

**Information on actions taken to give effect to General Assembly Resolution 61/105,
64/72, 66/68 and 71/123**

Submission by Norway

Resolution 61/105 from 2006 calls upon states to take action individually or through regional fisheries management organizations (RFMOs) to protect vulnerable marine ecosystems (VMEs) from destructive fishing practices. This is to be done in a way that is consistent with the precautionary approach and the ecosystem approach to fisheries management. This call for action was reiterated and reaffirmed in resolutions 64/72 and 66/68.

In 2011 Norway submitted a report to DOALOS listing specific action taken by Norway to implement paragraphs 83 to 90 of resolution 61/105 and paragraphs 119, 120 and 122 to 123 of resolution 64/72. An updated report describing succeeding measures taken by Norway was submitted to DOALOS in 2016. The present report updates the previously submitted information and describes the most recent measures taken by Norway to address the important issues raised in resolutions 61/105, 64/72, 66/68 and 71/123.

Actions taken by regional fisheries management organizations or arrangements of which Norway is a member

The Northeast Atlantic Fisheries Commission (NEAFC)

Protection of vulnerable marine ecosystems

In 2004, following a Norwegian proposal, NEAFC introduced a precautionary closure of a large area on the Reykjanes Ridge, and four seamounts adjacent to it, in response to international calls for precautionary action to regulate deep-sea resources and their habitats, including VMEs such as corals and sponges. The text of the NEAFC Convention was amended in 2006 to give the organisation the mandate to adopt fishery management measures in accordance with the precautionary approach and ecosystem approach.

Following the initial closures in 2004, several other areas have in subsequent years been closed to bottom fisheries. The total number of closed areas is currently 13.

In 2008, NEAFC adopted additional measures on bottom fishing activities in the NEAFC Regulatory Area, which were supplemented with specific operational procedures at its Annual Meeting. The general approach that can be found in the 2008 Recommendation still remains NEAFC's general approach to the protection of VMEs, although further improvements have been implemented since. This includes the rule that regular bottom fisheries can only take place in areas that are defined as "existing bottom fishing areas", on the basis of actual fishing taking place there within a specific reference period. Outside these areas, only exploratory bottom fisheries can be authorised, and these are subject to severe restrictions.

The current NEAFC list of VME indicators is based on the FAO Guidelines and the thresholds used for determining what constitutes an "encounter" with a possible VME are

based on scientific advice from ICES (the International Council for the Exploration of the Sea).

In 2012, an extensive review of NEAFC's regulation of bottom fisheries was carried out. Although it was concluded that "the NEAFC bottom fishing regulation is in general consistent with the UNGA resolutions and the FAO Guidelines," improvements were made, which resulted in the new Recommendation on the protection of VMEs, adopted in 2014. The Recommendation includes all the general rules regarding the protection of VMEs, as well as the details of what areas are considered as "existing bottom fishing areas" and what areas are closed to bottom fishing. It also includes annexes on a "VME Data Collection Protocol", the "Assessment of Exploratory Bottom Fishing Activities" and on "VME Indicator Species". Furthermore, the Recommendation underlines a process of annual advice from NEAFC's scientific adviser ICES, including the possibility of advice on revision of the closed areas. In addition, the Recommendation includes a specific requirement to renew the closed areas every 5 years. The last time this occurred was in the update to the Recommendation in 2018.

As required by the Recommendation, a review of its effectiveness in protecting VMEs from significant adverse impacts from bottom fishing was conducted in 2019, finding the Recommendation to be effective in keeping bottom fishing from impacting areas outside defined existing fishing areas. Nevertheless, NEAFC put in place actions to further improve its performance in protection of these ecosystems. These include actions under monitoring control and surveillance, science, management and taking into account other international developments, for instance under the United Nations.

Deep-Sea Species

In 2014, NEAFC formally approved interim guidelines on the management of deep-sea species. These guidelines establish that NEAFC's approach to deep-sea fisheries management should aim to place individual stocks into one of four categories, each of which require a different character and level of NEAFC regulations ("Stock-specific management measures", "measures stipulating that directed fisheries are not authorised and that bycatches should be minimised", "measures to respond in a timely and adequate manner to new deep-sea species fishing activity in the high seas" or "measures for fisheries primarily restricted to EEZs"). Following the adoption of these guidelines, NEAFC adopted in 2015 an interim categorisation of deep-sea species, where a total of 64 stocks and species are placed in one of the categories set out in the interim guidelines. Following review by ICES, the NEAFC approach to deep-sea fisheries conservation and management was formally adopted in 2016 and now forms the basis of NEAFC's conservation and management measures.

NEAFC currently has a number of legally binding conservation and management measures in place, which are consistent with the guidelines and categorisation. In addition to these measures, NEAFC also has a legally binding Recommendation that prohibits deploying gillnets, entangling nets or trammel nets at any position where the charted depth is greater than 200 metres.

NEAFC will continually work towards improving the management regime for deep-sea fisheries further and the development of NEAFC measures to protect VMEs is likely to continue.

NEAFC is also taking part in efforts to increase cooperation and coordination among those with legal competence under international law to manage different types of human activities in areas beyond national jurisdiction, such as the OSPAR Commission.

The Northwest Atlantic Fisheries Commission (NAFO)

NAFO has made efforts to ensure that the measures it has taken to promote sustainable fisheries and protection of ecosystems in the deep-sea area are consistent with the FAO Guidelines.

NAFO has taken a number of measures to implement the Guidelines, including, *inter alia*, defining a list of habitat forming VME indicator species found in the NAFO Regulatory Area, closing 380 000 km² to bottom fishing on seamounts and in areas where these species are known or predicted to form aggregations, and adopting measures to prohibit bottom contact gears from seamounts.

In 2016, NAFO undertook a review of its bottom fisheries, including its management measures for VMEs. A second review will take place in 2021.

NAFO participates in regular exchanges and international fora, mediated through the FAO or bilaterally with other RFMOs, to develop and implement best practices.

The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)

The legal basis of the Commission, the Convention on the Conservation of Antarctic Marine Living Resources, forms a part of the Antarctic Treaty System. The precautionary approach and the ecosystem approach have been implemented. With regard to bottom fishing, CCAMLR has implemented a set of regulations and guidelines to protect VMEs, particularly through Conservation Measure 22-04 on interim prohibition of deep-sea gillnetting, Conservation Measure 22-05 (2008) on restrictions on the use of bottom trawling gear in high-seas areas of the Convention Area, Conservation Measure 22-06 (2015) on bottom fishing in the Convention Area, and Conservation Measure 22-07 (2013) on Interim measure for bottom fishing activities subject to Conservation Measure 22-06 on encountering potential vulnerable marine ecosystems in the Convention Area.

There are currently no bottom trawl fisheries in the CCAMLR area, only long line fisheries, primarily for tooth fish, with bottom contact. In accordance with Conservation Measure 22-08 such fishing is prohibited in depths shallower than 550 meters.

The South East Atlantic Fisheries Organization (SEAFO)

The Commission has adopted conservation measures to address the protection of VMEs, namely Conservation Measures 18/10 on the Management of Vulnerable Deep Water Habitats and Ecosystems in the SEAFO Convention Area and Conservation Measure 17/09 on Bottom Fishing Activities in the SEAFO Convention Area.

Under these measures a total of 11 sub-areas known or likely to contain VMEs in the SEAFO Convention Area have been closed to bottom fisheries activities. The measures also include a protocol on the landing and reporting of corals and sponges. Furthermore, landing data for corals and sponges should also be recorded on the individual scientific forms.

In 2015, following a Norwegian proposal, SEAFO adopted Conservation Measure 30/15, thus expanding its protection of VMEs from significant adverse impacts. A research survey conducted by the FAO's EAF Nansen Ecosystem Approach to Fisheries Program, in collaboration with the Norwegian Institute of Marine Research (IMR), constituted the scientific basis for the proposal.

Actions taken by Norway

Implementation of RFMO regulations on bottom fishing activities

The rules described above have been adopted and implemented by Norway under the Regulation of 9 February 2009 on bottom fishing activities in the areas beyond national jurisdiction in the North East Atlantic Ocean, the Regulation of 14 October 2014 on protection of vulnerable marine ecosystems in areas beyond national jurisdiction in the North West Atlantic Ocean and the Regulation of 13 March 1998 on fishing by Norwegian vessels in Antarctica (CCAMLR Area). Norwegian vessels do not operate in the SEAFO Convention Area.

Adoption of the regulation pertaining to vulnerable marine ecosystems in the Norwegian Territorial Sea, Exclusive Economic Zone, the Fisheries Protection Zone around Svalbard and the Fisheries Zone around Jan Mayen

On 1 July 2011 Norway adopted the Regulation on bottom fishing activities in the Norwegian Economic Zone, the Fisheries Zone around Jan Mayen and the Fisheries Protection Zone around Svalbard. The regulation is adjusted to fit the national fisheries and aimed at protection of VMEs from destructive fishing practices.

The regulation addresses the requirements of resolution 61/105 on habitat protection, and is based on the FAO's guidelines of 2008 for the management of deep-sea fisheries in the high seas. The Norwegian Economic Zone, the Fisheries Zone around Jan Mayen and the Fisheries Protection Zone around Svalbard is consequently divided into two main area categories, i.e. existing bottom fishing areas and new bottom fishing areas.

In general, existing bottom fishing areas cover all areas above 1000 meters depth. New bottom fishing areas cover all areas below 1000 meters depth within the above-mentioned area. The legislation regulates bottom fishing in existing and new bottom fishing areas. More rigorous obligations, especially with regard to reporting and protocol routines, scientific observer on board, apply for fishing activities in new bottom fishing areas.

The regulation also includes rules of conduct in case of an encounter with a VME (where VME indicator species is defined as a catch per set of more than 30 kg of live coral and/or 400 kg of live sponge). Summarily, the vessel shall in this case cease fishing, report the

incident to its flag state and move at least 2 nautical miles from the area. The latter obligations apply regardless of fishing area category.

In 2018-2019 Norway undertook a review of the bottom fishing regulation. New knowledge about the Barents Sea, including information on sea floor conditions, fishing activity in the area and catch and research data, showed that the bottom fishing regulation was inadequate in this area, as the biodiversity and the sea floor depths are different from other areas. Hence, amendments were required to ensure protection of the vulnerable marine ecosystems in the Barents Sea.

The amendments to the regulation, now renamed as Regulation to protect vulnerable marine ecosystems, were adopted in 2019 and include closing ten areas for bottom fishing activities. Furthermore, the coordinates outlining the existing bottom fishing areas and the areas where bottom fishing activities require a special licence from the authorities were redefined. Finally, significant changes to the conduct and technology of bottom activities within existing bottom fishing areas now require a special licence from the authorities.

Other national legislation relating to protection of VMEs

Pursuant to the Marine Resources Act of 6 June 2008, the Norwegian fisheries authorities have adopted regulations to protect cold-water coral reefs. According to these regulations, intentional and negligent destruction of known coral reefs is prohibited, and precaution is required when fishing in the vicinity of known cold-water coral reefs. Furthermore, a selection of coral reef areas are granted special protection by a ban on the use of fishing gear which is dragged along the bottom (such as bottom trawl).

So far eighteen reefs have been given this type of special protection pursuant to the Marine Resources Act; the Sula Reef (1999), Iverryggen Reef (2000), the Røst Reef (2003), Tisler and Fjellknausene Reefs (2003), Trænarevene, Breisunddjupet and an area northwest of Sørøya in Finnmark (2009), Rauerfjorden Reef (2010) and Sotbakken, Fugløyrevne, Storneset, Aktivneset, Hola, Midsundrevet, Søndre Søster, Straumsneset and Nakken Reefs (2016). In some of these areas the use of gillnets, long line and pots is also prohibited. Pursuant to the Nature Diversity Act of 19 June 2009 Saltstraumen, Tauterryggen (which includes the world's shallowest known Lophelia-reef, Selligrunnen) and Framvaren are now marine protected areas with vulnerable/rare bottom habitats. In addition the Marine National Park Hvaler includes the Tisler coral reefs.

Since 1999 there has been in place a general attention duty for vessels fishing close to identified coral reefs in order to protect the reefs against damage.

MAREANO sea floor mapping program and scientific research

Implementation and adoption of the above mentioned regulations on bottom fishing activities in Norwegian waters requires scientific information and advice on vulnerable marine ecosystems. Mapping of existing and new areas is ongoing.

Norwegian authorities have since 2005 systematically mapped a total of 219 950 km² of bathymetry data of the Norwegian sea floor through the MAREANO sea floor mapping

programme. The programme is a national, interdisciplinary research programme whose objective is mapping the Norwegian ocean floor. Until 2019 approximately 1.1 billion Norwegian kroner has been spent in total.

MAREANO maps depth and topography, sediment composition, contaminants, biological communities and biotopes/habitats in Norwegian waters, and hence the MAREANO programme is important to uncover and document VMEs. Fishing also becomes more effective with terrain maps for the seabed. With new subsea maps, catches are bigger, fuel consumption less and damage to the equipment reduced. These are the experiences of the fishing vessels that have tested out MAREANO maps on the chartplotters. In 2017 and 2018 there were a total of 17 fishing vessels engaged in testing of new maps, which show depth, terrain conditions and bottom types. The maps are available in different formats, used in the most common chart plots. The public now has a detailed map of bottom types and depth conditions for several important fishing grounds, the shelf and along the coast.

Norwegian fishery authorities have ensured that scientific research and mapping services from MAREANO can be a basis for decision making. The Norwegian Directorate of Fisheries, which has the main responsibility for practical procedures relating to the regulations on bottom fishing activities, is a member of MAREANO's operational management team. The Norwegian Institute of Marine Research is one of several institutions collecting and analyzing MAREANO data. These bodies therefore cooperate closely.