Frequently Asked Questions on Establishing Marine OECMs under the Convention on Biological Diversity

Introduction
Decision 14/8 of Convention on Biological Diversity (CBD) established the definition and criteria for “Other Effective Area-Based Conservation Measures” (OECMs). In that decision, agreed to by all parties, the IUCN was invited to assist in identifying OECMs and in applying the scientific and technical advice. To that end IUCN’s World Commission of Protected Areas (WCPA) has developed two key documents. These documents also reflect CBD decision 15/4, known as Kunming-Montreal Global Biodiversity Framework (GBF).

The OECM technical guidance and site identification tool apply to all ecosystems, including marine. However, in response to a high level of interest and questions from parties to the CBD around marine OECMs, WCPA has prepared this additional information based on key questions received on marine ecosystems.

Defining Marine OECMs
Marine OECMs are marine areas that, while not formally recognized as Marine Protected Areas, effectively contribute to the effective, long-term conservation of marine biodiversity. They may result from range of actions, such as restrictions on human activities, ecosystem-based management, and protection of critical habitats.

Formally the CBD definition of OECMs is: A geographically defined area other than a Protected Area, which is governed and managed in ways that achieve positive and sustained long-term outcomes for the in situ conservation of biodiversity with associated ecosystem functions and services and where applicable, cultural, spiritual, socio-economic, and other locally relevant values. (CBD, 2018).
Key Characteristics of Marine OECMs
The key characteristics of marine OECMs, as defined by the CBD, are the same as terrestrial or fresh water OECMs, namely:

• The area is not currently recognized or reported as a protected area or part of a protected area; it may have been established for another reason.
• Equivalent to marine protected areas in conservation and complementary to marine protected areas in creating marine conservation networks.
• Can be any of the four governance types: government, private, Indigenous and community areas, or a mix of the first three.
• In all cases of OECMs involving Indigenous peoples and local communities, OECM identification and reporting is done with the free prior and informed consent of the community (FPIC) and needs to recognize and respect the rights of Indigenous Peoples and local communities, including over their traditional territories (CBD 15/4). FPIC is mandatory for Indigenous peoples.

Key Criteria for Identifying Marine OECMs
The key criteria of Marine OECMs are the same as terrestrial or freshwater OECMs, namely:

• The area is geographically defined.
• The site has important biodiversity values.
• Institutions or mechanisms exist to govern and manage the site.
• Conservation is long term.
• Governance and management of the site achieve or are expected to achieve the in-situ conservation of important biodiversity values.
• Governance and management are done equitably.

Frequently Asked Questions on Marine OECMs

What are marine “important biodiversity values”?
Marine OECMs must have ecological significance, meaning they should conserve sites with one or more of the following: a) rare, threatened or range-restricted biodiversity or ecosystems; b) important aggregations areas for spawning or during migration; d) important marine areas, such as nursery grounds for marine species; d) areas with high ecological integrity; or e) areas with important oceanographic processes. A range of such marine sites have been identified globally are available in global databases including:

• Ecologically or biologically significant marine areas (EBSAs)
• Key Biodiversity Areas (KBAs)
• Vulnerable marine ecosystems (VMEs)
• Particularly Sensitive Sea Areas (PSSAs)
• Important Marine Mammal Areas (IMMAs)

In addition to the global databases, marine sites can be identified through expert consensus, national databases, and traditional ecological knowledge.

In the ocean we are often lacking data about important biodiversity values. What is the standard of proof?
It is appreciated that marine ecosystems are often less well studied and understood than terrestrial or even freshwater biomes. However, as noted above, many sites have already been identified and are available from global data sets. This can be complemented by other data sets such IUCN species range maps, information from fisheries departments, and local universities. Traditional knowledge may be
available from Indigenous and community groups as well as local fishers. Finally, expert groups can be assembled to define important areas, as done for the CBD’s EBSA process. Ecological models may be useful in identifying marine sites. It is important to act on the best information available in identifying marine OECMs. The CBD is an international legal instrument. The standard of proof in international law is that the claim must be proven on the “balance of probabilities” or on the preponderance of evidence. In lay terms, this simply means that it is likely to be true. Wherever possible a monitoring system should be established to inform management on the condition of the important ecological values of the OECM.

**Are marine OECMs recognized or created?**
The original conception of OECMs is that they would recognise existing management that was resulting in effective biodiversity conservation. It is now increasingly practiced that OECMs are established in marine ecosystems through the development of new management mechanisms. ‘Recognized OECMs’ are based on recognition of an existing management system that is resulting in effective long-term conservation (i.e., Indigenous territories). ‘Created OECMs’ result from intentionally developing a management system that is expected to result in effective long-term conservation. In both cases, the OECM must meet the defined criteria. Many areas with existing management mechanisms may partially, but not fully, meet the OECM criteria. In these cases, there is an opportunity to modify management conditions to meet the criteria. This might include such things as strengthening a fisheries closure to make it long term, clearly defining a boundary, or ensuring an area is free from other threats.

**What is meant by the term “effective conservation” in marine ecosystems?**
Under the CBD Decision 14/4, an OECM should achieve, or be expected to achieve, positive and sustained outcomes for the in-situ conservation of biodiversity. Effective conservation is understood to mean that the area conserves, or is likely to conserve, the important biodiversity value for the long term. It is understood that no marine protected or conserved areas (MPA or marine OECM) will be able to address all pressures and threats to biodiversity, given that many threats are global or regional and thus originate outside the area, including land-based sources. Effective conservation management of marine OECM should demonstrate that a) threats or pressures are known, b) all threats or pressures that can be addressed by place-based management are being mitigated, and c) the result is the maintenance of enhancement of biodiversity of the important feature. In the CBD decision, OECMs are meant to have conservation outcomes equivalent to protected areas.

**Can artificial features such as offshore wind farms and created reefs count as OECMs?**
In marine ecosystems, human interventions sometimes result in new and even unexpected ecological responses. For example, offshore wind farm structures might support high densities of sessile organisms and act as fish attractants. The result may be an important area for biodiversity. Similarly artificial reefs structures that are created intentionally, or by accident, can also support high levels of biodiversity. There is nothing inherent about the human origins of these structures that would disallow them as OECMs. As with other sites, they would need to meet the defined OECM criteria including a defined boundary, be long-term, have a management system that results in effective conservation, and the biodiversity at the site should be sufficiently important to be an OECM.

**What about fisheries closures. Do they count as OECMs?**
Fisheries closures are one of the main marine management tools that can result in OECMs. There are many examples globally of long-term fisheries closures that effectively protect important marine ecosystems. As with any OECM, the fisheries closures must meet all the OECM criteria described above. Because OECMs are meant to be in situ, or whole ecosystem conservation, a closure for only a single
species, while still allowing large-scale fishing or other industrial activities, for other species, would not be an OECM. The FAO has developed sector specific guidance on how OECMs can result from fisheries management that looks at this question in considerable detail (FAO, 2022).

**Can fishing be permitted in OECMs?**

Marine areas managed for large-scale sustainable fishing should be reported under Target 10 of GFB, which call for all areas under fisheries to be managed sustainably, through the sustainable use of biodiversity. If fishing or other extractive activities are at a low level and compatible with the ecological values for which the OECM is recognized, they can be considered at OECMs. However, fishing should have a low ecological impact, and be consistent with the long-term conservation of the site. Examples of compatible fishing might be community areas managed by traditional management systems, or areas permitting many forms of recreational fishing.

**What about measures to protect a single species?**

OECMs are expected to achieve the conservation of nature as a whole, rather than only selected elements of biodiversity. The CBD definitions of “biodiversity” and “in-situ conservation” clearly recognise that a given species can only exist in-situ as part of an interconnected web with other species and the abiotic environment. Therefore, for OECMs, conservation measures targeting single species or subsets of biodiversity should not allow the broader ecosystem to be compromised.

The terminology here can be confusing. If a fishery closure is on a single species and the closure results in effective conservation of the whole ecosystem, it can be an OECM, assuming it meets the rest of the criteria. On the other hand, if there is a single species measure on a specific species (i.e., a requirement to not harass whales or to use turtle excluders in a given area), while still continuing industrial fishing on other species, the presence of the single species measure would not result in the areas counting as an OECM.

**Can OECMs be zoned vertically, protecting benthic communities while allowing fishing in the pelagic areas?**

All ecosystems exist in three spatial dimensions. This is notable in tropical forests where the species in the canopy are very different from the species on forest floor. The three-dimensional nature of marine ecosystems is especially pronounced and increases with increasing depth. Ecological connections between benthic zones and pelagic zones certainly exist but are not often well studied or understood. So, the question arises on whether it is possible to protect or conserve one marine zone (almost always the benthic zone) while allowing sustainable fishing in another zone (almost always the pelagic zone). The CBD Decision 14/8 does not cover this issue specifically. IUCN's view is that protecting only one zone as an MPA or and OECM should be avoided, wherever possible. This is because of the difficulty of administering a spatial conservation that is vertically zoned and the potential impact from harvest on the protected zone. However, if there is compelling reason to use a vertical zoning approach to conservation, IUCN advises the following:

- The protected zone should be specified in three dimensions. For example, if an important reef system is protected, it should have a vertical dimension, as well as a horizontal area.
- Because OECMs are based on in-situ conservation, the nature of ecological interaction between the benthic and pelagic zone should be understood. For example, the harvest or use in the pelagic zone should not negatively impact the protected benthic zone.
- The gear used in pelagic harvest should be such that it does not unintentionally impact the protected zone.
• As with any OECM, the protected zone meets are the OECM criteria.

**Conclusion**

All ecosystems have different challenges with regard to recognizing and establishing OECMs. It is understood that marine ecosystems may be especially challenging because they are less well understood, less well monitored, and more three-dimensional. Experience has shown that it is certainly possible to recognize and establish OECMs in marine ecosystem that effectively protect important marine biodiversity. Effectively protecting and conserving at least 30% of marine ecosystem by 2030 is an enormous challenge. It is coupled with the additional challenge of sustainably managing fishing on the other 70% of the ocean as specified Target 10 of the Global Biodiversity Framework. In meeting both Targets, and indeed all the other Targets of the GBF, we can halt and reverse marine biodiversity loss, and to ensure a future where marine organisms are part of our sustainable food supply.

**References**

CBD decision 14/8 on protected areas and other effective area-based conservation measures (see paragraph 2 and Annex III). http://www.cbd.int/doc/decisions/cop-14/cop-14-dec-08-en.pdf

CBD decision 15/4, Kunming-Montreal Global Biodiversity Framework.


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