

Report on potential mechanisms
through which areas recognised for
their conservation value may be
downsized or degazetted that may be
of relevance for Ecologically or
Biologically Significant Areas (EBSAs)

Compiled by the Secretariat of the Global Ocean Biodiversity Initiative (GOBI)

Prepared by Phillip J Turner

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REPORT ON POTENTIAL MECHANISMS THROUGH WHICH AREAS RECOGNISED FOR THEIR CONSERVATION VALUE MAY BE DOWNSIZED OR DEGAZETTED THAT MAY BE OF RELEVANCE FOR ECOLOGICALLY OR BIOLOGICALLY SIGNIFICANT MARINE AREAS (EBSAs)

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Prepared by Phillip J Turner

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1. Introduction

Ecologically or biologically significant marine areas (EBSAs) have been described and identified in twelve of the worlds ocean regions, with global coverage anticipated by the end of 2018. Through 12 regional workshops, 279 EBSAs have been described on the basis of attaining high scores in one or more of seven internationally agreed criteria¹.

The description of areas meeting the EBSA criteria is an open and evolving process, as affirmed during the 11th session of the Conference of the Parties (COP) to the Convention of Biological Diversity (CBD)². In future, the process needs to allow for improvements or additions to information in the CBD Repository (including new scientific and technical information as well as traditional knowledge), and for the new information to be incorporated into existing EBSA descriptions as well as the scoring of new areas against the EBSA criteria³.

Concerns have been raised that, at present, the annexes to the COP decisions are static documents⁴. A process for edits and additions to annexes needs to be identified and agreed in a timely manner as new knowledge continues to be acquired. For example, efforts are currently underway to identify Important Marine Mammal Areas (IMMAs) with the aim of further recognising EBSAs in regard to marine mammals⁵.

During COP 13 a request was made to the Executive Secretary to organize an expert workshop that aims to address this need as part of an evolving process (Box 1).

¹ Azores Scientific Criteria and Guidance

https://www.cbd.int/doc/meetings/mar/ebsaws-2014-01/other/ebsaws-2014-01-azores-brochure-en.pdf

² UNEP/CBD/COP/DEC/XI/17, Paragraph 9 https://www.cbd.int/decision/cop/default.shtml?id=13178

³ UNEP/CBD/SBSTTA/20/3, Annex IV.2 https://www.cbd.int/doc/?meeting=sbstta-20

⁴ UNEP/CBD/SBSTTA/20/INF/20, Page 27 https://www.cbd.int/doc/?meeting=sbstta-20

⁵ UNEP/CBD/SBSTTA/20/INF/19, page 22 https://www.cbd.int/doc/?meeting=sbstta-20

BOX 1. CBD/COP/DEC/XIII/12 Paragraph 10.

The expert workshop shall have the following objectives:

- a) To develop options, for cases both within and beyond national jurisdiction, regarding procedures within the Convention to modify the description¹ of areas meeting the EBSA criteria and to describe new areas, while fully respecting the sovereignty, sovereign rights and jurisdiction of coastal States...
- b) To develop options for strengthening the scientific credibility and transparency of the EBSA process, including by enhancing the scientific peer review by Parties, other Governments and relevant organizations.
- ¹ The description of areas meeting the EBSA criteria constitutes both a textual description and a polygon of the area ...

The intention of this report is to provide reference material for this expert workshop, which is to be convened in 2017/2018. The report outlines how other international environmental regimes process changes (i.e., downgrading, downsizing and degazettement) to areas designated under their regulatory frameworks (i.e., Conventions or Directives). Following a review of procedures within the: Ramsar Convention (Ramsar), World Heritage Convention (WHC), Man and the Biosphere Programme (MAB), EU Habitats and Birds Directives, as well as regulations surrounding Vulnerable Marine Ecosystems (VMEs), this report suggests points that may merit consideration during the EBSA expert workshop. A summary of the main components of each regulatory framework is provided in Annex I, followed by key questions which may be of interest to workshop participants (Annex II).

1.1 Definitions: downgrading, downsizing and degazettement

Within conservation policy and practice there are documented examples where legal changes to protected areas have occurred, collectively termed protected area downgrading, downsizing and degazettement (PADDD; Mascia & Pailler 2011).

- **Downgrading** is defined as a decrease in legal restrictions on the number, magnitude, or extent of human activities within an area
- Downsizing is a decrease in the size of an area through a legal boundary change
- **Degazettement** is a loss of legal protection for an entire area

In the context of the EBSA process, examples of downsizing and degazettement can illustrate types of procedures by which EBSA boundaries may be changed or an EBSA may be removed from the Repository. Downgrading does not apply because the EBSA process is the provision of scientific and technical advice (Dunn et al. 2014), which determines inherent value of biodiversity and does not pose legal restrictions on human activities or management measures.

The boundary shift scenario may arise if, for example, new information highlights new features of importance outside of the current area or constrains areas that are important for particular species.

A case for the removal of EBSAs from the Repository may arise if an area is found to no longer meet any of the EBSA criteria, either following new information that disputes previous knowledge or due to changes in the condition of key features. For example, if factors such as climate change and/or other anthropogenic pressure degrade key features that contribute to the EBSA criteria, the rationale for the

EBSA description may be brought into question⁴. Concern for anthropogenic pressure on EBSAs identified by CBD COP13 is exemplified by the recent damage to Raja Ampat coral reefs, an EBSA identified in December 2016⁶ that was then damaged in March 2017 when a 90m cruise ship ran aground⁷. Such an example highlights the need to consider processes to assess the extent of any damage, the potential and timescale for restoration and remediation as well as any ecological and/or biological properties that may have been compromised.

2. Site review, downsizing and degazettement in other environmental regimes

2.1 Ramsar Convention

2.1.1 Overview

Within the Ramsar Convention each Contracting Party is required to designate at least one suitable wetland for inclusion in the List of Wetlands of International Importance (Article 2.4)⁸. As of May 2017, 2278 wetlands⁹ have been identified for their international significance in at least one of five areas: ecology, botany, zoology, limnology or hydrology (Article 2.2)⁸.

Inscription comes with the commitment of Parties to maintain the ecological character of sites and work towards the wise use, conservation and effective management of wetlands as well as migratory waterfowl (Article 2.6, 3.1, 3.2)⁸. Parties are strongly urged to develop management plans for each inscribed wetland and to establish funding mechanisms as well as legal and administrative structures¹⁰. Guidelines on management planning have been provided (Chatterjee et al. 2008) and funding for the preparation and application of management plans is encouraged through the Ramsar Small Grants Fund (previously titled the Wetland Conservation Fund¹¹) as well as non-governmental and multilateral/bilateral aid sources¹⁰.

Parties are strongly urged to establish a monitoring programme for each site that includes a national mechanism by which changes (or likely changes) to the ecological character of a site can be communicated to the Contracting Party and the Ramsar Secretariat (Resolution VIII.14¹² in accordance with Article 3.2⁸ of the Convention). Monitoring programmes should include indicators of ecological character¹² as outlined in the 'Managing wetlands' handbook¹³.

⁶ CBD/COP/DEC/XIII/12, Paragraph 2, Annex 1 Table 3.16 https://www.cbd.int/decisions/cop/?m=cop-13

Gokkon B, 2017. Mongabay and the Guardian Environment Network https://news.mongabay.com/2017/03/cruise-ship-wrecks-one-of-indonesias-best-coral-reefs/

⁸ Convention on Wetlands of International Importance especially as Waterfowl Habitat http://www.ramsar.org/sites/default/files/documents/library/scan_certified_e.pdf

⁹ Ramsar Sites Information Service https://rsis.ramsar.org/

¹⁰ Resolution 5.7 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_5.7e.pdf

¹¹ Resolution VI.6 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_vi.06e.pdf

¹² Resolution VIII.14 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_viii_14_e.pdf

¹³ Handbook 18: Managing wetlands http://www.ramsar.org/sites/default/files/documents/pdf/lib/hbk4-18.pdf

2.1.2 Review procedure

The Ramsar Convention operates a selective review process whereby sites are presumed to remain on the list until they are shown to be at risk (Gillespie 2007). A selective review process is more common than an automatic periodic review, where all areas are reviewed at a set time-period (e.g., European Diploma, where sites are reviewed every 5 years; Gillespie 2007). In addition to a review of at-risk sites, State Parties are required to report on their progress in implementing the Ramsar Strategic Plan through national reports¹⁴; the national reports follow a standardized reporting format and are presented at each COP meeting (i.e., every three years)¹⁵.

Sites that are at potential risk as a result of 'technological developments, pollution or other human interference' may be placed on the Montreux Record¹⁶ ¹⁷. The Record is a means of drawing attention to sites where changes in ecological character have occurred, are occurring, or are likely to occur¹⁶. As of July 2017, 48 Ramsar Sites (approx. 3.4 million hectares) are on the Montreux Record¹⁷.

Sites are only included in the Montreux Record with approval from the Contracting Party¹⁶. Once the Secretariat (previously referred to as the Ramsar Bureau¹⁸) receive notice that the ecological character of a Ramsar site is at risk (either directly from the Party or from a partner or non-governmental organization), the Secretariat request additional information on the status of the site from the concerned Party. At request of the Party, the Secretariat may also organize a Ramsar Advisory Mission to assess the status of a site¹⁹.

If the risk is confirmed the Secretariat (in agreement with the Contracting Party and in consultation with the Scientific and Technical Review Panel) shall add the site to the Montreux Record²⁰. Within the Record it should be clear which sites have implemented a monitoring procedure and remedial action plan²⁰, which typically includes wetland restoration²¹. Annual reports should be provided to the Secretariat documenting the conservation situation of sites on the Montreux Record²⁰. The Secretariat (in agreement with the Contracting Party and in consultation with the Scientific and Technical Review Panel) can remove a site from the Montreux Record when the remedial actions are shown to be successful, or the ecological character of a site is no longer at risk of change²⁰. If there is no improvement in the ecological character of a site, the site may be considered for downsizing or degazettement following guidance within Resolution IX.6²² (described below).

2.1.3 Downsizing and degazettement

Contracting Parties under Article 2.5 have the right to delete or restrict the boundaries of a site included in the Ramsar List due to "urgent national interests". The determination of "urgent national interests" lies with the Contracting Parties but Parties are encouraged to consider the general guidance provided in Resolution VIII.20²³. If invoking Article 2.5 Contracting Parties should, as far as possible, compensate for any loss of wetland resources. It is preferred that compensation takes the form of new nature reserves for waterfowl and protecting an adequate portion of the original habitat (Article 4.2)⁸.

¹⁴ Resolution VIII.26 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_viii_26_e.pdf

¹⁵ COP9 DOC29 http://www.ramsar.org/sites/default/files/documents/pdf/cop9/cop9_doc29_e.pdf

¹⁶ Recommendation 4.8 http://www.ramsar.org/sites/default/files/documents/library/key_rec_4.08e.pdf

¹⁷ Ramsar Sites Information Service https://rsis.ramsar.org/ris-search/?f[0]=montreuxListed_b%3Atrue

¹⁸ DOC.COP9 SG-15 http://www.ramsar.org/sites/default/files/documents/pdf/sc/sg/key_sc_sgcop9_doc15.pdf

¹⁹ Recommendation 4.7 http://www.ramsar.org/sites/default/files/documents/library/key_rec_4.07e.pdf

²⁰ Resolution 5.4 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_5.4e.pdf

²¹ Resolution VIII.25 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_viii_25_e.pdf

²² Resolution IX.6 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_06_e.pdf

²³ Resolution VIII.20 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_viii_20_e.pdf

Guidelines have been developed that outline principles and procedures for considering the downsizing or degazettement of Ramsar sites due to the loss of ecological character²². It is important to note that these are guidelines and the only obligation of Parties is to report the situation to the Ramsar Secretariat (Article 2.5)⁸. Similarly, the only response for Ramsar members is to make recommendations to the Party on future actions (Gillespie 2007).

According Resolution IX.6 downsizing should be considered first and degazettement (or delisting) should only be considered in exceptional circumstances²². If downsizing or degazettement is not justifiable under "urgent national interest" it should be established whether the site still qualifies as a Wetland of International Importance²². If attempts at recovery or restoration have failed and the loss of part or all of the listed site is irreversible²², or if there is clear evidence that the site was listed in error, a report should be prepared prior to formal changes²². The report should document: loss of ecological characters and the reasons, any assessments made and their results, steps taken to seek recovery and proposals for compensation. If the intention is for boundary changes, the report should include an updated Information Sheet on Ramsar Wetlands (i.e., the template for Contracting Parties to describe and nominate areas for the Ramsar List)²². The Party should submit the report to the Ramsar Secretariat, notification is then passed to the Contracting Parties and the changes are discussed at the next COP (Article 8.2d)⁸. The COP may make recommendations (including degazettement, downsizing or continued monitoring/remediation; Figure 1) to the Party concerned (Article 8.2e)⁸ but there is no obligation for State Parties to follow recommendations (Gillespie 2007).

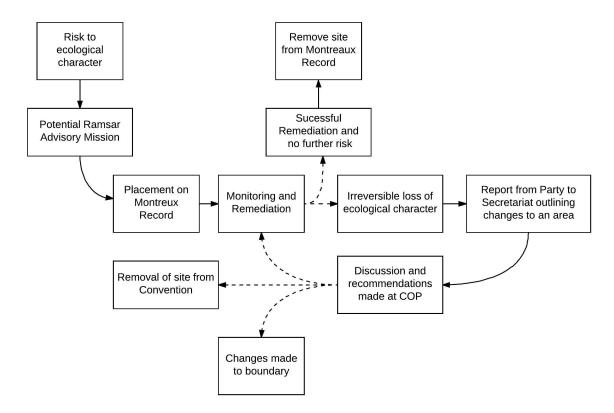


Figure 1: Idealized schematic of the Ramsar degazettement process. It is important to note that Contracting Parties are under no obligation to follow this procedure; Parties only obligation is to report the situation to the Secretariat. The COP can only make recommendations regarding monitoring/remediation, downsizing or degazettement and decisions lie with the concerned Party. Dotted lines represent 'either-or' pathways

BOX 2. Ramsar Site No. 407 - Lake Bardawil, Egypt

Overview

Designated in 1988 Lake Bardawil covers ~60,000 ha¹ along the Mediterranean coastline of Egypt². Consisting of two interconnected lagoons (i.e., Bardawil and Zaranik)² Lake Bardawil is recognised by Birdlife International as an Important Bird Area, providing habitat for ~500,000 migrating birds each autumn including the Dalmatian pelican and 7 other globally threatened species³. The site also provides an important spawning area for commercially important fish populations (e.g., Common sole, European bass and Flathead grey mullet)², providing employment for ~3,000 fishers and producing >2,500 tonnes of seafood annually³.

Montreux Record

The site was placed on the Montreux Record in 1990, followed by a Ramsar Advisory Mission in 1991⁴. The Advisory Mission highlighted a number of conservation issues including the recent extension of the salt production system and the government salt works failing to maintain channels between the lagoons and sea, placing the lagoons at risk of desiccation². Concerns were also raised that development plans would increase population settlement in the area and increase runoff into the lagoon².

Recent Actions

Lake Bardawil remains on the Montreux Record despite efforts to incorporate communication, education, participation and awareness tools into the management of the wetlands⁵. Recent reports on wetland areas (2012-2015) have shown further ecological change due to the conversion of land to salt extraction, fish farming and agricultural activities. Rangers face problems with local communities at Zaranik because law enforcement is not effective and activities (i.e., aquaculture and agriculture) continue without the correct permits or impact assessments⁵.

References

- ¹ Ramsar Sites Information Service https://rsis.ramsar.org/ris/407?language=en
- ² 1993 Ramsar Information Sheet https://rsis.ramsar.org/RISapp/files/RISrep/EG407RISformer1993.pdf?language=en
- ³ 1998 Ramsar Information Sheet https://rsis.ramsar.org/RISapp/files/RISrep/EG407RIS.pdf?language=en
- ⁴ Ramsar Advisory Mission Report https://rsis.ramsar.org/RISapp/files/RAM/RAM 026 EG en.pdf?language=en
- ⁵ COP 12 National Report for Egypt

http://www.ramsar.org/sites/default/files/documents/2014/national-reports/COP12/cop12_nr_egypt.pdf

2.2 World Heritage Convention

2.2.1 Overview

The Convention concerning the Protection of the World Cultural and Natural Heritage (i.e., the World Heritage Convention) was adopted by the Member States of UNESCO in 1972. The WHC aims to identify, protect, conserve, present and transmit to future generations the cultural and natural heritage of Outstanding Universal Value (Operational Guidelines²⁴, OG paragraph 6, 7). To date, 1052 properties (including 49 marine and coastal properties) have been included in the World Heritage List, recognised for at least one of ten criteria relating to cultural and natural value (OG²⁴ paragraph 77).

To be inscribed into the World Heritage List properties must have an adequate protection and management system (OG²⁴ paragraph 78). Depending on the characteristics of the nominated property the management system may include: an assessment of the vulnerabilities of the property to social and economic pressures (i.e., risk assessment), plans for monitoring, evaluation and feedback, as well as the allocation of resources to implement the management system and the necessary capacity-building opportunities (OG²⁴ paragraph 111). State Parties are encouraged to establish staff and services at the site and to report regularly to the World Heritage Committee on the state of conservation (OG²⁴ paragraph 169, 199, Annex 5 3.1e).

Any utilization of the area should not impact the "outstanding universal value" of the property that was recognized when it was originally inscribed (Gillespie 2007, OG²⁴ paragraph 53). State Parties should inform the Committee via the Secretariat (i.e., the World Heritage Centre) of any utilization of the property that may affect the Outstanding Universal Value (OUV); notification should be given as soon as possible and before any decision is taken that would be difficult to reverse (OG²⁴ paragraph 172).

2.2.2 Review procedure

States parties conduct a regional Periodic Review every 6 years (OG²⁴ paragraph 203b). The regional approach was introduced due to the insufficient nature of some national reporting and aims to increase objectivity and allow countries to address reporting requirements collectively (Gillespie 2007). Reporting is conducted through a web-based questionnaire that is prefilled by the World Heritage Centre with information contained in official documents²⁵. Site Managers are responsible for reporting the state of conservation for each of their sites, and the national Focal Point is responsible for reporting the legislative and administrative provisions adopted by the State Party²⁵. Secretariat prepares the regional report by consolidating national reports (OG²⁴, paragraph 208). The regional reports are examined by the Committee, who advises State Parties regarding their concerns (OG²⁴, paragraph 209). The Secretariat, Advisory Bodies and State Parties within the region generate an Action Plan that takes into account the data from the questionnaire²⁶. Action Plans outline ways to improve implementation of the Convention within the region, assigning responsibility to each action (i.e., to the Committee, Secretariat, Advisory Bodies, State Party and/or Sites) and establishing a timeline for follow-up that includes presentations and decisions at specific COPs (for an example, please refer to the Periodic Report and Action Plan, Europe 2005-2006)²⁶. A final report on the Committee's response to the Periodic Review is presented to the General Conference of UNESCO²⁷.

State Parties also submit annual State of Conservation (SOC) reports for any property where circumstances may impact the Outstanding Universal Value, as well as properties already included on

²⁴ Operational Guidelines for the Implementation of the World Heritage Convention http://whc.unesco.org/en/guidelines/

²⁵ World Heritage Convention: Periodic Reporting Questionnaires Website http://whc.unesco.org/en/pr-questionnaire/

²⁶ World Heritage Report n°20: Periodic Report and Action Plan, Europe 2005-2006 http://whc.unesco.org/en/series/20/

²⁷ World Heritage Convention: Periodic Reporting Website http://whc.unesco.org/en/periodicreporting/

the List of World Heritage in Danger (OG²⁴ paragraph 169). Emphasis is placed on State Parties reporting threats but if information comes from external sources, the potential threat is relayed to the State Party in order to verify the source and content (OG²⁴ paragraph 174). SOC reports follow a standardized format that responds to decisions of the Committee, includes progress reports for implementing corrective measure and provides updates regarding current conservation issues and potential alterations (OG²⁴ Annex 13). Since 2003 the World Heritage Centre and the Advisory Bodies²⁸ have reviewed and separated the reports into two groups, one that can be noted by the Committee but does not require discussion and a second group that includes recommendations to address threats but requires Committee discussion²⁹. Discussion may result in one of five decisions depending on the information available and the severity of the deterioration (OG²⁴ paragraph 176).

- i. no further action as the property has not seriously deteriorated;
- ii. property is maintained on the World Heritage List providing the State Party take measures to restore the property within a reasonable timeframe. Technical support may be provided under the World Heritage Fund if the State Party requests it. State Parties may also invite an Advisory mission by the relevant Advisory Body to seek advice in addressing the threats.
- iii. if the condition of the property meets at least one of the criteria for ascertained or potential danger (OG²⁴ paragraphs 178-180), the property may by inscribed onto the List of World Heritage in Danger following the OG²⁴ (paragraphs 183-191).
- iv. if the property has irretrievably lost the characteristics that determined its inscription onto the World Heritage List, the property may be deleted.
- v. If the information available is not sufficient, the Secretariat (in consultation with the State Party) may be authorized to investigate the present condition of the property, the threats to the property and the feasibility of restoration. Investigation may include a Reactive Monitoring mission, consultation with specialists or an Advisory mission. If emergency action is needed, financing from the World Heritage Fund may be allocated by the Committee through an emergency assistance request.

2.2.3 Downsizing and degazettement

Before a property is placed on the List of World Heritage in Danger (Danger List), the Committee develops, in consultation with the State Party, a desired state of conservation for the removal of the property from the Danger List and a plan for corrective measures (OG²⁴ paragraph 183). To develop a corrective programme the Committee may request the Secretariat to investigate (in co-operation with the State Party) the present condition of the property (OG²⁴ paragraph 184). Decisions to place the property on the Danger List require a two-third majority of Committee members present and voting (OG²⁴ paragraph 186); the Committee's decision is forwarded to the State Party and immediately issued via public notice (OG²⁴ paragraph 187) with the corrective programme proposed to the State Party for immediate implementation (OG²⁴ paragraph 186). Properties on the Danger List are reviewed annually via SOC reports (as explained above).

In accordance with the Convention all possible measures should be taken to prevent the deletion of any property from the World Heritage List (OG²⁴ paragraph 170). Failing this, a property may be considered for degazettement if the property has lost the characteristics that determined its inclusion onto the List (OG²⁴ paragraph 192). A decision for degazettement requires a two-third majority of

²⁸ The WHC works with three Advisory Bodies: IUCN (International Union for Conservation of Nature) evaluates proposed natural heritage properties and reports on the state of conservation for listed sites; ICMOS (i.e., the International Council on Monuments and Sites) provides support by evaluating proposed cultural and mixed properties; ICCROM (i.e., the International Centre for the Study of the Preservation and Restoration of Cultural Property) provides expert advice on how to conserve listed properties and provide training in restoration techniques. Other organizations may contribute to the WHC programme of work but Advisory Bodies are provided with specific responsibilities within the Operational Guidelines.

²⁹ Decision 27 COM 7B.106 http://whc.unesco.org/en/decisions/689/

members present and voting, but a decision cannot be made unless the State Party has been consulted on the question of degazettement (OG^{24} paragraph 196). To date, two properties have been de-listed, the Arabian Oryx Sanctuary in Oman (de-listed in 2007, see Box 3) and the Dresden Elbe Valley (de-listed in 2009 due to the construction of a four-lane bridge^{30 31}).

Regarding downsizing, a State Party may choose to alter the boundaries of a World Heritage Site within its territory. If boundary changes are significant (including both extensions and reductions) the State Party submits the proposed changes as if it were a new nomination. The re-nomination is then passed through the full year and a half evaluation cycle (OG²⁴ paragraph 165). Re-nomination is also required if a State Party wishes to modify the criteria used to justify a properties inscription, initiating the full evaluation cycle (OG²⁴ paragraph 166).

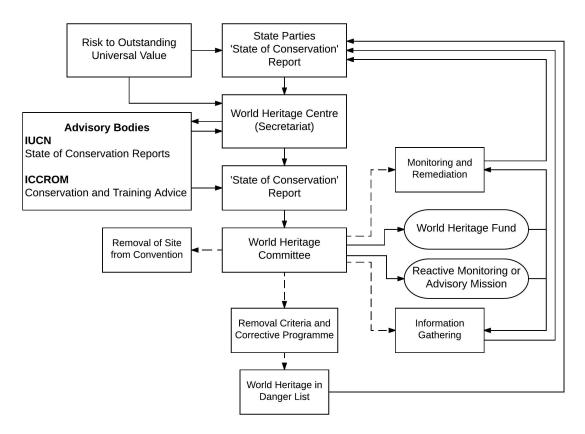


Figure. 2 Schematic of the World Heritage Convention degazettement process. It is important to note that the State Party must be consulted if information about a risk to a site is provided from an external source. State Parties must also be consulted before a site is removed from the World Heritage List. Dotted lines represent 'either-or' pathways. IUCN: International Union for Conservation of Nature; ICCROM: International Centre for the Study of the Preservation and Restoration of Cultural Property.

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³⁰ Decision 33 COM 7A.26 http://whc.unesco.org/en/decisions/1786

³¹ Dresden Elbe Valley 2009 State of Conservation Report http://whc.unesco.org/en/soc/611

BOX 3. Arabian Oryx Sanctuary in Oman

Overview

The Arabian Oryx Sanctuary was inscribed into the World Heritage List in 1994¹, with a total area of 2.75 million ha. Within the central desert and coastal hills of Oman the area supports the first free-ranging herd of Arabian Oryx, declared extinct in the wild in 1972 and reintroduced to the area in 1982². The area also supports the largest wild population of Arabian gazelle and the only wild breeding site in Arabia for the vulnerable Houbara bustard².

List of World Heritage in Danger

The Sanctuary was never placed on the List of World Heritage in Danger but concerns regarding the state of conservation were raised as early as 1996. In 1996 IUCN noted concerns regarding Oryx poaching and construction of a reverse osmosis plant³, a follow up review was postponed because the management plan and boundaries of the site had yet to be finalized⁴. From 1996 to 1999 the Oryx population dropped due to heavy poaching with reports that the Oryx could be threatened with a second extinction in the wild⁵. Further concerns were raised as IUCN reported that an EIA for oil exploration had been undertaken in the Sanctuary⁵.

Financial support from the World Heritage Fund was provided in 2003 for capacity building and training of staff and rangers⁶. Continued lack of funding prevented the management plan from being fully implemented⁷ and reports indicated that the current management plan would conditionally permit mining in the Sanctuary⁸. During the 30th Session of the Committee (July 2006) it was noted that any planned exploitation would justify the property being placed on the List of World Heritage in Danger⁸.

Degazettement

The Sanctuary was de-listed following the 31st Session of the Committee (July 2007) following consultation with IUCN. The reasons provided by the Committee include: the decline of the Oryx population, lack of management implementation, the State pursuing oil exploration activities and the significant reduction in size of the Sanctuary⁹. The reduction of the Sanctuary was in violation of the Operational Guidelines²³ (paragraph 165), which require State Parties to re-nominate a site if significant boundary changes are proposed.

References

- ¹ Decision CONF 003 XI http://whc.unesco.org/en/decisions/3192
- ² World Heritage List Description http://whc.unesco.org/en/list/654/
- ³ Decision CONF 201 VII.D.39 http://whc.unesco.org/en/decisions/2590
- ⁴ Decision CONF 201 V.B.27 <u>http://whc.unesco.org/en/decisions/5637</u>
- Decision CONF 204 IV.B.36 http://whc.unesco.org/en/decisions/5711
- ⁶ Decision 27 COM 12.8 http://whc.unesco.org/en/decisions/754
- Decision 29 COM 7B.6 http://whc.unesco.org/en/decisions/361
- ⁸ Decision 30 COM 7B.10 http://whc.unesco.org/en/decisions/1093
- ⁹ Decision 21 COM 7B.11 http://whc.unesco.org/en/decisions/1392

2.3 Man and the Biosphere Programme (MAB)

2.3.1 Overview

Launched in 1974 UNESCO's Man and the Biosphere Programme (MAB) promotes the conservation of biodiversity and the sustainable use of resources within areas comprising terrestrial, marine and coastal ecosystems³². Biosphere reserves are sites where interdisciplinary approaches (i.e., natural and social sciences, economics and education) can be used to understand interactions and manage changes between social and ecological systems³³. Each biosphere is composed of three zones: 1) a core area with strict protection, 2) a buffer zone that is used for scientific research, monitoring, training and education; 3) a surrounding transition area where the greatest activity is allowed, encouraging sustainable economic and human development (Article 4.5)³². To date, 669 biosphere reserves have been identified in 120 countries³³.

To qualify as a biosphere reserve sites must: contribute to conservation, foster economic and human development, and support environmental education, training, research and monitoring (Article 3)³². State Parties nominate sites by completing a standardized nomination form³⁴ that is verified by the Secretariat (Article 5.1a)³². All nominations are considered by the Advisory Committee before a decision is made by the International Co-ordinating Council (Article 5.1)³². For a site to be inscribed the site must include: a management policy, a designated authority or mechanism to implement the management policy as well as programmes for research, monitoring, education and training (Article 4.7)³². In addition to these criteria, arrangements should be in place for public authorities, local communities and/or private interests to participate in the design and functioning of the reserve (Article 4.6)³².

2.3.2 Review procedure

Each biosphere reserve undergoes a decadal periodic review (Article $9.1)^{32}$. A report is prepared by the concerned authority to assess the functioning, zoning, scale of the reserve and involvement of the local populations, corresponding to the criteria outlined in Article 4^{32} . The report is considered by the Advisory Committee and examined by the International Co-ordinating Council (ICC). If the status of the reserve no longer satisfies the criteria, ICC may recommend measures to ensure conformity with Article 4^{32} ; ICC will also inform the Secretariat on actions it should take to assist the State concerned (Article $9.5)^{32}$.

2.3.3 Downsizing and degazettement

States are encouraged to improve any existing biosphere reserve and, as appropriate, propose extensions (Article 5.2)³². Within the MAB-framework no process exists for downsizing; however, under Article 9.8³² a State may remove a biosphere reserve by notifying the Secretariat. Notification is passed to ICC and the area is no longer included in the biosphere network. A site may also be removed from the network if ICC concludes that the reserve does not satisfy the criteria contained in Article 4³² and corrective measures have not addressed the issue within a reasonable timeframe (Article 9.6)³². Following the decision to remove a site by ICC, the Director-General of UNESCO notifies the concerned Party and the area is no longer referred to as a biosphere reserve (Article

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³² Biosphere Reserves: The Seville Strategy & The Statutory Framework of the World Network http://unesdoc.unesco.org/images/0010/001038/103849Eb.pdf

³³ UNESCO Man and the Biosphere Programme Website: http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/man-and-biosphere-programme/

³⁴ Man and the Biosphere Programme: Official Documents http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/related-info/publications/mab-official-documents/

9.7)³². As of June 2017, 38 sites have been withdrawn from the World Network of Biosphere Reserves; 20 sites were withdrawn in 2017 with 17 of these within the United States of America³⁵.

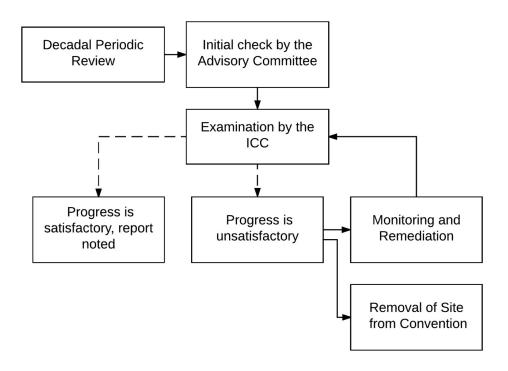


Figure 3: Schematic of the Man and the Biosphere Programme degazettement process. It is important to note that monitoring and remediation would be attempted before the International Co-ordinating Council (ICC) decided to remove a site from the Convention. Dotted lines represent 'either-or' pathways

³⁵ Biosphere reserves withdrawn from the World Network of Biosphere reserves http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/

BOX 4. North Norfolk Coast

Overview

The North Norfolk Coast was designated as a Biosphere Reserve in 1976 with a total area of 8,500 ha¹. The area contains a range of coastal and marine habitats including: intertidal sands and muds, shingle ridges as well as salt and freshwater marshes¹. The area is recognised for its importance to breeding and wintering waterfowl as well as a large breeding colony of harbor seals¹. The Norfolk Coast provides important resources for the local community, including cereal and sugar beet cultivation as well as seafood harvesting (e.g., mussels, cockles, shrimp, crabs)¹. Tourism is an important industry (contributing ~£3 billion to the local economy and supporting ~60,000 jobs in Norfolk²), along with the coastal area being used for educational visits as well as biological and geomorphological research¹.

Degazettement and Transparency

Session reports from the International Co-ordinating Council (which are only available online from 2008³) clarify whether a reserve is removed from the network upon request by the State Party or because the site no longer meets the MAB Criteria. How a site fails to meet the criteria is explained within the periodic review of a reserve; however, the periodic reviews are not held within the central UNESCO's MAB website and can only be found on country specific websites (e.g., UK Man and the Biosphere Committee⁴).

The North Norfolk Coast reserve was delisted because the area no longer met the MAB criteria⁵. The 2009 periodic review explains that, despite the ecological qualities, the reserve does not include the gradient of human intervention or sustainable development opportunities required by the MAB criteria⁶. From 2009, a stakeholder consultation looked at establishing the current reserve as the core area, the wider North Norfolk Coast SSSI (Site of Species Scientific Interest) as a buffer zone and a range of options for a wider transition zone⁶. An agreement was not reached and the reserve was delisted in 2014⁵.

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http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?mode=all&code=UKM+09

http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=16085&FromSearch=Y&Publisher=1&SearchText=biosphere%20reserves&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description

¹ North Norfolk Coast, MAB Biosphere Reserves Directory Information

² Jarques 2015 Economic Impact of Tourism: Norfolk – 2015 http://mediafiles.thedms.co.uk/Publication/ee-nor/cms/pdf/Economic%20Impact%20of%20Tourism%20-%20Norfolk%202015.pdf

³ Sessions of the ICC of the MAB Programme http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/man-and-biosphere-programme/about-mab/icc/icc/

⁴ UK Man and the Biosphere Committee, Periodic Review webpage http://www.unesco-mab.org.uk/periodic-review.html

⁵ 26th Session of the ICC of the MAB Programme http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/SC/pdf/SC14-CONF-226-15-MAB-ICC_Final_Report_en_8-7-2014-v2.pdf

⁶ UK Biosphere Reserves: status, opportunities and potential – North Norfolk Coast Report

2.4 European Birds and Habitats Directive

2.4.1 Overview

The Habitats Directive was adopted in 1992 and promotes the maintenance of biodiversity for a wide range of rare, threatened or endemic animal and plant species³⁶. The Directive aims to conserve 200 rare and characteristic habitat types through Special Areas of Conservation (SACs), with due regard for economic, social, cultural and regional requirements (Article 2.3, Article 3.2)³⁶. The Birds Directive, adopted in 1979 and amended in 2009³⁷, aims to protect all of the 500 naturally occurring wild bird species in the European Union³⁸. The Birds Directive emphasises the need for habitat protection, establishing a network of Special Protection Areas (SPAs) in order to conserve endangered and migratory species (Article 4.1)³⁷. Together, SACs and SPAs listed under the Habitats and Birds Directives are protected under Natura 2000 (i.e., a network of protected areas that include core breeding and resting sites for rare and threatened species, as well as some rare natural habitat types)³⁹. The Natura 2000 network is formed of a combination of protected areas and private land, with an emphasis on sustainable use and people working with nature³⁹.

2.4.2 Review procedure

Member States provide a periodic review on the implementation of national provisions taken under the Directives. The Birds Directive calls for a triennial review (Article 12.1)³⁷ whereas the Habitats Directive asks for a review every six years (Article 17)³⁶. In both cases the State reports are compiled by the Commission, who form a composite report that is forwarded to Member States (Article 12.2)³⁷, the European Parliament, the Council and the Economic and Social Committee (Article 17.2)³⁶.

Both Directives require more regular reporting on any derogations. Within the Birds Directive annual reports are required by Member States that explain any deviations from the protection measures presented in Articles 5 to 8 (Article 9.3)³⁷; the Habitats Directive requests biennial reports that are reviewed by the Commission within 12 months (Article 16.2)³⁶. The Habitats Directive requires the derogation report to specify: the species affected, the reason for the derogation, the methods used for capturing or killing the species, the circumstances for when and where such derogations are granted as well as the authority and methods used for supervising the activity (Article 16.3)³⁶. Some derogations are permitted, either due to public health and safety, research and education or reintroduction and breeding programmes. Both Directives also allow derogations in order to prevent damage to various types of property (e.g., crops, livestock, forests, fisheries and water) or in the interest of protecting wild fauna, flora and conserving natural habitats (Article 16.1³⁶; Article 9.4³⁷). The Committee reviews reports to ensure the consequences of the derogations are not incompatible with the relevant Directive (Article 9.4)³⁷.

2.4.3 Downsizing and degazettement

Within the Birds Directive degazettement is not provided for, however, the degazettement of an SAC is warranted when the contribution of Natura 2000 has been affected by natural developments (Article 9)³⁶. For example, a site is declassified if natural processes (e.g., coastal erosion) remove the feature

³⁶ Council Directive 92/43/EEC

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31992L0043&from=EN

³⁷ Directive 2009/147/EC http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0147&from=EN

The Birds Directive webpage http://ec.europa.eu/environment/nature/legislation/birdsdirective/index_en.htm

³⁹ Natura 2000 webpage http://ec.europa.eu/environment/nature/natura2000/index en.htm

characterising a site. More recently, following the 2014 EU Court of Justice ruling⁴⁰, a site can be proposed for degazettement if it has experienced environmental degradation due to human activity and no longer contributes to the Natura 2000 network.

If a site is likely to be impacted by a planned activity or project, the Member State should illustrate that the activity is necessary for reasons of overriding public interest 36. Public interest includes social and economic considerations; however, if a site hosts priority habitat types and/or priority species, 'public interest' is limited to considerations of human health, public safety or environmental benefits (Article 6.4)³⁶. For any other reason, the opinion of the Commission must be sought (Article 6.4³⁶; Bough 2005). If the plan or project is pursued, Member States are expected to ensure the overall coherence of Natura 2000 is protected through any necessary compensatory measures (Article 6.4)³⁶. Compensatory measures are not defined but both the Birds and Habitats Directives emphasize the importance of habitat restoration. The Commission reviews the compensatory measures adopted and only in exceptional circumstances will the proposal of a new site be considered satisfactory (Bough 2005).

It is important to note that Member States have individual procedures for downsizing and degazettement. In general, a statutory nature conservation body (SNCB) provides scientific and conservation advice to the relevant Government Ministry⁴¹. Once a decision is made changes to SACs are documented by the SNCB using a standardized data form and notification is given to the European Commission⁴². In France, the justification for degazettement (including confirmation that restoration is not possible and proposals for alternative conservation areas) is reviewed by the French National Museum of Natural History and approved by the Ministry of Environment before notification is given to the Commission⁴³. In the United Kingdom, scientific and conservation advice is provided by Natural England (for England and its inshore marine area) or the Joint Nature Conservation Committee (JNCC for offshore areas more than 12 nautical miles from shore)⁴¹. Following consultation between the relevant SNCB and the relevant Secretary of State, the SNCB will notify the European Commission by providing a modified data form⁴¹.

Regarding boundary changes, the procedure varies between Member States and depends on the degree of change proposed. Within UK offshore areas, if proposals for boundary changes are deemed to be minor by the relevant Secretary of State (i.e., the Secretary of State for the Department for Environment, Food and Rural Affairs) JNCC may be instructed to make the changes within the data form directly. If changes are more substantive, a public consultation may be required before changes are considered by the Secretary of State (J. Davies, pers. comm.). For example, new data emerged showing that carbonate outcrops formed by the release of methane from the seabed were present beyond the current boundary for the candidate SAC Croker Carbonate Slabs⁴⁴, located approximately 30km west of Anglesey⁴⁵. The proposed boundary change went to a 12-week public consultation⁴⁵, which will be analysed by JNCC and built into their recommendations to the Secretary of State.

 $\underline{http://curia.europa.eu/juris/document/josf; jsessionid=9ea7d2dc30d6eb9520883d0540f99e6e9c5182403f6b.e34KaxiLc}$ 3qMb40Rch0SaxyMax10?text=&docid=150281&pageIndex=0&doclang=EN&mode=Ist&dir=&occ=first&part=1&cid=1181762

41 DEFRA The Habitats and Wild Birds Directives in England and its seas

https://inpn.mnhn.fr/docs/natura2000/Circulaire 6 mai 2008 instructions sur I evolutions du reseau.pdf

⁴⁰ ECLI:EU:C:2014:214

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/82706/habitats-simplify-guide-draft-20121211.pdf 42 Commission Implementing Decision 2011/484/EU http://eur-lex.europa.eu/legal-

content/EN/TXT/PDF/?uri=CELEX:32011D0484&from=EN ⁴³ Evolution of the Natura 2000 network

⁴⁴ Croker Carbonate Slabs MPA webpage http://jncc.defra.gov.uk/page-6530

⁴⁵ Croker Carbonate Slabs consultation http://jncc.defra.gov.uk/page-7362

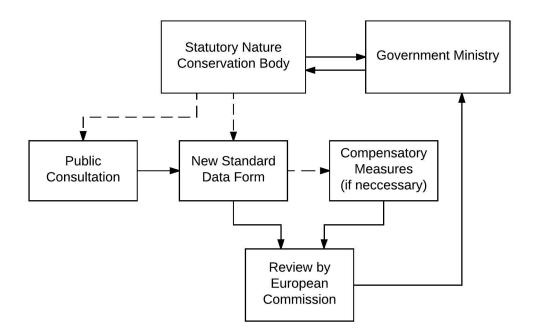


Figure 4: Schematic of the EU Birds and Habitats Directives degazettement process. It is important to note that the Statutory Nature Conservation Body will vary between State Parties. Dotted lines represent 'either-or' pathways, public consultation is sought when changes to boundaries are viewed as substantial by the relevant Government Ministry.

BOX 5. Solent Maritime

Overview

Solent Maritime was selected as a Special Area of Conservation (SAC) due to the variety of coastal habitats held within the region. Solent Maritime is the only site for *Spartina alterniflora* in the UK, and one of two sites where large swards of *S. maritima* are found¹. In addition to cord-grass *Spartina* spp. the area supports the second largest aggregation of salt meadows in the south and south-west of England¹. The Solent includes four coastal plain estuaries and four bar-built estuaries with a unique hydrographic regime of four tides each day¹. The Yar estuary is noted for the presence of rare sponge species and Chichester Harbour is recognized for a sandy 'reef' of the polychaete *Sabellaria spinulosa*¹.

Boundary Changes and Compensation

Coastal defence maintenance between Portchester Castle and Emsworth are resulting in the loss of coastal habitat². The presence of hard structures behind naturally eroding saltmarsh prevents the saltmarsh from migrating landward and results in a loss of habitat through 'coastal squeeze'². To compensate for the loss of 35.5ha within the Flood Risk Management Strategy, the Environment Agency proposed Medmerry as a new site within the Solent Maritime SAC as compensation²

Medmerry was identified and developed as a compensation site as part of a Regional Habitat Creation Programme (RHCP)². RHCPs are the recommended avenue to provide habitat conservation and are funded in advance of engineering works. Medmerry will be managed by the Royal Society for the Protection of Birds (RSPB) with the intention of becoming an RSPB reserve².

References

Solent Maritime site details http://jncc.defra.gov.uk/protectedsites/sacselection/sac.asp?EUCode=UK0030059

² Review of the Effectiveness of Nature 2000 Sites Compensation Measures in England, 2016
<a href="http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&ProjectID=18861&FromSearch=Y&Publisher=1&SearchText=natura%202000&SortString=ProjectCode&SortOrder=Asc&Paging=10#Description

2.5 Vulnerable Marine Ecosystems (VMEs)

2.5.1 Overview

Vulnerable Marine Ecosystems (VMEs) contain populations, communities or habitats that may be physically or functionally fragile and are slow to recover following disturbance⁴⁶. VMEs are identified where there is co-location of vulnerable species and habitats with the current or potential threat of bottom fishing pressure; VMEs may be designated based on observations or the likelihood that VME species and habitats are present (Johnson et al. 2017). VME taxa may include certain cold water corals, sponge dominated communities, communities of dense xenophyophores and invertebrates (e.g., hydroids and bryozoans), as well as cold seep and hydrothermal vent communities⁴⁶. Criteria for identifying VMEs have been developed by the Food and Agriculture Organization of the United

⁴⁶ FAO international guidelines for the management of deep-sea fisheries in the high seas http://www.fao.org/docrep/011/i0816t/i0816t00.htm

Nations (FAO)⁴⁶, with seamounts, hydrothermal vents and cold water corals specifically recognized as VMEs in the associated United Nations General Assembly Resolutions⁴⁷.

The VME concept was introduced in 2002 with the United Nations General Assembly (UNGA) calling upon States Parties to protect VMEs⁴⁸. States were asked to prohibit destructive fishing practices for VMEs beyond national jurisdiction until appropriate management measures were adopted⁴⁹. Action was coordinated through Regional Fisheries Management Organizations or Arrangements (RFMO/As), which were also charged with adopting conservation and management measures to address fishing impacts and to ensure compliance with such measures⁴⁹. Of the eleven RFMO/As, six contain VME-related management measures (Table 1).

Table 1. Regional Fisheries Management Organizations or Arrangements that have implemented Vulnerable Marine Ecosystem (VME) management measures

Management Body / Authority	Management Measure
NPFC: North Pacific Fisheries Commission	Seamount closures
GFCM: General Fisheries Commission for the Mediterranean	Fisheries restricted areas
SEAFO: South East Atlantic Fisheries Organisation	Closed areas
NEAFC: North East Atlantic Fisheries Commission	VME closures
NAFO: North Atlantic Fisheries Organization	Seamount closures Coral closures High sponge and coral concentration closed areas
CCAMLR: Convention for the Conservation of Antarctic Marine Living Resources	VMEs Risk Areas

2.5.2 Review procedure

Each RFMO/A carries out a periodic performance review. The review includes an element of independent evaluation⁴⁷, which is often organized through a review panel that includes experts from organizations such as the FAO and the International Council for the Exploration of the Sea (ICES)⁵⁰. The specific content of the review is dictated by the individual RFMO/A but the report will include a review of conservation and management measures. For example, the South East Atlantic Fisheries Organisation (SEAFO) conducted a performance review in 2010 and 2016, the 2016 review was based on five criteria: conservation and management, compliance and enforcement, decision-making and dispute settlement, international cooperation, and financial and administrative issues⁵⁰. Within the conservation and management criteria the review examined efforts to ensure the sustainable use of fish stocks and the protection of VMEs. Specific discussion points were the extent to which SEAFO acts upon the best scientific advice relevant to conservation activities, has applied a precautionary approach and has taken account of the need to conserve marine biological diversity and minimize the

⁴⁷ UNGA Resolution 61/105: https://documents-dds-ny.un.org/doc/UNDOC/GEN/N06/500/73/PDF/N0650073.pdf?OpenElement

 ⁴⁸ UNGA Resolution 57/141 https://documents-dds-ny.un.org/doc/UNDOC/GEN/N02/547/54/PDF/N0254754.pdf?OpenElement
 49 UNGA Resolution 59/25 https://documents-dds-ny.un.org/doc/UNDOC/GEN/N04/477/70/PDF/N0447770.pdf?OpenElement

⁵⁰ SEAFO Annual Commission Report 2015: http://www.seafo.org/Documents

negative impacts of harvesting⁵⁰. The RFMO/A reviews are presented to the UN General Assembly (UNGA) for comment⁵¹ and continue to be encouraged as a regular activity⁵².

2.5.3 Downsizing and degazettement

RFMO/As also conduct an annual compliance review that provides an opportunity to make changes to VME-related management measures. For example, during the 33rd annual meeting of the North East Atlantic Fisheries Commission (NEAFC, 10-14 November 2014) three new areas were recommended for closure to bottom fishing: south west Rockall Bank, the Hatton-Rockall Basin and the Hatton Bank⁵³. The new areas were proposed by PECMAS (NEAFC's Permanent Committee on Management and Science) and, following an objection period of ~2 months, the additional closed areas were enforced in January 2015⁵⁴.

Similarly, the Scientific Council of the Northwest Atlantic Fisheries Organization (NAFO) reviews closed areas during their annual meeting and makes recommendations for changes to VME-related management measures. During the 2014 meeting recommendations were made to: adjust the boundaries of the Corner Rise and New England Seamount Closed Areas to protect all peaks that are shallower than 2000m⁵⁵, to adjust the protection around the south east Flemish Cap to include coral and sponge grounds⁵⁶, and for a new protective area around Beothuk Knoll⁵⁶. Adjustments to the New England Seamount closed area and the Flemish Cap, as well as the establishment of the Beothuk Knoll closed area were introduced during the following meeting of the Fisheries Commission⁵⁷. At the same meeting area closures were extended until 31st December 2020, prohibiting all bottom fishing activities until that time⁵⁷. Whilst additions and boundary adjustments are discussed during the annual review, the extension suggests that any removal of sites is prohibited until specific review periods. It is our understanding that a VME closed area has yet to be removed from the VME database and the process of removal from the database remains unclear.

⁵¹ UNGA Resolution 66/68 https://documents-dds-ny.un.org/doc/UNDOC/GEN/N11/462/90/PDF/N1146290.pdf?OpenElement

⁵² UNGA Resolution 71/123 http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/71/123

⁵³ NEAFC 33rd Annual Meeting http://www.neafc.org/system/files/Annual-Meeting-2014-report-final.pdf

⁵⁴ NEAFC Closed Area Coordinates webpage http://www.neafc.org/closures/coordinates

⁵⁵ NAFO SCS Doc. 14/17 https://archive.nafo.int/open/sc/2014/scs14-17.pdf

⁵⁶ NAFO FC/SC Doc. 14/03 https://www.nafo.int/Portals/0/PDFs/fc-sc/2014/fc-scdoc14-03.pdf

⁵⁷ NAFO Meeting Proceedings of the General Council and Fisheries Commission for 2014/2015 https://www.nafo.int/Portals/0/PDFs/mp/2014-15/Meeting-Proceedings-2014-2015.pdf?ver=2016-02-16-122428-650

3. Key issues for consideration

Each of the regulatory frameworks described above outline the 'integrity' or character of sites inscribed (Gillespie 2007). For example, the World Heritage Convention (WHC) requires sites to contain "outstanding universal value" (OG²⁴ paragraph 53), the Ramsar Convention requires sites to maintain "ecological character" (Article 2.6, 3.1, 3.2)⁸, whilst VMEs and the Natura 2000 network specify particular habitats and taxa to be protected. The integrity of a site is linked to the reasons it was first inscribed (Gillespie 2007), providing a benchmark to which degradation may be measured. For EBSAs, the seven scientific criteria used to describe EBSAs set out the fundamental value/significance of an area and provide the basis of a definition for 'integrity' and how it could be lost. Understanding changes to the Regional Workshop rationale that determined how a site meets the relevant EBSA criteria is crucial if EBSA descriptions are to be updated and in a minority of cases where decisions are to be made regarding potential downsizing and/or degazettement.

3.1 Monitoring

EBSAs do not invoke an obligation to develop a management plan; however, condition monitoring with due regard to the ecological or biological criteria may be appropriate. For Marine Protected Areas the CBD emphasises the need for monitoring mechanisms through the Programme of Work on Protected Areas (PoWPA)⁵⁸. Previous PoWPA monitoring efforts include the development (in collaboration with the UN Environment Programme World Conservation Monitoring Centre) of a World Database on Protected Areas and encouragement to State Parties to facilitate progress towards PoWPA Goal 1.4, which aims to have effective management, including monitoring programmes, in all protected areas⁵⁸.

To implement successful monitoring programmes lessons can be learnt from other regulatory frameworks. For example, within the Ramsar Convention monitoring participation was encouraged by providing indicators of what to monitor, rapid assessment guidelines⁵⁹ and financial assistance (Resolution 5.7)¹⁰. Within the WHC, monitoring was not included within the Operational Guidelines until Parties created an obligation for the Convention to establish a monitoring system (Operational Guidelines 2002, paragraph 54-55⁶⁰; Gillespie 2007). The WHC monitoring system operates on three levels: 1) Systematic, with periodic reporting obligations for the State Parties; 2) Administrative, with the World Heritage Centre ensuring implementation of recommendations and decisions from the Committee, and 3) Ad-Hoc, with reports from UNESCO sectors and/or Advisory Bodies responding to exceptional circumstances (e.g., when a site may become, or is, in danger) and missions being sent to independently assess the risks (Gillespie 2007). Emphasis is placed within the WHC that monitoring should be continuous, flexible, participatory and adaptable to national and regional needs (Gillespie 2007).

3.2 Reporting

Communication of changes in site or area condition is crucial for the timely review of EBSA descriptions. Reporting change could take the form of a selective review (c.f. Ramsar Convention) or periodic reviews (c.f. WHC every 6 years) with separate requirements for areas recognised as being under threat (e.g., annual state of conservation reporting). Reporting by State Parties is emphasised within the CBD as a means for Parties to communicate the measures taken to implement the

⁵⁸ UNEP/CBD/COP/DEC/VII/28 https://www.cbd.int/convention/results/?id=7765&I0=PA

⁵⁹ Resolution IX.1 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_01_e.pdf

⁶⁰ Operational Guidelines 2002 http://whc.unesco.org/archive/opguide02.pdf

Convention and their effectiveness in meeting the criteria of the Convention (Article 26)⁶¹. Within the PoWPA, national reporting is specifically encouraged with State Parties invited to report on progress toward Aichi Biodiversity Target 11⁶².

Non-reporting is a common issue in international regimes (Gillespie 2007); therefore, careful consideration should be given to any proposed reporting requirements associated with EBSAs. To improve national reporting rates within the Ramsar Convention efforts were made to detail what was required within reports (outlined within the National Report Forms⁶³), and to harmonize reporting with comparable international regimes (Gillespie 2007)^{64, 65, 66}. The Executive Secretary formed a Biodiversity Liaison Group consisting of the Secretariats of CITES, Ramsar, CMS and the World Heritage Convention; the aim of the group was to examine a framework between actors that would harmonize reporting⁶⁶. To further increase cooperation, the Ramsar Secretariat and CBD developed a joint work plan⁶⁴, which was also pursued between CMS, WHC and MAB^{64 65}. Reporting rates within Ramsar increased from ~20% in 1990⁶⁷ to ~79% in 2015^{68 69}; highlighting the value of harmonizing EBSA reporting mechanisms with other international regimes.

3.3 Financing

Without stable sources of financing area-based management tools (e.g., protected areas) are not be able to maintain the characteristics they aim to conserve (Global Environment Facility 2003). The need for financial assistance is recognised by the CBD, which urges developed countries and invites institutions (e.g., Global Environment Facility) to provide financial support in order for developing countries to implement the PoWPA⁷⁰.

Voluntary contributions and/or reliance on financial institutions (e.g., the Global Environment Facility) is common. For example, Ramsar have developed a 'Small Grants Fund' that has an annual target of 1 million Swiss francs⁷¹. The target is met through the voluntary donations from Contracting Parties, who are also invited to seek assistance in contributions from other organizations⁷¹. Unfortunately, recent difficulties in reaching the target have called for a review of the programme at the 13th meeting of the Conference of the Contracting Parties in 2018 (Resolution XII.1, paragraph 21, 22)⁷².

Voluntary donations can also be made for specific causes and projects. For example, within the Ramsar Convention the Government of Switzerland contributed funds to support the conservation and wise use of wetlands in Africa (i.e., Swiss Grants for Africa); the Nagao Natural Environment Foundation in Japan contributed funds to establish the Nagao Wetland Fund, and the United States Fish and Wildlife Service (along with the US State Department) established Wetlands for the Future to assist with capacity building and training in Latin America and the Caribbean⁷³. Each program is an

⁶¹ Convention on Biological Diversity https://www.cbd.int/doc/legal/cbd-en.pdf

⁶² UNEP/CBD/COP/DEC/XI/24, paragraph 1j https://www.cbd.int/doc/decisions/cop-11/cop-11-dec-24-en.pdf

⁶³ National Report Form for COP13 http://www.ramsar.org/document/national-report-form-for-cop13-offline-version

⁶⁴ Resolution VII.4 http://www.ramsar.org/sites/default/files/documents/library/key_res_vii.04e.pdf

Resolution VII.27 http://www.ramsar.org/sites/default/files/documents/library/key_res_vii.27e.pdf

⁶⁶ Resolution IX.5 http://www.ramsar.org/sites/default/files/documents/pdf/res/key_res_ix_05_e.pdf

⁶⁷ Recommendation 4.3 http://www.ramsar.org/sites/default/files/documents/library/key_rec_4.03e.pdf

⁶⁸ COP 12 DOC.8 http://www.ramsar.org/sites/default/files/documents/library/cop12_doc08_report_sg_e.pdf

⁶⁹ Resolution XII.2 http://www.ramsar.org/sites/default/files/documents/library/cop12_res02_strategic_plan_e_0.pdf

⁷⁰ UNEP/CBD/COP/DEC/IX/18 https://www.cbd.int/convention/results/?id=11661&I0=PA

⁷¹ Resolution X.7 http://www.ramsar.org/sites/default/files/documents/pdf/res/key res x 07 e.pdf

⁷² Resolution XII.1 http://www.ramsar.org/sites/default/files/documents/library/cop12 res01 finance e.pdf

⁷³ Ramsar: Investing in Wetlands Webpage http://www.ramsar.org/activity/investing-in-wetlands

important source of funding to meet the Ramsar Convention objectives, providing finances for small-scale projects and support for emergency action within their given region.

The World Heritage Convention is a unique example where an internal financial mechanism has been established. A combination of compulsory and voluntary contributions from States Parties has established a World Heritage Fund that provides approximately US \$4 million annually⁷⁴. Compulsory contributions are set by the General Assembly but are capped at 1% of the contribution to the regular budget of UNESCO (Gillespie 2007). Each payment (i.e., compulsory and voluntary) is logged and made publically available via an annual statement⁷⁵. Non-payment by State Parties is a problem, but to minimize the issue defaulting Parties cannot sit on the Committee and, unless it is an exceptional circumstance, defaulting Parties cannot access funds from the World Heritage Fund (Gillespie 2007).

Whilst the World Heritage Fund provides a crucial body of core funding, it is important to note that voluntary and external financial assistance is still required. Countries have donated to specific projects (i.e., Funds-in-Trust)⁷⁴ and collaboration with the UN Foundation and Fauna & Flora International has been established in order to provide rapid assistance to properties in crisis (i.e., the Rapid Response Facility)⁷⁴. The WHC has also relied on international organizations such as the World Bank, which has refused funding to a number of developments that threatened World Heritage properties (Gillespie 2007). The combination of internal and external financing emphasises the importance of cooperation with international organization in order to meet the objectives of the regulatory framework.

The EBSA process to date has relied upon the voluntary contributions of State Parties. For example, the 12 completed regional workshops received financial support from the Governments of Australia, Canada, Finland, Monaco, Norway, Spain, United Kingdom and Japan, who contributed to 9 of the 12 workshops through the Japan Biodiversity Fund. Reliance on voluntary contributions is common; however, consideration could be given as to whether a guaranteed body of core funding is needed to help monitor the state and condition of EBSAs in the future.

3.4 Review components

3.4.1 "EBSAs under threat" list and the issue of State permission

Both the WHC and Ramsar Convention maintain publically posted lists that notify Contracting Parties and the internationally community of sites that are under threat (i.e., the List of World Heritage in Danger and the Montreux Record respectively). Notification of threats may benefit the objectives of the regulatory framework by generating awareness of issues and funding for conservation; however, Parties may also have reservations about sites within their jurisdiction being placed on a 'Danger List'.

In 2007, the Galapagos Islands were inscribed onto the List of World Heritage in Danger⁷⁶ despite objections from the Government of Ecuador. The decision of the Committee sparked dissatisfaction from the Governments of Australia, China and the United Kingdom because State consent was being bypassed (Gillespie 2007). Legal advisors to the Convention determined that, although the Convention respects sovereignty, it is the duty of the international community as a whole to cooperate and conserve the worlds heritage; the Committee concluded that State consent is preferred but a property may be inscribed onto the Danger List without state consent in urgent situations (Gillespie 2007). The Committee is typically reluctant to inscribe sites onto the Danger List without state consent; for example, in the case of Russia's Lake Baikal the Committee opted for regular

⁷⁵ World Heritage Committee: World Heritage Fund Webpage http://whc.unesco.org/en/world-heritage-fund/

⁷⁴ World Heritage Committee: Funding Webpage http://whc.unesco.org/en/funding/

⁷⁶ WHC-07/31.COM/24 Decision 31 COM 7B.35 http://whc.unesco.org/archive/2007/whc07-31com-24e.pdf

meetings between the State Party, Chairperson to the Convention, the Advisory Body and UNESCO (Gillespie 2007). However, the Galapagos Islands example highlights the need to consider State permission within mechanisms for publicizing threats, downsizing sites and degazettement.

The issue of State permission may require separate review, downsizing and degazettement processes for EBSAs within and beyond national jurisdiction. It may be argued that the conservation of EBSAs outside of national jurisdictions is the duty of the international community and the advice of the Informal Advisory Group (the formation of which was agreed at COP 13)⁷⁷ and/or the decision of COP (in consultation with partner organizations, scientific review panels and other relevant institutions) is satisfactory in order to make decisions regarding changes to EBSAs. For EBSAs within national jurisdiction the requirement of State permission, even in exceptional circumstances, is one for debate by the COP. The requirement of State permission is more complex in the case of transboundary areas and complicated by the fact that EBSAs are confirmed by a CBD COP Decision; therefore, whether or not a single State Party may revise a decision made by the Conference of the Parties may also require discussion.

3.4.2 Independent scientific review

Independent scientific review is a common element within environmental regimes and can either be kept in-house, or outsourced to an external organization. For example, WHC outsources scientific review to its Advisory Bodies (Gillespie 2007), with the state of conservation for natural sites being monitored by IUCN (OG²⁴ paragraph 37) and by ICOMOS for cultural sites (OG²⁴ paragraph 35). The Ramsar Convention established a Scientific and Technical Review Panel (STRP) that consists of 18 members, six scientific members and 12 practitioners (i.e., six regional experts and six experts on issues identified within the current work plan)⁷⁸. International organizations are invited as observers to the STRP and to establish working relationships for areas of common interest⁷⁸. The work plan of the STRP is determined by priority tasks approved by the Standing Committee, which are in turn based upon requests from the Conference of the Parties⁷⁸.

Within the EBSA process, as stated earlier, an expert Informal Advisory Group is to be established with a remit to provide independent scientific input⁷⁷. The group's responsibilities have been suggested to include: a gap analysis regarding available scientific information as well as geographic and thematic coverage of existing EBSAs in ABNJ⁷⁹; assistance with training for State-based EBSA information curators (e.g., training on information collection, data quality control and gap analysis); the compilation of new EBSA-related scientific information in ABNJ and revision of the EBSA scientific guidance⁸⁰. With this in mind, it may be important to consider the different review elements required (e.g., newly proposed sites, changes to boundaries, changes to how an area meets the EBSA criteria, state of conservation reports, periodic reports) and how to designate responsibilities.

3.4.3 Remediation

Each of the regulatory frameworks outlined above place emphasis on maintaining the character of sites and avoiding environmental damage. Should environmental damage occur, the Ramsar Convention encourages the restoration of ecological character wherever possible with compensation as a last-resort where changes in ecological character are irreversible ⁸¹. Similarly, the potential for restoration is considered by the World Heritage Committee when deciding if a property should be placed on the List of World Heritage in Danger or removed from the World Heritage List (OG²⁴

⁷⁷ CBD/COP/DEC/XIII/12, Paragraph 11 https://www.cbd.int/decisions/cop/?m=cop-13

⁷⁸ Resolution XII.5 http://www.ramsar.org/sites/default/files/documents/library/cop12 res05 new strp e 0.pdf

⁷⁹ CBD/COP/DEC/XIII/12 Annex III, Paragraph 1a https://www.cbd.int/decisions/cop/?m=cop-13

⁸⁰ CBD/SBSTTA/20/3 Annex IV, Appendix, Paragraph 1 https://www.cbd.int/doc/?meeting=SBSTTA-20

⁸¹ Change in Ecological Character http://www.ramsar.org/sites-countries/change-in-ecological-character

paragraph 176b). When the Outstanding Universal Value of a property has been irretrievable lost, the Committee may decide to delist the property (OG²⁴ paragraph 176d).

Within the EBSA process it will be important to recognise that the potential for restoration/rehabilitation varies between ecosystems. For example, the practicality of restoration following deep-sea mining has been brought into question, with estimates that restoration effort would cost 2-3 times more per hectare than efforts in shallow-water systems (Van Dover et al. 2014). For areas where restoration is not practical, compensation may be encouraged by protecting an adequate portion of the original habitat; however, for smaller areas protection may not be practical and designation of a new area may be preferred (c.f. Ramsar Convention, Article 4.2)⁸. For truly unique areas an equivalent area may not be available for protection; therefore, efforts should prioritise stringent monitoring and reporting in order to minimize the need for restoration in these areas.

3.5.4 "Triggers" for downsizing and/or degazettement

There are various triggers that may prompt calls for the downsizing of an EBSA or its removal from the Repository. The scientifically and technically defensible reason is if the scores for criteria on which the EBSA was originally described have changed.

EBSAs meet one or more of the seven criteria (Dunn et al. 2014); therefore, degazettement can be justified when an area no longer meets any of the criteria. If information supporting the high score of an area is found to be incorrect, or new information contradicting the high score of each criterion is found, the area may become a candidate to be removed from the Repository. If a change in environmental condition causes degradation to features within an EBSA (e.g., pollution, invasive species, natural disasters, climate change) a best practice policy could be to investigate the impact and establish whether the area continues to meet any of the EBSA criteria, or whether it could continue to do so in future. Consideration should be given to the feasibility of remediation and restoration, but if part of the site is irreversibly degraded it is possible to consider a circumstance where the EBSA may be downsized, and if the entire site is irreversibly degraded a circumstance where the area may be considered for degazettement. Under the justification that a site may only be delisted if it no longer meets any of the EBSA criteria, removal of any site from the Repository could only be considered once each EBSA, and the criteria for which it achieves a high score, is reviewed.

4. Concluding remarks

An important difference between the EBSA process and the regulatory frameworks outlined above is that different considerations may be needed for EBSAs within and beyond national jurisdiction. A major challenge is outlining the responsibilities of State Parties (if any) to monitor, report, and review sites within their territories, as well as to provide financial support to EBSA-related activities. In addition, clarification is needed going forward as to who (in the absence of another round of regional workshops) should take responsibility for nominating new sites, as well as monitoring, reporting and reviewing existing sites in the ABNJ (e.g., States Parties, Informal Advisory Group or competent International Organizations). A second challenge is addressing the concept of national sovereignty and the process of acknowledging and responding to changes in the ecological and/or biological condition of EBSAs. Whether threats to EBSAs are publically acknowledged (e.g., through a 'List of EBSAs in Danger') and, if State permission is required for sites to be placed on the 'Danger List' or removed from the Repository, are issues for further discussion. Equally complex is whether the CBD COP may only make recommendations to State Parties (c.f. Ramsar Convention) or if there are requirements to review sites under threat and apply corrective measures. Such requirements are

justifiable under the World Heritage Convention because the international community as a whole is responsible for the conservation of properties (Gillespie 2007).

The considerations outlined above are intended as background for discussion. It may be important to first discuss whether the seven EBSA criteria (or a combination of one or more of them) define the integrity and character of an area. If so, reasons for downsizing and degazettement should be tied to these criteria and the exclusion of an area from the EBSA Repository would only be scientifically justified if an area no longer meets any of the criteria in its original description. Following this decision, the biggest questions that remain are what mechanisms should be in place to determine timing of when an EBSA no longer meets the criteria, and what steps (if any) can be prescribed to maintain and/or restore the ecological or biological significance of areas both within and beyond national jurisdiction?

5. Acknowledgements

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Annex I: Table detailing the components of each regulatory framework and their obligations.

Convention	Component	Explanation	Obligations (if applicable)
Ramsar Convention	Scientific and Technical Review Panel (STRP)	STRP is made up of seven members appointed by the COP on the recommendation of the Standing Committee. Members serve a three-year term and due regard is given to equitable regional representation ¹ .	The STRP provides scientific and technical guidance to the COP, Standing Committee and the Secretariat. The work plan for each triennium is dictated by the priority tasks approved by the Standing Committee, which are based on requests from the COP. Specific obligations include: reviewing the Montreux Record, reviewing projects submitted to the Wetland Conservation Fund, evaluating the guidelines and criteria adopted by the Convention ¹
	Secretariat	The Secretariat is made up of a Secretary General and Deputy, Senior and Assistant Advisors to each region as well as administrative staff. The Secretariat is based at IUCN headquarters in Gland, Switzerland ² .	The Secretariat carries out the day-to-day coordination of the Convention. Specific obligations include: maintaining the List of Wetlands of International Importance, convene meetings (e.g., COP, Standing Committee, STRP), publish decisions of the COP and Standing Committee, assist in recruiting new Parties, organize Ramsar Advisory Missions upon request by Parties, provide support to Parties and STRP, develop cooperation with other institutes/organizations and to inform Parties and the public of developments within the Convention ² .
	Standing Committee	Committee members are elected during the COP to serve for three years, the members elect their chair, vice chair and subgroup members ³ . The Committee consists of 9 members, seven nominated based on proper geographical distribution, with one member from both the host country of the present COP and the host country for the next COP ⁴ .	The Committee represents the COP between the triennial meetings and, at a minimum, meets annually. The Committee makes recommendations for consideration at the next COP, supervises the Secretariats programme of work, provides guidance and advice to the Secretariat, acts as COP steering committee and performs any function entrusted to it by the COP ⁴ .
	International Organization Partners (IOPs)	IOPs are NGOs that work closely with the Convention and are given formal status. IOPs include: Birdlife International, IUCN, Wetlands International, WWF, IWMI and WWT. Additional organizations seeking partnership can apply via the Secretariat. Rules for conferring IOP status are outlined in Resolution VII.3 ⁵	The partner organizations provide expert advice, field level assistance and financial support ⁶ . Partners may be invited to evaluate projects and provide input into policy development and technical/scientific instruments ⁵ . The IOPs participate as observers in all COP, Standing Committee and STRP meetings ⁵ .
	Ramsar Bureau	Equivalent phrase to Ramsar Secretariat. The term 'Secretariat' was approved at COP 9 ⁷	N/A

Convention	Component	Explanation	Obligations (if applicable)
	Montreux Record	A public record of sites where changes in ecological character have occurred, are occurring or are likely to occur. Approved through Recommendation 4.8 ⁸ , guidelines provided through Resolution VI.1 ⁹ .	N/A
	Small Grants Fund	Established from voluntary donations from Contracting Parties to help developing countries conserve and sustainably use their wetland resources. Since 1990 the Fund has provided more than 8 million Swiss Francs to over 240 projects ¹⁰ .	N/A
	Ramsar Advisory Mission	A mission to analyse concerns at a site and provide advice on addressing issues. Organized by the Secretariat upon request from the Contracting Party ¹¹ .	N/A
World Heritage Convention	General Assembly of State Parties	The General Assembly meets during the biennial General Conference of UNESCO (Operational Guidelines, OG ¹² , paragraph 17).	The General Assembly review the report submitted by the World Heritage Committee outlining its activities and sets the compulsory contribution for each State Party to the World Heritage Fund (OG ¹² paragraph 18).
	World Heritage Committee	The Committee consists of representatives from 21 of the State Parties, elected by the General Assembly (OG ¹² paragraph 19). In the interest of independence and transparency, Parties have voluntarily refrained from nominating sites within their territory whilst serving on the Committee and non-elected Parties may attend meetings as observers ¹³ . To ensure equitable representation and efficient turnover, Parties are urged to refrain from serving consecutive terms and invited to reduce their term from 6 to 4 years (OG ¹² paragraph 21). To maintain institutional knowledge, members are replaced in sections ¹³ .	The Committee has the final say as to whether a property is inscribed onto the World Heritage List and whether a property is inscribed and removed from the List of World Heritage in Danger. The Committee revises the Operational Guidelines to reflect the decisions of the Committee, reviews SOC reports, defines the use of the World Heritage Fund, makes recommendations to State Parties on corrective measures and decides if a property should be delisted (OG ¹² paragraph 24).
	World Heritage Centre (Secretariat)	The coordinator for all matters related to World Heritage, the Centre is separated into a number of units: Policy and Statutory Meetings, Africa, Asia and the Pacific, Arab States, Europe and North America, Latin America and the Caribbean.	The Centre organizes annual sessions for the Committee and Bureau, advises State Parties in preparing site nominations, organises assistance from the World Heritage Fund upon request, updates the World Heritage List and database, and coordinates reporting on the condition of sites and actions taken when a site is threatened. The Centre also organizes technical workshops and teaching material to raise awareness of the need for heritage preservation and to keep the

Convention	Component	Explanation	Obligations (if applicable)
			public informed about World Heritage issues (OG ¹² paragraph 28; ¹⁴)
	Bureau of the Committee	The Bureau consists of seven State Parties elected annually by the Committee: Chairperson, five Vice-Chairs and a Rapporteur ¹⁵ .	The Bureau coordinates the work of the Committee fixing dates, hours and the order of business for meetings ¹⁵ .
	Advisory Bodies	Advisory Bodies are organizations named within the Operational Guidelines with specific obligations, the include IUCN (the International Union for Conservation of Nature), ICOMOS (the International Council on Monuments and Sites) and ICCROM (the International Centre for the Study of the Preservation and Restoration of Cultural Property) ¹⁶ .	Advisory Bodies are to assist the Secretariat in preparing Committee's documentation and implement the Committee's decisions; assist with the development and implementation of training, periodic reporting and the effective use of the World Heritage Fund. Advisory Bodies also monitor the state of conservation for properties, evaluate relevant nominated properties and attend meetings of the Committee and Bureau as an advisor (OG ¹² paragraph 31).
	Site Managers	Site managers are men and women who work to maintain a particular property and ensure its conservation. Site Managers often have a background in forestry, public environmental management and biological sciences. Therefore, effort has been placed in providing managers with training in business management, marketing and entrepreneurial risk management (Pendersen 2002) ¹⁷ .	Site managers are involved in monitoring programmes, initiating management programmes within sites and combatting management issues that the property may be experiencing (e.g., tourism issues; Pendersen 2002) ¹⁷ . The site managers are also required to comment on the state of conservation for their site in the periodic review ¹⁸ .
	Focal Points	Governmental organizations responsible for the implementation of the Convention. Contact information is provided to the Secretariat for official correspondence (OG ¹² paragraph 13).	N/A
	Action Plan	When the Outstanding Universal Value of a property is threatened an Action Plan detailing the corrective measures to be implemented is developed and nominated by the State Party. If the measures are not taken within the time proposed, the property may be considered for delisting (OG ¹² paragraph 116).	N/A
	Reactive Monitoring Mission	A mission from the relevant Advisory Body (or other organizations) that is requested by the Commission, in consultation with the State Party, in order to evaluate the	N/A

Convention	Component	Explanation	Obligations (if applicable)
		extent of threats within a property and to propose corrective measures (OG ¹² paragraph 184). The mission is part of the statutory reporting for properties under threat (OG ¹² paragraph 28f).	
	Advisory Mission	A mission that is requested by the State Party to provide advice and guidance on a property. The mission is voluntarily initiated by the State Party for expert advice on specific matters (e.g., identification of sites, nominations, evaluating possible impact of development projects, preparation or revision of management plans). Costs of the Advisory Mission are borne by the State Party, except where the Party is eligible for International Assistance (OG ¹² paragraph 28f).	N/A
	World Heritage Fund	Comprised of both voluntary and compulsory contributions from State Parties; the compulsory contribution is set by the General Assembly (OG ¹² paragraph 15j). Use of the World Heritage Fund is determined by the Committee (OG ¹² paragraph 24f) and, unless there are exceptional circumstances, Parties that have defaulted on their compulsory payments cannot access funds ¹³ .	N/A
	List of World Heritage in Danger	A public record of sites where properties are experiencing potential and/or ascertained dangers. Dangers are outlined in the Operational Guidelines for both cultural (OG ¹² paragraph 179) ¹² and natural (OG ¹² paragraph 180) ¹² properties.	N/A
MAB	International Co- ordinating Council (ICC)	ICC is the main governing body of MAB, consisting of 34 Member States elected at UNESCO's biennial General Conference. Approximately half of the members are elected at each General Conference, with outgoing members replaced by nominations from the same regional group. Annual meetings are held with other Member States of UNESCO invited as observers. UN agencies are also invited, along with representatives from the International Council for Science and IUCN ¹⁹ .	The ICC is charged with supervising the MAB programme. Responsibilities include: reviewing how the programme is implemented and to recommend research projects as well as priorities for MAB activities. ICC should co-ordinate: international cooperation between Member States, activities with international scientific programmes and to consult with international NGOs on scientific and technical queries. ICC decides upon new reserves and notes the recommendations made by periodic reviews ¹⁹ .

Convention	Component	Explanation	Obligations (if applicable)
	Secretariat	The Secretariat is made up of a Director office, a research and policy component, as well as a networking component that is responsible for capacity building ²⁰	The Secretariat is the coordinator for matters relating to the Man and the Biosphere Programme. Specific obligations include: organizing the World Congress of Biosphere Reserves, strengthening collaboration within UNESCO and with key organizations, to assist reserves and regional networks to develop their own revenue, maintain the MAB website as a data and information hub, collate information from Member States regarding implementation of the MAB Strategy ²¹ .
	MAB Bureau	Composed of members nominated from each of UNESCO's geopolitical regions. ICC elects a chairman and five vice-chairs, one of which serves as a rapporteur ¹⁹ .	The Bureau acts on behalf of the ICC between meetings ¹⁹ .
	Advisory Committee	The International Advisory Committee for Biosphere Reserves is composed of 12 members that serve, in their personal capacity, for four years. Terms may be renewed for one additional period by the Director-General. Members are selected for their scientific qualifications and experience in promoting/implementing the biosphere reserve concept. Membership is in accordance with equitable geographical representation and attention is given to gender balance. Members are appointed by the Director General after consultation with Member States and the National Committees/focal points ²² .	The Advisory Committee acts as the primary scientific and technical body advising the ICC and the Director-General of UNESCO. Advice extends to scientific and technical matters concerning the nomination of new sites, changes and periodic reviews of sites, as well as the development, operation and monitoring of the biosphere network ²² .
EU Birds and Habitats Directives	European Commission	The Commission is composed of one member from every State Party of the European Union, a new Commission is appointed every 5 years ²³ .	The European Commission is responsible for implementing decisions and managing the day-to-day business of the European Union. In terms of the Directives it is responsible for reviewing changes to the Standard Data Form ²⁴ , defining reasons of 'overwhelming public interest' that allow projects within protected areas to continue, and for reviewing compensatory measures wherever protected areas are degraded by development projects ²⁵ .
	Government Ministry / Department	Varies according to the State Party but a specific ministry will be charged with ensuring the provisions of the Directives are met. For example, in France it is the Ministry of the Environment ²⁶ and in the United Kingdom it is the Department for Environment Food and Rural Affairs ²⁷ .	The relevant ministry / department takes the advice of the relevant SNCB and makes recommendations on any additions or changes to the Natura 2000 network ²⁷ .

Convention	Component	Explanation	Obligations (if applicable)
	Statutory Nature Conservation Body (SNCB)	Varies according to the State Party but a specific conservation body will act upon recommendations from the State Party regarding the Natura 2000 network. For example, in France it is the French National Museum of Natural History ²⁶ and in the United Kingdom it is Natural England or the Joint Nature Conservation Committee for areas > 12 nautical miles from shore ²⁷ .	SNCBs provide the State Party with advice regarding the Natura 2000 network. Following recommendation from the State Party, the relevant SNCB will make changes to the Standard Data Form and inform the European Commission of any change ²⁷ .
	Special Protection Areas (SPAs) Special Areas of Conservation (SACs)	SPAs aim to protect habitat that is important for endangered and migratory bird species under the Birds Directive ²⁸ . SACs aim to conserve 200 rare and characteristic habitat types listed under the Habitats Directive ²⁹ . Together, the SPAs and SACs make up the Natura 2000 network. It is important to note that only SACs can be downsized or de-listed ³⁰ .	N/A
	Standard Data Form	The form used to make changes to SACs and to inform the European Commission of such change ²⁴ .	N/A
Vulnerable Marine Ecosystems (VMEs)	Commission	An amalgamation of the General Council and the Fisheries Commission (as of May 18, 2017). Each Contracting Party is a member and appoints up to three representatives to the Commission ³¹ .	The Commission is to supervise and coordinate the internal affairs of the Organization, it must regularly review the status of fish stocks and is in charge of adopting conservation and management measures to prevent significant adverse impacts of fishing activities on VMEs ³¹ . Measures are adopted after considering the advice of the Scientific Council ³¹ .
	Contracting Party	NAFO has 12 Contracting Parties: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Union, France (in respect of St. Pierre and Miquelon), Iceland, Japan, Norway, Republic of Korea, Russian Federation, Ukraine and the United States of America ³² .	Contracting Parties are responsible for forwarding encounter information from the ship masters to the Secretariat if the quantity of the VME indicator taxa encountered is beyond the threshold ³³ . Reporting is only necessary where the ship master has not reported directly to the Executive Secretary ³³ . The Party is also responsible for alerting all vessels flying their flag of an encounter of VME taxa and to consider a temporary closure around any reported VME encounter (i.e., a two-mile radius closure) ³³ .
	Secretariat	Chief administrative officer is the Executive Secretary, who is appointed by the Commission. The Secretary is made up of 11 staff members ³⁴ .	Responsible for archiving encounters of VME taxa provided by ship masters, observers and/or Contracting Parties. In addition, the Secretariat must make requests to Contracting Parties to implement

Convention	Component	Explanation	Obligations (if applicable)
			temporary closures of a two-mile radius around encounters of VME indicator species ³³ . The Secretariat provides an annual report to the Scientific Council summarising encounters of VME taxa and, following review by the Scientific Council, informs State Parties of temporary closures that may be reopened ³³ .
	Scientific Council	Each Contracting Party is a member of the Scientific Council and appoints its own representative ³⁵ . The Council has established four standing committees focusing on: fisheries science (e.g., stock assessments), fisheries environment (e.g., reviews of environmental conditions and effects on fish), research coordination (e.g., encourages cooperation in scientific research, reviews information on advances in knowledge of biology), publications (e.g., develops and reviews publications of the Scientific Council) ³⁵ .	The Scientific Council analyses the report produced by the Executive Secretary on encounters of VME taxa and any temporary closures adopted by State Parties ³³ . The Council provides advice to the Commission regarding boundary changes to current management measures, or the adoption of new conservation and management measures ³³ .

Note: Each Regional Fisheries Management Organization or Arrangement (RFMO/As) will have its own structure and components. The Northwest Atlantic Fisheries Organization (NAFO) is given here as an example.

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Annex II: Potential Questions to consider regarding the EBSA process

1. Financial Support

- a) Will support for EBSA related activities (including but not limited to monitoring and reporting) rely on the existing financial mechanisms of the CBD and voluntary contributions from Contracting Parties, or should compulsory contributions be considered?
- b) What priorities should be considered when allocating funds for EBSA related activities (e.g., support to developing countries, support to identify new areas as well as monitor and report on existing EBSAs within ABNJ)

2. Committees, Subsidiary Bodies and Partner Organizations

- a) Is there need for an EBSA Committee to make recommendations to the COP or is this a role for the Informal Advisory Group?
 - i. If so, how is regional representation, gender balance and the special conditions of developing countries to considered within any Committee?
- b) What role, if any, can non-governmental organizations already collaborating with the CBD (e.g., IUCN, Nature Conservancy, Conservation International, the Wildlife Conservation Society and WWF) play in supporting EBSA related activities?
 - ii. Are there other organizations that may provide valuable input?
- c) How are responsibilities to review, report and nominate new sites separated between EBSA information curators, national focal points, CBD Secretariat, Partner Organizations (if any), and the Informal Advisory Group?

3. Monitoring and Reporting Mechanisms

- a) Does EBSA status invoke obligations for criteria-related monitoring?
 - i. If so, what elements are needed within a monitoring programme?
 - ii. If so, who takes responsibility for monitoring EBSAs within ABNJ?
- b) What procedure should State Parties, other Governments and Competent Intentional Organizations follow to highlight potential threats to EBSAs?
- c) What are the requirements (if any) for reporting and should reporting guidelines be harmonized with other regulatory frameworks?
 - i. If there are requirements, how often should State Parties, other Governments and Competent International Organizations report on EBSAs within their territories both in general and for EBSAs thought to be threatened?
 - ii. Who takes responsibility for reporting on EBSAs in ABNJ, both in general and for EBSAs thought to be threatened?

4. Review, Downsizing and Degazettement Mechanisms

- a) Should a public list of potentially threatened EBSAs be established?
 - i. If so, what factors justify an EBSA being included and later changed or removed?
 - ii. If so, is State permission required for an area to be placed on the public list?
- b) How should reports, in general and for EBSAs thought to be threatened, be evaluated (e.g., CBD Secretariat, Partner Organizations and/or Independent Scientific Review)?
- c) If downsizing of an EBSA is proposed:
 - i. are changes for boundaries within national waters simply accepted?

- ii. who will assess whether boundary changes will impact the scores for the EBSA criteria?
- iii. if changes will impact criteria, are recommendations made to the State Party but downsizing is still at the discretion of the Party?
- iv. are State Parties required to re-nominate the site following proposed boundary changes?
- d) In reaction to an EBSAs thought to be threatened:
 - i. are recommendations made to the State Party to address the issue, but implementation is at the discretion of the Party?
 - ii. are corrective measured proposed to the State Party for immediate implementation?
- e) If an area no longer meets the EBSA criteria, should it be removed from the Repository?
 - i. If so, is State permission required to remove a property from the Repository when it is within their national waters?
- f) If a State Party requests that an EBSA within its national waters be removed from the Repository, but the area still meets one or more of the EBSA criteria:
 - i. is the area simply removed from the Repository?
 - ii. is it recommended that the site remain in the Repository, but the decision is left to the State Party?
 - iii. is the site maintained in the Repository but highlighted as 'at risk'?