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Agenda item 6: Conservation of sites of particular ecological interest

6.5. Mediterranean Offshore Guidelines and Standards: Draft Common Standards and Guidelines for Special Restrictions or Conditions for Specially Protected Areas (SPAs) within the framework of the Mediterranean Offshore Action Plan

Mediterranean Offshore Guidelines and Standards: Draft Common Standards and Guidelines for Special Restrictions or Conditions for Specially Protected Areas (SPA) within the Framework of the Mediterranean Offshore Action Plan

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#### **Explanatory Note by the Secretariat**

1. In accordance with Decision IG.20/12 adopted by the 17th Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Protocols (COP17) in February 2012, an analysis of existing recognized international best practices and regulations relevant to the implementation of the Protocol for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil, hereinafter referred to as the "Offshore Protocol", and a comparative analysis of existing legislative and administrative framework in the region, were prepared.

2. After completion and review, Decision IG.22/3 related to the Mediterranean Offshore Action Plan in the framework of the Protocol for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil, hereinafter referred to as the "Mediterranean Offshore Action Plan", prepared by the Secretariat with substantive contribution of the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC), was adopted by the Nineteenth Ordinary Meeting of the Contracting Parties and its Protocols (COP19), in February 2016.

3. Since the adoption of the Offshore Protocol, numerous standards and guidelines applicable to the Convention and Protocol objectives have emerged from a wide variety of industry, national and international organisations.

4. In order to consolidate these standards and guidelines into a common set of working practices for use at the regional level, to support the Contracting Parties in the implementation of the Offshore Protocol and the Mediterranean Offshore Action Plan, REMPEC, in close cooperation with the Secretariat and the Specially Protected Areas Regional Activity Centre (SPA/RAC) implemented the following activities pursuant to the UNEP/MAP's Programme of Work for 2016-2017 adopted by COP 19:

- a. Prepare Environment Impact Assessment guidelines from Offshore activities;
- b. Develop the common offshore standards on the disposal of oil and oily mixtures, the use and disposal of drilling fluids and cuttings and analytical measurements;
- c. Develop the offshore common standards and guidelines for special restrictions or conditions for specially protected areas.

5. Through a highly participatory process including a kick-off meeting (Valletta, Malta, 21-22 August 2017), the distribution and completion of questionnaires by Offshore Focal Points and MAP Focal Points, relevant Regional Activity Centres (RACs) and MAP Partners, and a consultation process with the Offshore Focal Points and MAP Focal Points, a consolidated document consisting of three Draft Regional Standards and Guidelines for offshore activities and their rational was produced in May 2018.

6. Following the Contracting Parties' request, the Secretariat has transformed the Mediterranean Offshore Guidelines and Standards into the three following standalone documents for submission to and review by the meetings of the REMPEC Focal Points and SPA/BD Thematic Focal Points respectively:

- Mediterranean Offshore Guidelines and Standards: Guidelines for the Conduct of Environmental Impact Assessment (EIA) (REMPEC/WG.45/13/1);
- Mediterranean Offshore Guidelines and Standards: Common Standards and Guidance on the Disposal of Oil and Oily Mixtures, and the Use and Disposal of Drilling Fluids and Cuttings (REMPEC/WG.45/13/2);
- Mediterranean Offshore Guidelines and Standards: Common Standards and Guidelines for Special Restrictions or Conditions for Specially Protected Areas (SPA) within the Framework of the Mediterranean Offshore Action Plan (UNEP/MED WG.461/20).

7. In the present document, existing standards and operating procedures within the offshore oil and gas industry have been used to develop these guidance documents, particularly with regards to mitigating impacts on protected areas and valued features.

8. The present document covers all the main steps of offshore activities, including geophysical survey, exploratory drilling, field development and decommissioning, providing guidance and key elements to be taken into consideration with the view to ensuring that offshore activities cause no significant impacts on Specially Protected Areas and are in line with their conservation objectives.

9. The Rationale for the Common Standards and Guidelines for Special Restrictions or Conditions for Specially Protected Areas (SPA) within the Framework of the Mediterranean Offshore Action Plan is also developed and submitted to the present meeting as an information document (UNEP/MED WG. 461/Inf.9).

10. Upon approval of the present document by the SPA/BD Thematic Focal Points meeting, it will be further submitted to the Ecosystem Approach Coordination Group and MAP Focal Points meetings, in September 2019.

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# List of Abbreviations / Acronyms

<b>BWM</b> Convention	Ballast Water Management Convention
EIA	Environmental Impact Assessment
ΙΜΟ	International Maritime Organization
IPIECA	International Petroleum Industry Environmental Conservation Association
JNCC	Joint Nature Conservation Committee (UK government advisory body)
MARPOL	International Convention for the Prevention of Pollution from Ships
OSPAR	Convention for the Protection of the Marine Environment of the North-east Atlantic. (Oslo Paris Commission)
РАМ	Passive acoustic monitoring
ROV	Remotely-operated vehicle
SPA	Specially Protected Areas
SPAMI	Specially Protected Area of Mediterranean Importance

# 1. Introduction

1. This present document provides guidelines for special restrictions or conditions to offshore activities for Specially Protected Areas (SPAs) with particular reference to the offshore oil and gas industry as an example of an exploration and exploitation industry relevant to the Offshore Protocol. They are drawn from a review of existing best practices and industry and statutory guidance that is already in place in countries with mature oil and gas industries and reflect a range of measures that have been implemented or recommended to mitigate for potential adverse effects of explorative and exploitative activities on valued habitats and species both in the Mediterranean and worldwide.

2. The guidelines cover the full range of development life cycle stages of offshore activities including the initial geophysical survey, exploratory drilling, field development and decommissioning and contribute to the harmonisation of working practices across Contracting Parties in accordance with Specific objectives, 3, 7 and 8 of the Mediterranean Offshore Action Plan in the framework of the Protocol for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (Directive IG.22/3). The following guidelines are provided for key aspects of the different development phases of offshore developments.

# 2. Geophysical Survey

# 2.1 Permitting

3. Underwater sound produced during geophysical surveys has the potential to disturb protected marine species including mammals, reptiles and fish resulting in physiological damage or alterations in behaviour. Therefore, where proposed, geophysical surveys should be permitted and approved by the relevant Competent Authority using the most up to date knowledge of the spatial and temporal distributions and life cycle stages of protected species within the proposed area of investigation so that sensitive locations and periods can be avoided.

4. Geophysical surveys should be undertaken during the least sensitive period, in terms of spawning, nesting and migration of protected species and as agreed with the Competent Authority prior to the commencement of the survey. Peak spawning, nesting and migration periods should be avoided.

5. Prior to the issue of permits for geophysical survey, survey contractors or project proponents should adequately demonstrate to the Competent Authority the need for the conduct of the proposed geophysical survey and the alternatives considered.

#### 2.2 Conduct of the Geophysical Field Survey

6. IPIECA and Ballast Water Management Convention guidelines together with Strategic Priorities and Actions of the Mediterranean Strategy on Ship's Ballast Water Management should be adhered to during marine geophysical surveys and the following measures should be adopted:

• Local vessels should be used for the conduct of the geophysical survey. This includes the survey vessels used for the deployment of geophysical equipment as well as chase vessels which are used to protect seismic cables and other towed equipment;

- Vessels used during geophysical survey should be restricted to those which have documented non-native species capabilities, such as ballast water treatment and management systems, in accordance with the IMO's International Convention for the Control and Management of Ship's Ballast Water and Sediments;
- A review of marine species records for the presence of alien invasive species in ports that are to be used for the mobilisation and demobilisation of geophysical surveys should be undertaken prior to the commencement of the survey, the findings of which should be reported to the Competent Authority as part of the permit application;
- In light of species inventory data for mobilisation and demobilisation ports, the vessel nonnative species capabilities, the vessel origin and the intended area of operation, a risk assessment of the potential for the introduction and spread of alien invasive species due to the intended survey should be conducted and reported to the competent authorities prior to the commencement of the survey and as part of the permit application. Risk assessments should refer to relevant emerging research on the relationships between vessel traffic and invasive alien species;
- IPIECA guidelines on minimising the risk of introducing and spreading alien species should be adopted and vessels should adhere to the requirements of the BWM Convention, as appropriate. Removal of biofouling from vessel hulls, equipment, rigs, and plant should be conducted at the source of the biofouling and in a way that does not increase the risk of the further spread of non-native species. Where appropriate the Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species (Biofouling Guidelines) (resolution MEPC.207(62)) shall be implemented.

7. Geophysical surveys should be conducted using the lowest sound intensities and over the smallest geographical area possible.

8. In the absence of national guidance, and for high seas areas beyond national jurisdictions, JNCC Seismic Survey Guidance for the mitigation of potential effects to marine mammals should be referred to. Certified observers should conduct searches from a sufficiently high platform to monitor a mitigation zone of 500 m around the sound source for the presence of sensitive species for a minimum of 30 minutes in waters < 200 m deep or 60 minutes in waters > 200 m deep during each soft-start and prior to the noise emitting survey equipment operating at full energy. Soft-starts should recommence, with a 20-minute delay, in the event that a sensitive species is observed within the mitigation zone during the soft start procedure. Shooting may continue if a marine mammal is observed within the mitigation zone after shooting has commenced. Passive acoustic monitoring (PAM) equipment should be used by trained personnel to detect the presence of marine mammals during periods of darkness and poor visibility. Procedures for line turns should be agreed with the relevant Competent Authority, or as per 2017 JNCC advice.

9. Turtles have the potential to become entangled in tail buoys during field surveys causing physiological damage and mortality. Therefore, guards should be fitted to all tail buoys used during field surveys in areas likely to support turtles i.e. near known turtle nesting and feeding sites.

10. Vessels should comply with MARPOL guidelines for the control of oily discharges, recognising the extra levels of controls imposed under the IMO designation of the whole Mediterranean Sea as a Special Area.

# 3. Offshore Drilling Operations

# 3.1 Permitting

11. Operations within SPAs are typically subject to a full EIA and may only be undertaken in accordance with individually assigned permit conditions.

12. Concentrations of all chemicals and substances proposed to be discharged should be identified, quantified and risk assessed in a permit application prior to the commencement of offshore operations. The Competent Authority will review the permit application and only issue consent once satisfied no significant environmental effects will result from the planned operations, with particular consideration being given to the conservation objectives for which the SPA is designated.

# 3.2 Siting

13. Wells and other seabed infrastructure should be sited in areas that cause the least damage to sensitive habitats and species, as far as this is practicable, and in consideration of other potential seabed impacts, such as anchor positioning.

14. Wells and other seabed infrastructure should be sited in consideration of the potential interest features of specially protected areas that are likely to be designated in the future, for example proposed offshore SPAMIs, as far as is practicable.

# 3.3 Conduct of Drilling Activities

15. Exploratory drilling activities should be adopted or adapted for use in Mediterranean situations including the following measures:

- Use dynamic positioning rigs to avoid the use of mooring anchors in potential sensitive seabed areas;
- Pre-lay anchors prior to the arrival of the rig to achieve accuracy in positioning of anchors and chains and to avoid corals and environmentally sensitive habitats;
- Avoid grappling for pick-up of anchor chains and to employ ROV or pick up buoys for this purpose;
- Replace anchor chains in part by fibre (nylon) wire and make buoyant by attaching buoys to the fibre wire to avoid interference with sensitive seabed features;
- Use larger, heavier anchor or larger dimension anchor chain to reduce the chain length to reduce the footprint and add flexibility in anchor positioning.

16. Methods for monitoring drilling activities in specially protected areas should be specific to the features for which the site is designated and draw upon existing standards where suitable (e.g. PERSGA/GEF, 2004).

17. The Common Standards and Guidance on the Disposal of Oil and Oily Mixtures, and the Use and Disposal of Drilling Fluids and Cuttings (REMPEC/WG.45/13/2) provides guidance on the use and disposal of drilling fluids and cuttings and should be referred to when proposing offshore drilling activities. In particular, the environmental profile of drilling fluids and other chemical additives should

be considered, and the least environmentally harmful alternatives should be chosen, where possible. The discharge of drill cuttings and non-aqueous (oil) based drilling fluids is prohibited in SPAs.

18. MARPOL guidance should be adhered to as a minimum standard regarding the control of wastes, oily discharges and ballast waters recognising the extra levels of controls imposed under the IMO designation of the whole Mediterranean Sea as a Special Area.

19. Dedicated spill response resources should be kept at a suitable onshore site if drilling occurs inside or close to a specially protected area, in accordance with the requirements of the Offshore Protocol. Where appropriate, additional local resources should be considered to enhance oil spill resilience and contingency planning.

# 4. Field Development

# 4.1 Permitting

20. Discharge concentrations of all chemical additives proposed to be discharged should be identified, quantified and risk assessed in a permit application prior to the commencement of operations. The Competent Authority will review the permit application and only issue consent once satisfied no significant environmental effects will result from the planned operations.

21. Any permit application for operations inside or close to a special protection area will require a scientifically robust environmental assessment.

# 4.2 Offshore Activities

22. Contracting Parties should spatially or temporally restrict or prohibit discharges in sensitive areas or during important life cycle stages and should minimise flaring during critical bird migration periods.

23. The environmental profile of chemical additives should be considered and the least environmentally harmful alternatives should be chosen, where possible.

24. All discharges to sea shall be monitored and reported to the Competent Authority, in line with consent conditions.

25. Use of biologically relevant species is recommended for ecotoxicological and bioaccumulation studies. A list of key indicator species should be developed and agreed for specific habitat types and regions for the purposes of condition monitoring, as necessary.

26. Incorporation of site-specific environmental monitoring campaigns with regional programmes should be considered, where appropriate, to allow for the interpretation of data within the wider context. Monitoring equipment should be appropriate to the habitat and species being monitored. Non-destructive sampling techniques, such as video and photography surveillance via remote or diver techniques is recommended in hard substrate areas, sea grass beds and areas where a high density of sensitive species occur.

27. Pipelines, cables, coastal intakes and outfalls, jetties, moorings and other seabed structures should not directly impact on biologically sensitive species and habitats. Sediment plumes arising from seabed construction works should be minimised as far as practicable. Minimum separation zones or the use of turbidity curtains should be used where relevant to protect key habitats and species from predicted adverse sediment impacts, as agreed with the Competent Authority.

28. Light emissions should be reduced as far as practicable in line with existing <u>OSPAR</u> <u>Guidance</u>.

29. Dedicated spill response resources should be kept at a suitable onshore site if the development is within or close to a specially protected area, in accordance with the requirements of the Offshore Protocol. Where appropriate, additional local resources should be considered to enhance oil spill resilience and contingency planning.

# 5. Decommissioning

30. All platform structures should be removed from within the boundaries of specially protected areas unless there are over-riding and agreed reasons why these should remain in situ, in which case their suitability for conversion to a reef should be assessed.

31. All process fluids, fuel oils, produced solids and other chemicals and lubricating oils are to be drained or flushed from the decommissioned items and transported to shore for disposal.

32. Pipelines should be subject to a comparative assessment to determine the most suitable decommissioning options from those outlined in Article 20.2 of the Offshore Protocol.

33. Cuttings piles on the seabed should remain in situ on decommissioning unless there are significant over-riding reasons for removal.

34. The use of mechanical cuttings tools should be favoured over the use of explosives. If explosives are used, their use should be fully justified and supported by an assessment of the potential impact on protected and sensitive species and which should form part of the EIA and licence application. JNCC Guidelines, or similar, should be used to mitigate effects on protected species.

35. Post-decommissioning environmental seabed surveys should be undertaken until the state of the seabed returns to background levels. The scope and number of repeat decommissioning environmental surveys should be developed in consultation with the relevant Competent Authority.

36. Post-decommissioning debris search and removal surveys of the site should be conducted to ensure that no debris remains on the seabed. The surveys should cover an area of 500 m radius around the site of the decommissioned installation and 100 m either side of any decommissioned pipelines.