and the receptors that are likely to be affected by the proposed activity is essential for making predictions of potential impacts and effects, and for making appropriate mitigation recommendations. It is important to describe the presence or absence of relevant receptors, their current condition, natural variability, and any other characteristics relevant to impact assessments. Valuations of receptors and the methodology employed should also be included. Details of the valuation methodology are described in Section 3.4.3 Valuation of Receptors.

61. The description of the baseline should incorporate both desk-based research and field survey data. Before commencing surveys or technical studies, guidance and agreement should be sought from the Competent Authority regarding appropriate data sources, desk-based assessments, survey design and sample analyses, modelling studies and appropriate stakeholder consultation. The scope of surveys and technical studies should consider the nature of activities and the corresponding zones of influence, the sensitivities of likely receptors, and potential pathways for activities to affect receptors. Formal analysis of potential pathways is known as source-pathway-receptor analysis, and a full description is provided in Section 3.3.4 Source-Pathway-Receptor Analysis.

### **3.3.2. Data Gaps and Uncertainty**

62. During the EIA process, it is important to identify potential data gaps or uncertain datasets, acknowledge limitations of datasets, and attempt to fill those gaps or find alternative datasets to support impact assessment. Where alternative datasets cannot be found, it is important for the assessment to characterise any uncertainty within the supporting data or the underlying body of scientific knowledge, and to recognise and communicate any corresponding uncertainty in predictions of impacts and effects.

### **3.3.3. Identifying Impacts and Effects**

63. The terms ‘Impact’ and ‘Effect’ are frequently used interchangeably in many published EIA reports and in certain guidance documents. The Offshore Protocol requires that “an application must include a survey concerning the effects of the proposed activities on the environment”. The distinction between impacts and effects (and their magnitude) is important for the overall assessment of the significance of effects described in Section 3.4.5 Assessment of Significance of Effects.

64. The Offshore Protocol stipulates the requirement for EIAs to describe and assess the “foreseeable direct or indirect short and long-term effects” of the activity. In particular, Annex IV requires:

- A description of the likely effects of the activity on the environment;
- A description of the features of the activity and/or measures proposed in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment, including possible alternatives.

65. The nature and characteristics of impacts and effects differ according to the topic and should be described in detail in the relevant EIA report chapters.

### **3.3.4. Source-Pathway-Receptor Analysis**

66. Determining which receptors may be affected by activity-related actions relies on Source-Pathway-Receptor (SPR) analysis for the identification of impacts and consequential effects. The SPR Analysis process is presented in a schematic way in Annex III. SPR considers all potential routes and mechanisms for impacts to affect all potential receptors along predicted pathways. Pathways are processes or series of interactions that result in an impact upon a final receptor.

67. In some cases, receptors affected by activity related sources may themselves have effects upon other receptors, for example where there are effects on food webs or predator-prey relationships. SPR analysis should also identify all pathways and receptors when considering complex interactions where several inter-related receptors may be affected. In these cases, receptors may be affected in different ways and to different extents. For this reason, assessment of effects may need to be an iterative process, identifying several ultimate receptors, each with differing magnitudes of effects (Annex III).



### 3.4. Description and assessment of Impacts and Effects

68. All impacts identified as being potentially significant during the scoping phase should be taken forward for detailed assessment in the EIA report. Each impact should be described, quantified and assessed.

69. Although not an exhaustive list, a number of potential impacts associated with typical offshore oil and gas activities have been listed below. The assessment of the impacts should address all the phases of the project – construction/installation, pre-commissioning and commissioning, operation and decommissioning.

#### **Seismic survey:**

- a. Underwater noise generation on marine mammals and fish;
- b. Physical presence (e.g. survey vessel, streamers etc.) on other users of the sea and marine animals.

#### **Drilling (exploration and production):**

- a. Physical presence on other users of the sea and the seabed and associated communities (e.g. benthos);
- b. Drilling discharges (e.g. drilling muds, cement etc.) affecting the seabed and associated communities (e.g. benthos), water column and associated communities (e.g. fish);
- c. Atmospheric emissions (e.g. power generation, flaring etc.) on the atmosphere (local, transboundary and cumulative);
- d. Underwater noise generation on marine mammals and fish;
- e. Unplanned/accidental events (e.g. hydrocarbon spills) may affect plankton, benthos, coral reefs, fish, shellfish, marine mammals, marine turtles, seabirds, seagrass beds, designated sites, coasts and inshore habitats and other users of the sea;
- f. Waste management activities.

#### **Production:**

- a. Physical presence on other users of the sea and the seabed and associated communities (e.g. benthos);
- b. Oily discharges (e.g. produced water) on water column and associated communities (e.g. fish);
- c. Atmospheric emissions (e.g. power generation, flaring etc.) on the atmosphere (local, transboundary and cumulative);
- d. Accidental events (e.g. hydrocarbon spills) on plankton, benthos, coral reefs, fish, shellfish, marine mammals, marine turtles, seabirds, seagrass beds, designated sites, coasts and inshore habitats and other users of the sea;
- e. Waste management activities.

**Pipelines** (the main impacts of pipelines – during the laying and operation phases should be stated, including):

- a. Transportation of hydrocarbon from production or non-production installations onshore;
- b. Suspension of sediment particles during construction and sedimentation on sensitive hard substrate habitats;
- c. Underwater noise;
- d. Lighting during construction phase, especially in shallow waters;
- e. Unplanned/accidental events (e.g. hydrocarbon leakage) on plankton, benthos, coral reefs, fish, shellfish, marine mammals, marine turtles, seabirds, seagrass beds, designated sites, coasts and inshore habitats and other users of the sea.

70. Recognition of potential cumulative and transboundary impacts from the proposed activities should also be considered when assessing impacts and effects and included within the EIA report.

71. The Common Standards and Guidelines for Special Restrictions or Conditions for Specially Protected Areas (SPA) within the Framework of the Mediterranean Offshore Action Plan should be

taken into consideration for the assessment of activities on a formally designated area (e.g. SPA), in accordance with the Specially Protected Areas/Biological Diversity (SPA/BD) Protocol provisions.

### **3.4.1. Characterising and Assessing the Magnitude of Impacts**

72. Predictions on changes in baseline conditions are made relative to the baseline. These should be measurable, and quantified or estimated, where possible. The characterisation and assessment of the magnitude of impacts are made according to the receptors affected and require receptor-specific context. Therefore, threshold values for specific factors such as area, frequency or duration should be provided within the relevant EIA report chapters.

### **3.4.2. Characterising and Assessing the Magnitude of Effects**

73. The magnitude of potential environmental effects for each receptor should be assessed independently of its value or designated status. Even where high value receptors utilise the site, the magnitude of the effect upon those receptors may be relatively low if the habitat affected is relatively unimportant to them. Examples where the magnitude of effects upon high value receptors of concern may be low:

1. Loss/reduction of habitats of receptors that are a very small proportion of their foraging range;
2. Loss/reduction of habitats of receptors whose ranges are increasing;
3. Loss/reduction of habitats of receptors that are of very poor quality;
4. Loss/reduction of habitats not used for the purposes of breeding, sheltering or overwintering;
5. Loss/reduction of habitats of receptors that have many alternatives sites.

74. The sensitivity of each receptor must be considered when assessing the likely magnitude of the effect. Ecological sensitivity is defined as the relative change of a system or population in relation to the level of disturbance or perturbation (Miller et al., 2010). The sensitivity of socio-economic and socio-ecological systems may be defined in a similar manner (Holling, 2001).

75. The magnitude of ecological effects will be a product of the activity-specific impacts and the receptor specific characteristics that make those receptors sensitive or responsive to the relevant impacts. Definitions for topic-specific characteristics should be provided in individual EIA report chapters and should incorporate any receptor-specific guidelines and best practice.

### **3.4.3. Valuation of Receptors**

76. The next stage is to determine the ecological, socio-economic or heritage value of the affected receptor. The methods and criteria for assigning value need to be specific to individual receptors and should be detailed in relevant EIA report chapters.

77. Special attention should be given to the receptors typically affected by offshore activities, including:

- a. Benthos;
- b. Coral reefs;
- c. Fish and shellfish;
- d. Marine mammals;
- e. Marine reptiles;
- f. Plankton;
- g. Seabirds;
- h. Seagrass beds;
- i. Nature Conservation Areas and/or sensitive areas formally designated (e.g. Specially Protected Areas);
- j. Other users of the sea e.g. fishing, shipping, tourism and recreation, oil and gas activities, renewable energy, submarine cables, military activity, aquaculture, archaeology etc.

#### **3.4.5. Assessment of Significance of Effects**

78. The significance of each effect is determined by scoring the value of the ecological, socio-economic or heritage feature against the magnitude of the predicted effect. This methodology is applied individually with respect to the specific ecologic, socio-economic or heritage characteristics of each receptor.

79. The level of effect significance is used to determine the use and level of mitigation measures. Where a potential effect is assessed as 'moderate' or 'major', then this should be considered "significant" in EIA terms. So far as practicable, mitigation (including offsetting) should be identified that reduces the potential magnitude or significance of effects, or the likelihood of significant effects. Minor adverse effects would not usually require any action beyond standard good management practices.

80. Mitigation recommendations should be explored as part of the EIA process for all 'moderate' and 'major' effects. Effects are reassessed as described above until either the effect significance is reduced to acceptable levels ('Minor Adverse' or 'Negligible') or no more mitigation can be applied. Residual effect significance is estimated, from which consenting decisions can be made.

#### **3.4.6. Environmental Risk Assessment**

81. It is also important to consider the likelihood that a potential effect could occur as predicted. Therefore, once the magnitude of an effect has been determined, the probability of the effect occurring should be categorised into a number of classifications ranging from 'Certain' to 'Extremely Unlikely'.

82. The reason for including an 'Extremely Unlikely' category is that while some potential effects may be very improbable, they may also be extremely serious should they occur, resulting in major adverse effects on some receptors. These cases will require contingency plans to be put into place. Where doubt exists between two categories within the scale of probability, a precautionary approach should be adopted, and the more conservative category selected.

83. Risk management strategies include managing or breaking receptor pathways, and/or protecting receptors. Mitigation measures or strategies to reduce environmental risk should be addressed for relevant activities that may cause operational pollution, "business-as-usual" as well as accidental events. Their subsequent influence on residual effects should be assessed for relevant receptors.

84. For accidental events, where it may not be possible to reduce the magnitude of potential impacts or effects, the overall environmental risk may be decreased by reducing the likelihood of an adverse event occurring through adequately designed-in mitigation measures (Gormley et al., 2011).

85. The assessment methodology used should be clearly described in the relevant EIA report chapter.

#### **3.5. Cumulative and Transboundary Effects**

86. Cumulative effects are those caused by the combined effects of past, present or reasonably foreseeable activities in the wider area and the activity itself. Assessment of in-combination effects considers other marine and terrestrial activities generating effects over similar temporal and spatial extents. Assessment of cumulative effects should consider all potential interacting effects. The assessment of cumulative effects should draw upon established guidelines and methodologies.

87. Factors considered in scoping other activities in or out for assessment of cumulative and transboundary effects should include connectivity, effects pathways, species distribution and foraging ranges. Consultation with the Competent Authority should be undertaken to confirm that the selection

of activities included is complete, and that the approach to the assessment of cumulative and transboundary effects is correct. Details regarding the rationale for considering cumulative and transboundary effects should be provided within relevant EIA report chapters.

### **3.6. Mitigation and Offsetting**

#### **3.6.1 Mitigation Measures and Residual Effects**

88. The term mitigation is used in general to cover all efforts used to reduce potential impacts (and consequently, effects). These may include design changes, alteration of proposed methods, or other activities, in addition to the core activities to reduce or ameliorate impacts.

89. Mitigation measures are predominantly applied at source, to reduce impacts, with the intention of a corresponding reduction in residual effects upon the receptors in question. However, mitigation may also be applied directly at the receptor-level, with the intention of reducing effects, without any influence on the source or the impact.

90. All the mitigation recommendations described within the EIA report should be based upon the realistic worst-case scenarios and on the Best Available Techniques (BAT) approach, ensuring that all measures described are adequate to ameliorate the range of predicted effects. Mitigation recommendations may be revised during the determination of application.

#### **3.6.2 Mitigation and Monitoring**

91. Mitigation measures should be predominantly applied at source, to reduce impacts, with the intention of a corresponding reduction in residual effects upon the receptors in question to acceptable levels. However, mitigation may also be applied directly at the receptor-level, with the intention of reducing effects, without any influence on the source or the impact.

92. Many oil and gas operators are multinational companies, which operate in different countries under multiple regulatory regimes and are typically managed through their global corporate management systems to ensure all regulatory standards are met wherever they operate. Many offshore oil and gas activities do have inherent mitigation measures in place, as part of their “normal” operational procedures and practices. Such mitigation measures should, nevertheless, be assessed/reviewed on a case-by-case basis in order to make sure they correspond to the needs as identified through the EIA and should be included in the EIA report as a way to demonstrate that the impacts are being managed.

93. All environmental mitigation and monitoring requirements should be stated within the EIA report and the decision to grant development consent and should be taken forward in an Environmental Management Plan (EMP). In line with the requirements set out in the IMA, regular Operator Environmental Performance assessments should be carried out by an independent/third-party to assess and evaluate the operator’s environmental performance throughout the operations against that stated within the EIA report.

#### **3.6.3 Compensation and offsetting**

94. Compensation measures should be considered separate from mitigation. Compensation refers to ‘measures taken to make up for the loss of, or permanent damage to, biological resources through the provision of replacement areas’. Replacement areas should seek to offset as many of the features that were lost as possible.

### **3.7. The Environmental Impact Assessment Report**

95. An EIA report submitted to the Competent Authority must identify, describe and assess the effects of the proposed activities on the environment, socio-economic and cultural domain, the

mitigation measures, information on geographical location, safety measures, contingency plan, operator details, monitoring and decommissioning procedures, precautions for Specially Protected Areas and information about responsibilities for any environmental damage.

96. Annex IV of the Offshore Protocol provides the minimum criteria that every EIA report must contain.

### **3.7.1 Content and Structure**

97. The Environmental Impact Assessment report should contain, if not otherwise foreseen by national legislation at minimum:

- a. A description of the methods, installations and other means to be used, and possible alternatives to such methods and means and justification of the selected option;
- b. An indication of the nature, aims, scope and duration of the proposed activities;
- c. A description of the initial state/baseline of the environment of the area;
- d. A description of the reasonable alternatives to the proposed activities studied by the operator which are relevant to the project and its specific characteristics;
- e. A description of the geographical boundaries of the area within which the activities are to be carried out, including safety zones, where applicable;
- f. A reference to the methodology used for the environmental impact assessment;
- g. A description of the foreseeable direct or indirect short and long-term effects of the proposed activities on the environment, including fauna, flora and the ecological balance;
- h. A statement setting out the measures proposed for reducing to a minimum the risk of damage to the environment as a result of carrying out the proposed activities, including possible alternatives to such measures;
- i. An indication of the measures to be taken for the protection of the environment from pollution and other adverse effects during and after the proposed activities;
- j. An indication of whether the environment of any other State is likely to be affected by the proposed activities;
- k. Details of the environmental monitoring programme and the management plan.

### **3.8. Regulator Review and Public Consultation**

98. After submission of the EIA report to the Competent Authority, it will be subject to a formal public consultation period. The general public should be notified that an EIA report has been submitted to allow for any persons or third parties likely to be interested in, or affected by, the relevant activity to comment. Notifying the public is typically undertaken through the publication of a notice in a newspaper or other publication inviting comments on the EIA report. Taking into account the wider significance of the activities and best practice, publication should take place electronically and for free (via the internet). It is recommended that a deadline for the submission of comments be applied to the consultation period e.g. 30 days after the date of public notice. Any comments raised during the public consultation must be sent to the Competent Authority.

99. If the Competent Authority considers that an activity could have a significant effect on the environment of an adjacent State, or where that State considers that its environment is likely to be significantly affected by the activity, the adjacent State should be invited to participate in the consultation process. The Competent Authority should always consider that the environment of an adjacent State is likely to be affected, if this possibility cannot be excluded with certainty on the basis of submitted information.

100. Once the consultation has concluded, the Competent Authority will undertake its review. The review is the process of establishing whether the environmental information submitted by the operator, as part of an EIA procedure, is adequate to grant consent. The review can be undertaken by the Competent Authority or by an independent organisation on behalf of the Competent Authority. The result of the public consultation with all questions and provided answers must be publicly available.

Relevant public comments must be taken into consideration and must be specifically addressed by the Competent Authority. Maastricht guidelines on public consultation (United Nations, 2015) should be considered best practice and is recommended.

101. Where the EIA report is considered to be inadequate, the operator will be asked to provide additional information and the consent decision process will not start until this information has been provided. There will usually be a procedure for appeal against requests for further information.

102. Following receipt of the operator's response, the Competent Authority will take the additional information into consideration when reviewing the submission. If the additional information is considered to be integral to the decision, it will also require the additional information to be subject to a further round of public consultation.

103. Where there are significant additional information requirements, the Competent Authority may request a formal addendum to the original EIA report, or even suggest that the operator should prepare a new EIA report, and the entire review process would have to be repeated.

### **3.9. Decision Making (Consenting)**

104. Once all the issues raised during the consultation process and the Competent Authority's review have been resolved, authorisation will only be granted if the authority is satisfied that the activity is unlikely to have a significant impact on the receiving environment and that the installation has been planned, in accordance with accepted international standards and practice. The operator should also demonstrate the technical competence and financial capacity to carry out the activities.

105. Authorisation shall be refused if there are indications that the proposed activities are likely to cause significant adverse effects on the environment that could not be avoided by compliance with the conditions laid down in the authorisation. These conditions concern measures, techniques or methods designed to reduce to the minimum risks of and damage due to pollution resulting from the activities, as referred to in Article 6, paragraph 3 of the Offshore Protocol.

106. When considering approval of the siting of an installation, the Competent Authority should ensure that no detrimental effects will be caused to existing facilities, in particular, to pipelines and cables.

107. The Competent Authority will examine the EIA report against the requirements listed in the Offshore Protocol. Authorisation will be granted when the Competent Authority is satisfied with the information provided and that there are no environmental objections to the issue of consent for the activities. Authorisation will specify the activities and the period of validity, geographical limits, technical requirements, installations and necessary safety zones. The authorisation may impose conditions to reduce risks and damage due to pollution resulting from the activities. Any changes to the proposed activity/project must be reported to the Competent Authority and shall be subject to screening or EIA. When a decision to grant or refuse consent has been taken, the Competent Authority shall promptly inform the public and the authorities.

## **4. Guidance for the conduct of environmental assessment**

### **4.1. Permitting**

108. Following the screening decision, in the case of an activity that qualifies for an environmental assessment, the information to be provided by the operator should address the following aspects:

- a. A brief description of the activity, methods, installations and other means to be used during their entire lifespan;
- b. A brief description of the nature, aims, scope and duration of the proposed activities;
- c. A brief description of the initial state/baseline of the environment of the area;

- d. A brief description of the geographical boundaries of the area within which the activities are to be carried out, including safety zones, where applicable;
- e. A brief description of the potential direct or indirect, short and long-term effects of the proposed activities on the environment, including fauna, flora and the ecological balance;
- f. A description of the mitigation measures in place to avoid/minimise the risk of damage to the environment through pollution during and after the proposed activities;
- g. A notification, as per Article 17 of the Protocol, on whether it is likely that the environment of another State is to be affected by the proposed activities.

109. In describing the above points, the operator may consider the following provisions:

i. Description of Activity

110. A description of the activity including the activity methodologies, location of activity and work programme should be provided.

ii. Activity Schedule

111. The environmental assessment should confirm the proposed start date and duration of the activities. The schedule should also take into account potential delays, as there may be seasonal differences in environmental sensitivities.

iii. Description of Environmental Baseline

112. A description of all aspects of the environment likely to be affected by the activity should be included. Particular attention should be made to environmentally sensitive geographical areas, which are likely to be affected by the activity, including any protected species or habitats. Maps should be included, where relevant, to supplement the environmental baseline description. Consideration should also be given to other activities and users which use the location of the proposed activities, and the likely evolution of the current state of the environment without implementation of the project (baseline scenario).

iv. Significant effects of the activity

113. The Environmental Assessment should include any likely significant effects of the activity on the environment. The elements to be considered are shown in Section 2.1 paragraph 36.

v. Environmental Management and Mitigation Measures

114. Where relevant, any features or measures envisaged to avoid, prevent or reduce what might otherwise cause significant adverse effects on the environment should be included in the environmental assessment, as well as the monitoring and the management plan including oil spill contingency plan.

## **4.2. Permitting for the Use and Discharge of Chemical Additives**

115. Details on the use and discharge of chemical additives are provided in separate guidance documents, including the Common Standards and Guidance on the Disposal of Oil and Oily Mixtures and the Use and Disposal of Drilling Fluids and Cuttings (Decision IG.24/9 Annex I) and the planned guidance on the use and discharge of harmful or noxious substances and material.

## **4.3. Regulator Review and Consultation**

116. Environmental assessment (and chemical permit) applications will be reviewed by the Competent Authority and may also be subject to review by additional statutory consultees. Once all statutory requirements are met, the Competent Authority will issue a permit to undertake the proposed

work. The permit may contain specific operational, temporal and reporting conditions/restrictions related to the proposed activities. Environmental assessment (and chemical permit applications) is not subjected to public consultation, so typically the permitting process will be much quicker than for activities that require an EIA.

#### **4.4. Decision Making (Consenting)**

117. When considering approval for environmental assessment (and chemical permit applications), consultee comments will be taken into consideration along with the outcome of the Competent Authority's review. If the information provided in the environmental assessment is acceptable, there are no objections from consultees and the Competent Authority is satisfied that the activity will not result in any significant adverse effects, the approval will be granted. If the Competent Authority is not satisfied, and considers the activity has the potential to cause significant adverse environmental effects, the application will be rejected. The Competent Authority will provide advice on how to proceed in this instance.



## 5. Bibliography

Gormley, A., Pollard, S, and Rocks, S., 2011. Guidelines for Environmental Risk Assessment and Management. Defra, London.

Holling, C.S., 2001. Understanding the Complexity of Economic, Ecological, and Social Systems. *Ecosystems*, 4(5), pp. 390-405.

Miller, F., Osbahr, H., Boyd, E., Thomalla, F., Bharwani, S., Ziervogel, G., Walker, B., Birkmann, J., Van Der Leeuw, S., Rockström, J., Hinkel, J., Downing, T., Folke, C. and Nelson, D., 2010. Resilience and Vulnerability: Complementary or Conflicting Concepts? *Ecology and Society*, 15(3), pp.11-35.

United Nations, 2015. Maastricht Recommendations on Promoting Effective Public Participation in Decision-making in Environmental Matters prepared under the Aarhus Convention Geneva. ECE/MP.PP/10 - ECE/MP.EIA/SEA/5. Available at:  
[https://unece.org/fileadmin/DAM/env/pp/Publications/2015/1514364\\_E\\_web.pdf](https://unece.org/fileadmin/DAM/env/pp/Publications/2015/1514364_E_web.pdf)

**ANNEX I**  
**Reference documents**

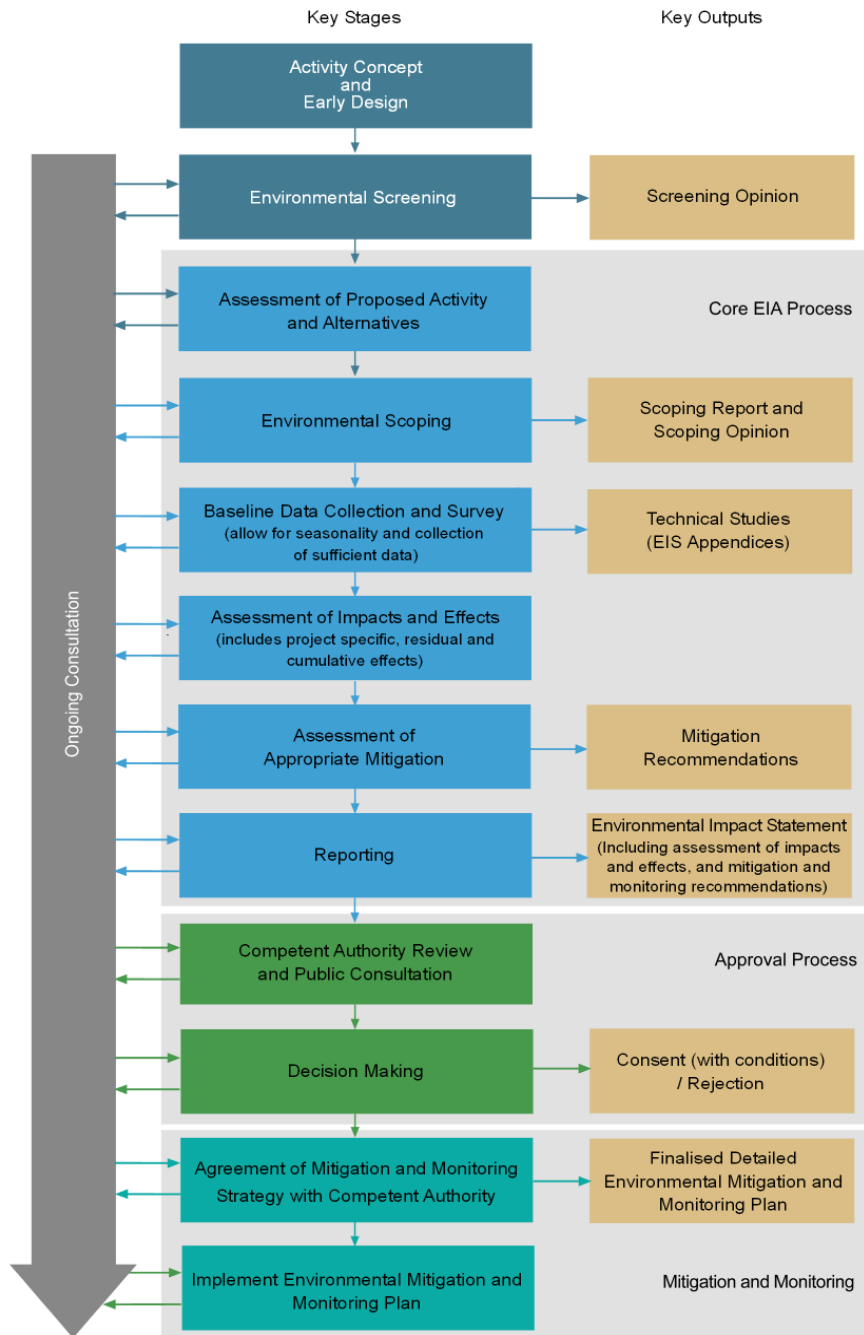
### Reference documents

- BEIS Offshore Petroleum Regulator for the Environment and Decommissioning 2020. The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020 – A Guide  
[www.gov.uk/government/publications](http://www.gov.uk/government/publications).
- European Union. 2001a. Guidance on EIA – EIA Screening.  
<http://ec.europa.eu/environment/eia/eiaguidelines/g-screening-full-text.pdf>
- European Union. 2001b. Guidance on EIA – EIA Scoping.  
<http://ec.europa.eu/environment/eia/eiaguidelines/g-scoping-full-text.pdf>
- European Union. 2001b. Guidelines for the Assessment of indirect and cumulative impacts as well as impact interactions.  
<http://ec.europa.eu/environment/eia/eia-studies-and-reports/guidel.pdf>
- European Union. 2001c. Guidance on EIA – EIA Review.  
<http://ec.europa.eu/environment/eia/eiaguidelines/g-review-full-text.pdf>
- European Union. 2013c. Guidance on the application of the environmental impact assessment procedure for large-scale transboundary projects.  
<http://ec.europa.eu/environment/eia/pdf/Transboundry%20EIA%20Guide.pdf>.
- IOGP 2020. Environmental management in the upstream oil and gas industry. IOGP Report 254.  
<https://www.iogp.org/bookstore/product/environmental-management-in-the-upstream-oil-and-gas-industry/>
- REMPEC/WG.45/INF/16 Rational for the draft guidelines for the conduct of the Environmental Impact Assessment (EIA) - and references therein.
- REMPEC/WG.35/INF.3 Study on International Best Practices - and references therein.

**ANNEX II**

**Key stages and outputs of the EIA process**

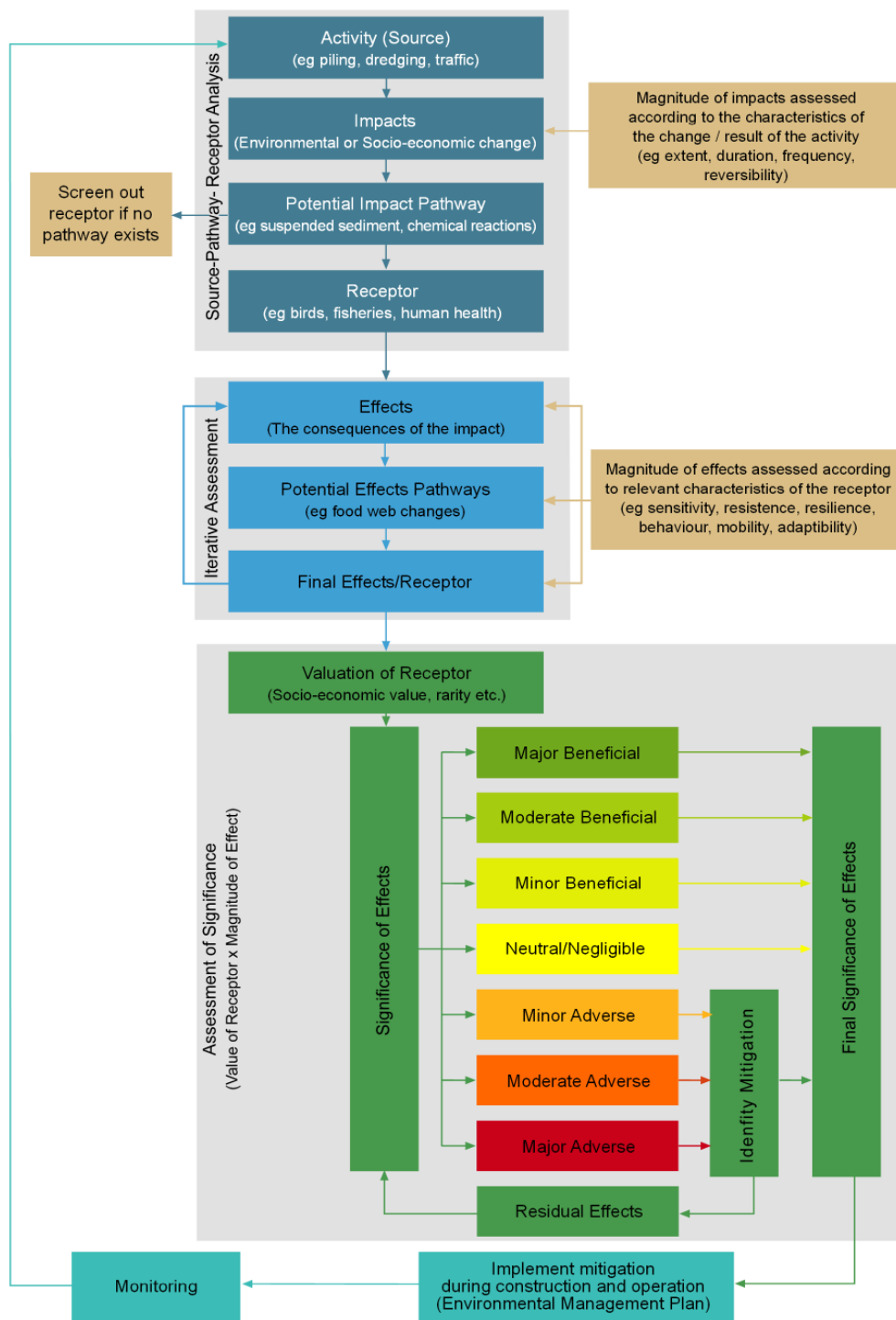
**Key stages and outputs of the EIA process**



**ANNEX III**

**Source-Pathway-Receptor analysis, assessment of significance of effects, and implementation of mitigation and monitoring measures**

### Source-Pathway-Receptor analysis, assessment of significance of effects, and implementation of mitigation and monitoring measures



**Appendix 2.**  
**Amended Annexes to the Offshore Protocol**  
**(UNEP/MED WG.498/3/L3)**



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## OFFSHORE PROTOCOL TO THE BARCELONA CONVENTION

### ANNEX I:

#### HARMFUL OR NOXIOUS SUBSTANCES AND MATERIALS THE DISPOSAL OF WHICH IN THE PROTOCOL AREA IS PROHIBITED

A. The following substances and materials and compounds thereof are listed for the purposes of Article 9, paragraph 4, of the Protocol. They have been selected mainly on the basis of their toxicity, persistence and bioaccumulation:

1. Mercury and mercury compounds, with the exception of mercury within drilling mud/fluids and drilling cuttings up to a maximum of 1 mg/kg dry weight in stock barite. The above exception does not apply in Specially Protected Areas, as determined in Article 21, in coastal or inland waters, or in wetlands
2. Cadmium and cadmium compounds, with the exception of cadmium within drilling mud/fluids and drilling cuttings of 3 mg/kg dry weight in stock barite outside SPAs. The above exception does not apply in Specially Protected Areas, as determined in Article 21, in coastal or inland waters, or in wetlands
3. Organotin compounds and substances which may form such compounds in the marine environment, with the exception of those which are biologically harmless or which are rapidly converted into biologically harmless substances
4. Organophosphorus compounds and substances which may form such compounds in the marine environment, with the exception of those which are biologically harmless or which are rapidly converted into biologically harmless substances
5. Organohalogen compounds and substances which may form such compounds in the marine environment, with the exception of those which are biologically harmless, or which are rapidly converted into biologically harmless substances
6. Polynuclear aromatic hydrocarbons (PAHs), also known as polycyclic aromatic compounds
7. Oil & grease in production water, with the exception of permitted process discharges with an oil in water concentration of less than 30 mg/l, as an average in any calendar month. The discharge concentration of oil in production water shall not exceed 100 mg/l at any time
8. Drilling fluids and drill cuttings within 1 mile / (or 1.61 km or 0.87 nm) from shore
9. Non-aqueous drilling fluids (NAFs), with the exception of NAFs associated with drill cuttings
10. Copper
11. Lead and organic lead compounds
12. Zinc
13. Phosphorus
14. Aliphatic hydrocarbons, also known as non-aromatic compounds
15. Tin and organic tin compounds
16. Free oil, diesel oil, formation oil
17. Organohalogens
18. 4-(dimethyl butyl amino) diphenylamine (6PPD) (Organic Nitrogen Compounds)
19. Neodecanoic acid, ethenyl ester (Organic Esters)
20. Phthalate Esters
21. Dicofol, endosulfan, hexachlorocyclohexane isomers (HCH), methoxychlor, pentachlorophenol (PCP), trifluralin (Pesticides/Biocides)
22. Phenols
23. Clotrimazole (Pharmaceuticals)
24. Musk xylene (Synthetic musks)
25. Non-aqueous based drilling fluids (except that fluid which adheres to cuttings) and small volume discharges

26. Oil-based drilling fluids and associated cuttings
27. Diesel oil
28. Formation oil
29. Crude oil, fuel oil, oily sludge, used lubricating oils and refined products
30. Persistent synthetic materials which may float, sink or remain in suspension and
31. which may interfere with any legitimate use of the sea
32. Substances having proven carcinogenic, teratogenic or mutagenic properties in or
33. through the marine environment
34. Radioactive substances, including their wastes, if their discharges do not comply
35. with the principles of radiation protection as defined by the competent international
36. organizations, taking into account the protection of the marine environment

B. Annex I does not apply to discharges which contain substances listed above that are below the limits defined jointly by the Parties and, in relation to oil, below the limits defined in Article 10 of this Protocol.

**ANNEX II:****HARMFUL OR NOXIOUS SUBSTANCES AND MATERIALS THE DISPOSAL OF WHICH  
IN THE PROTOCOL AREA IS SUBJECT TO A SPECIAL PERMIT**

A. The following substances and materials and compounds thereof have been selected for the purpose of Article 9, paragraph 5, of the Protocol.

1. Arsenic
2. Beryllium
3. Nickel
4. Vanadium
5. Chromium
6. Biocides and their derivatives not covered in Annex I
7. Selenium
8. Antimony
9. Molybdenum
10. Titanium
11. Barium (other than barium sulphate)
12. Boron
13. Uranium
14. Cobalt
15. Thallium
16. Tellurium
17. Silver
18. Cyanides

B. The control and strict limitation of the discharge of substances referred to in section A must be implemented in accordance with Annex III.

**ANNEX III:**

**FACTORS TO BE CONSIDERED FOR THE ISSUE OF THE PERMITS**

For the purpose of the issue of a permit required under Article 9, paragraph 7, particular account will be taken, as the case may be, of the following factors:

**A. Characteristics and composition of the waste**

1. Type and size of waste source (e.g. industrial process);
2. Type of waste (origin, average composition);
3. Form of waste (solid, liquid, sludge, slurry, gaseous);
4. Total amount (volume discharged, e.g. per year);
5. Discharge pattern (continuous, intermittent, seasonally variable, etc.);
6. Concentrations with respect to major constituents, substances listed in Annex I, substances listed in Annex II, and other substances as appropriate;
7. Physical, chemical and biochemical properties of the waste.

**B. Characteristics of waste constituents with respect to their harmfulness**

1. Persistence (physical, chemical, biological) in the marine environment;
2. Toxicity and other harmful effects;
3. Accumulation in biological materials or sediments;
4. Biochemical transformation producing harmful compounds;
5. Adverse effects on the oxygen content and balance;
6. Susceptibility to physical, chemical and biochemical changes and interaction in the aquatic environment with other sea-water constituents which may produce harmful biological or other effects on any of the uses listed in Section E below.

**C. Characteristics of discharge site and receiving marine environment**

1. Hydrographic, meteorological, geological and topographical characteristics of the area;
2. Location and type of the discharge (outfall, canal, outlet, etc.) and its relation to other areas (such as amenity areas, spawning, nursery and fishing areas, shellfish grounds) and other discharges;
3. Initial dilution achieved at the point of discharge into the receiving marine environment;
4. Dispersion characteristics such as effects of currents, tides and wind on horizontal transport and vertical mixing;
5. Receiving water characteristics with respect to physical, hydrological, chemical, biological and ecological conditions in the discharge area; temperature, hydrology (wave and current regimes, upwelling, mixing, residence time, freshwater input, sea level), bathymetry, turbidity, transparency, sound, salinity, nutrients, organic carbon, dissolved gases, pH, links between

species of marine birds, mammals, reptiles, fish and cephalopods and habitats, pelagic-benthic community shifts and productivity;

6. Capacity of the receiving marine environment to receive waste discharges without undesirable effects.

**D. Availability of waste technologies**

The methods of waste reduction and discharge for industrial effluents as well as domestic sewage should be selected taking into account the availability and feasibility of:

- (a) Alternative treatment processes;
- (b) Reuse or elimination methods;
- (c) On-land disposal alternatives;
- (d) Appropriate low-waste technologies.

**E. Potential impairment of marine ecosystem and sea-water uses**

1. Effects on human life through pollution impact on:
  - (a) Edible marine organisms;
  - (b) Bathing waters;
  - (c) Aesthetics.
2. Effects on marine ecosystems, in particular living resources, endangered species and critical habitats.
3. Effects on other legitimate uses of the sea in conformity with international law.

**ANNEX IV:**

**ENVIRONMENTAL IMPACT ASSESSMENT**

1. Each Party shall require that the environmental impact assessment contains at least the following:
  - (a) A description of the geographical boundaries of the area within which the activities are to be carried out, including safety zones where applicable, with particular regard to the environmental sensitivity of areas likely to be affected. Safety zones, where applicable, shall cover areas within a distance of 500 metres around installations and be established in conformity the provisions of general international law and technical requirements;
  - (b) A description of the initial state of the environment of the area, (baseline scenario) and the likely evolution of the state in a “no- project scenario”, on the basis of available information and scientific knowledge;
  - (c) An indication of the nature, aims, scope and duration of the proposed activities, including description of reasonable alternatives and an indication of the main reasons for selecting the chosen option supported by a comparison of environmental effects;
  - (d) A description of the methods, installations and other means to be used, possible alternatives to such methods and means;
  - (e) A description of the foreseeable direct or indirect short and long-term and cumulative effects of the proposed activities on the environment, including fauna, flora, soil, air, water, climate and the ecological balance, including possible transboundary impacts. This description shall include an estimate by type and quantity of expected discharges and emissions (pollutants, water, air, noise, vibration, heat, light, radiation) produced during the construction and operation phases, as well as demolition works, where relevant;
  - (f) A statement setting out the measures proposed for reducing to the minimum the risk of damage to the environment as a result of carrying out the proposed activities, including possible alternatives to such measures;
  - (g) An indication of the measures to be taken for the protection of the environment ~~from~~ in order to avoid, prevent, reduce and if possible offset pollution and any other likely pollution and other pollution and other adverse effects during and after the proposed activities;
  - (h) A reference to the methodology used for the environmental impact assessment;
  - (i) An indication of whether the environment of any other State is likely to be affected by the proposed activities.
2. Each Party shall promulgate standards taking into account the international rules, standards and recommended practices and procedures, adopted in accordance with Article 23 of the Protocol, by which environmental impact assessments are to be evaluated.

**ANNEX VII:**

**CONTINGENCY PLAN**

**A. The operator's contingency plan**

1. Operators are obliged to ensure:

- (a) That the most appropriate alarm system and communication system are available at the installation and they are in good working order;
- (b) That the alarm is immediately raised on the occurrence of an emergency and that any emergency is immediately communicated to the competent authority;
- (c) That, in coordination with the competent authority, transmission of the alarm and appropriate assistance and coordination of assistance can be organized and supervised without delay;
- (d) That immediate information about the nature and extent of the emergency is given to the crew on the installation and to the competent authority;
- (e) That the competent authority is constantly informed about the progress of combating the emergency;
- (f) That at all times sufficient and most appropriate materials and equipment, including stand-by boats and aircraft, are available to put into effect the emergency plan;
- (g) That the most appropriate methods and techniques are known to the specialized crew referred to in Annex VI, paragraph (c), in order to combat leakages, spillages, accidental discharges, fire, explosions, blow-outs and any other threat to human life or the environment;
- (h) That the most appropriate methods and techniques are known to the specialized crew responsible for reducing and preventing long-term adverse effects on the environment, in order to mitigate the negative impacts on wildlife both onshore and offshore including the situations where oiled animals reach shore earlier than the actual spill;
- (i) That the crew is thoroughly familiar with the operator's contingency plan, that periodic emergency exercises are held so that the crew has a thorough working knowledge of the equipment and procedures and that each individual knows exactly his role within the plan;
- (j) That the names and positions of persons authorised to initiate emergency procedures are known to the crew and the authorities;
- (k) That there is evidence of prior environment and health assessments of any chemicals foreseen for use as dispersants.

2. The operator shall cooperate, on an institutional basis, with other operators or entities capable of rendering necessary assistance, so as to ensure that, in cases where the magnitude or nature of an emergency creates a risk for which assistance is or might be required, such assistance can be rendered.