

30TH ANNUAL MEETING – SEPTEMBER 2008**(ADOPTED)****Preliminary Assessment of the Risk of Significant Adverse Impact (SAI) of Fishing Activities  
in the NAFO Regulatory Area****Background**

At its 2005 annual meeting, NAFO agreed to launch a reform process which inter alia was intended to implement modern standards established by current international fisheries instruments, including the 1982 United Nations Convention on the Law of the Sea and the 1995 United Nations Fish Stocks Agreement.

In 2005, the United Nations (UN) Secretary-General published a report outlining actions taken by States and regional fisheries management organizations (RFMO) to address the impacts of fishing on vulnerable marine ecosystems in response to UN General Assembly (UNGA) Resolution 59/25.

As a part of this process, NAFO decided in 2006 to implement the precautionary closures of four seamount areas which included strict conditions under which exploratory fisheries could occur within these areas. In 2007, NAFO closed part of NAFO Subarea 3O to fishing where corals were identified.

The United Nations General Assembly adopted Resolution 61/105 in 2006 which called for an assessment of the risk of significant adverse impacts (SAI) of fishing activities on vulnerable marine ecosystems (VMEs) and the adoption of appropriate mitigating measures by 31 December 2008.

To this end, and given the shortness of time to realistically undertake the appropriate work required, NAFO adopted during an Extraordinary Meeting in May 2008 comprehensive measures to fulfill the recommendations of Resolution 61/105. According to those provisions, each Contracting Party will be required to assess any proposed bottom fishing for anticipated impacts on VMEs in 2009. At the same meeting, it was also agreed that every effort should be made to start the assessment process, including a preliminary risk assessment and adoption of resulting measures in 2008.

In June 2008, Scientific Council of NAFO initiated its work to identify areas in which features associated with VMEs may exist, but was neither able to make a detailed analysis nor conduct impact assessments of bottom fishing activities. In September 2008, the Ad Hoc Working Group of Fishery Managers and Scientists on VMEs concluded that further work by the Scientific Council was indeed required to either identify new VMEs, if any, or enable credible risk assessments.

In addition, this ad hoc working Group recommended, in light of limited resources and time, that focus be placed first (in 2008) on identifying areas with sensitive coral concentrations and seamounts and secondly (during 2009), on areas related to sponge concentrations.

The Fisheries Commission made the following observations based on the ad hoc Working Group report which may help inform preliminary assessments:

Based on historical information collected over decades, concentrations of corals had been found by survey trawls in a few localized areas in the Regulatory Area. However, based on preliminary

information presented related to catch of corals by commercial vessels in areas currently fished, there appears to be little interaction between species of corals and fishing activity in the Regulatory Area. This situation reflects decades of sustained fishing.

- With respect to the South East Shoal relative to capelin spawning during June/July and bivalve populations, there is not a high risk of significant adverse impact on the capelin spawning grounds. It is noted that there is no directed capelin fishery, seasonal and low fishing levels generally exist from the yellowtail flounder and skate fisheries, the Canadian fishery for yellowtail has a closure during the summer season. In addition, the habitat comprises a sandy, gravel bottom, with limited or no presence of coral or sponge concentrations, and limited bottom perturbation associated with the capelin spawning period.

#### Considerations by the Fisheries Commission

In its comparison of the historic footprint in the NAFO Regulatory Area and preliminary assessments by the Scientific Council on possible areas where VMEs may exist, the Fisheries Commission observes a significant overlap between the aggregate footprint and these areas, and considerable specificity in individual fisheries footprints. The Fisheries Commission considers that this reinforces the observation of the ad hoc Working Group that there has been a long history of fishing, including bottom contact fishing, in existing fishing areas and that this should be taken into account in determining whether VMEs in fact continue to exist within those areas.

The Fisheries Commission also observes that, on the one hand, during this long history of fishing there seems to have been little interaction between commercial fishing activities and species of corals. On the other hand, the Fisheries Commission considers that new fishing areas essentially consist of deep waters which may contain slow growing marine species. Against this background, the Fisheries Commission concludes that, in general, the probability of significant adverse impacts on VMEs is higher in new fishing areas rather than in existing fishing areas.

The Fisheries Commission reaffirms its strong commitment to implementing the internationally agreed standards to protect VMEs from significant adverse impact, as identified under Resolution 61/105 and FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas. The Fisheries Commission understands that this will be an ongoing process and that the work in 2008 represents what can be done with the information and resources available. The Fisheries Commission will continue its efforts beyond 2008 as information and experience expands.

In order to complete the preliminary assessment of fishing activities and adopt resulting mitigating measures, the Fisheries Commission agrees to:

- Request that the Scientific Council refine the information on coral concentrations as soon as possible in 2008 (it is understood that the work of the Working Group on Ecosystem Approach to Fisheries Management is ongoing and the Scientific Council is planning to review and adopt a report at the end of October, 2008.)
- Request that the Scientific Council provide, by 30 June 2009, information on sponge concentrations;
- Request that the Scientific Council provide the information on corals and sponges in canyons with a focus on those species which involve interactions with commercial fisheries as soon as practicable or at least provide a progress report by June 30, 2009;
- Hold a meeting of the ad hoc Working Group in the first quarter of 2009 to review the SC information on corals, review information by the Scientific Council regarding identification of

VMEs and assessment of risk, and make recommendations to FC on any further mitigation measures that maybe required through processes to be established at that time.

- Adopt the proposal (Annex 1) to reference the definition and criteria for VMEs and Significant Adverse Impact to the NCEM, Chapter 1bis based on the FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas.

### **Implementation of Additional Mitigating Measures in 2009**

Furthermore, the Fisheries Commission agrees to adopt the following additional mitigation measures as of 1 January 2009:

- Extension of the current seamount measures to include the Fogo Seamounts and the amendment of Article 14 of the NCEM accordingly (Annex 2)
- Adoption of Interim Exploratory Fishery Protocol (Annex 3)
- Adoption of interim Encounter Provisions for Deep Sea VMEs in both fished and unfished areas of the NAFO Regulatory Area (Annex 4) until there is a clear definition of areas of VMEs by geographical references done by a seabed mapping using the best available scientific analysis.

ANNEX 1

**Proposal for Amendment of Article 1 of Chapter Ibis**

Article 1 in Chapter Ibis be amended by adding the following:

**5. The term “vulnerable marine ecosystems” has the same meaning and characteristics as those contained in paragraphs 42 and 43 of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas**

**6. The term “significant adverse impacts” has the same meaning and characteristics as those described in paragraphs 17-20 of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas.**

## ANNEX 2

### Inclusion of Fogo Seamounts in Closed Area Table for Seamounts

Amend Article 14, paragraph 5 as to include coordinates for the Fogo Seamounts as follows:

As of January 1, 2007, and until December 31, 2010, the following areas shall be closed to all bottom fishing activities. The closed areas are defined by connecting the following coordinates (in numerical order and back to coordinate 1).

<b>Area</b>	<b>Coordinate 1</b>	<b>Coordinate 2</b>	<b>Coordinate 3</b>	<b>Coordinate 4</b>
Fogo Seamounts 1	42 31 33 N 53 23 17 W	42 31 33 N 52 33 37 W	41 55 48 N 53 23 17 W	41 55 48 N 52 33 37 W
Fogo Seamounts 2	41 07 22 N 52 27 49 W	41 07 22 N 51 38 10 W	40 31 37 N 52 27 49 W	40 31 37 N 51 38 10 W

## ANNEX 3

### Exploratory Protocol for New Fishing Areas

The Exploratory Fishery Protocol for New Fishing Areas shall include:

- A harvesting plan which outlines target species, dates and areas. Area and effort restrictions should be considered to ensure fisheries occur on a gradual basis in a limited geographical area.
- A mitigation plan including measures to prevent significant adverse impact to vulnerable marine ecosystems that may be encountered during the fishery.
- A catch monitoring plan that includes recording/reporting of all species caught, 100% satellite tracking and 100% observer coverage. The recording/reporting of catch should be sufficiently detailed to conduct an assessment of activity, if required.
- A data collection plan to facilitate the identification of vulnerable marine ecosystems/species in area fished.

Exploratory fisheries shall not commence until this information has been provided to the Executive Secretary and forwarded to all Contracting Parties and the Scientific Council for information.

**Proposed templates for the exploratory protocol for new fishing areas where fishing gear is likely to contact the seafloor**

**I. CONTRACTING PARTY SUBMITS NOTICE OF INTENT TO UNDERTAKE EXPLORATORY FISHING TO THE NAFO SECRETARIAT**

**HARVESTING PLAN**

- TARGET SPECIES
- FISHING DATES
- DESCRIPTION OF AREA TO BE FISHED
- ANTICIPATED EFFORT
- BOTTOM FISHING GEAR-TYPE(S) USED

**MITIGATION PLAN**

MEASURES TO PREVENT SIGNIFICANT ADVERSE IMPACTS TO VMEs

**CATCH MONITORING PLAN**

IDENTIFY AND RECORD ALL SPECIES BROUGHT ONBOARD TO THE LOWEST POSSIBLE TAXONOMIC LEVEL

100% SATELLITE COVERAGE

100% OBSERVER COVERAGE

**DATA COLLECTION PLAN**

DATA WILL BE COLLECTED AND REPORTED IN A STANDARDIZED FORMAT

**II. CONTRACTING PARTY SUBMITS TRIP REPORT TO THE NAFO SECRETARIAT**

PROPOSED DRAFT TEMPLATE FOR THE EXPLORATORY FISHERY PROTOCOL FOR NEW FISHING AREAS WHERE FISHING GEAR IS LIKELY TO CONTACT THE SEAFLOOR

**ADVANCED NOTICE OF INTENT TO UNDERTAKE EXPLORATORY FISHING<sup>1</sup>**

**NAME OF VESSEL:**

**FLAG STATE OF VESSEL:**

**ANTICIPATED LOCATION(S) OF EXPLORATORY FISHING ACTIVITIES (INCLUDE LAT/LONG):**

**ANTICIPATED DATES OF EXPLORATORY FISHING ACTIVITIES:**

**HAS ANY PREVIOUS FISHING BEEN UNDERTAKEN IN ADJACENT AREAS (IF SO, IDENTIFY INFORMATION SOURCE):**

**DEPTHS EXPECTED TO BE ENCOUNTERED DURING EXPLORATORY FISHING ACTIVITIES:**

**DO HABITAT MAPS OF THE AREA EXIST (IF SO, PLEASE IDENTIFY SOURCE(S)):**

**ARE TAXONOMIC KEYS IDENTIFYING POTENTIALLY VULNERABLE SPECIES AVAILABLE (IF SO, IDENTIFY SOURCES(S)):**

**KNOWN VULNERABLE MARINE ECOSYSTEMS (VMEs)<sup>2</sup> IN THE LOCATION(S) TO BE FISHED:**

**MITIGATION MEASURES TO PREVENT SIGNIFICANT ADVERSE IMPACT TO VMEs, IF ENCOUNTERED:**

**DO BATHYMETRIC MAPS OF THE EXPLORATORY AREA EXIST (IF SO, PLEASE IDENTIFY SOURCE(S)):**

**DOES ANY FISHERIES SCIENTIFIC INFORMATION IN THE EXPLORATORY AREA EXIST (IF SO, IDENTIFY SOURCE(S)):**

**TARGET SPECIES BEING SOUGHT:**

**WHAT GEAR TYPE(S) ARE BEING PROPOSED TO BE USED (PLEASE IDENTIFY) IN WHAT AREAS (INCLUDE LAT/LONG):**

<sup>1</sup> EXPLORATORY FISHING IS DEFINED AS ALL BOTTOM FISHING ACTIVITIES IN NEW AREAS OR WITH BOTTOM GEAR NOT PREVIOUSLY USED IN THE AREA CONCERNED AND NOT IDENTIFIED IN ARTICLE 2 OF NEW CHAPTER I BIS (SEE NAFO/FC DOC. 08/3)

<sup>2</sup> REFER TO FAO INTERNATIONAL GUIDELINES FOR THE MANAGEMENT OF DEEP-SEA FISHERIES IN THE HIGH SEAS



**PROPOSED DRAFT TEMPLATE FOR THE EXPLORATORY FISHERY PROTOCOL FOR NEW FISHING AREAS WHERE THE FISHING GEAR IS LIKELY TO CONTACT THE SEAFLOOR**

**CONTRACTING PARTY EXPLORATORY FISHING<sup>1</sup> TRIP REPORT SUBMITTED TO THE NAFO SCIENTIFIC COUNCIL**

**NAME OF VESSEL:**

**FLAG STATE OF VESSEL:**

**LOCATION(S) OF AREAS FISHED (INCLUDE LAT/LONG):**

**DATES OF FISHING ACTIVITIES:**

**DEPTHS ENCOUNTERED DURING FISHING (LIST FOR EACH HAUL INCLUDING LAT/LONG):**

**TOTAL HOURS/AREA FISHED (LIST FOR EACH HAUL INCLUDING LAT/LONG):**

**GEAR TYPE(S) USED (PLEASE IDENTIFY) IN WHAT AREAS (INCLUDE LAT/LONG):**

**VULNERABLE MARINE ECOSYSTEMS (VMEs)<sup>2</sup> ENCOUNTERED (LIST FOR EACH HAUL INCLUDE LAT/LONG):**

**MITIGATION MEASURES TAKEN TO PREVENT SIGNIFICANT ADVERSE IMPACT TO VMEs IF ENCOUNTERED:**

**LIST OF ALL ORGANISMS (RETAINED, BYCATCH) BROUGHT ONBOARD (IDENTIFIED TO THE LOWEST TAXONOMIC UNIT):**

**LIST OF POTENTIAL VULNERABLE INDICATOR SPECIES<sup>3</sup> BROUGHT ONBOARD BY LOCATION (INCLUDE LAT/LONG):**

**LIST OF ORGANISMS RETAINED FOR BIOLOGICAL SAMPLING (E.G., LENGTH-WEIGHT, SEX, AGE), IF ANY:**

<sup>1</sup> EXPLORATORY FISHING IS DEFINED AS ALL BOTTOM FISHING ACTIVITIES IN NEW AREAS OR WITH BOTTOM GEAR NOT PREVIOUSLY USED IN THE AREA CONCERNED AND NOT IDENTIFIED IN ARTICLE 2 OF NEW CHAPTER I BIS (SEE NAFO/FC DOC. 08/3)

<sup>2</sup> REFER TO FAO INTERNATIONAL GUIDELINES FOR THE MANAGEMENT OF DEEP-SEA FISHERIES IN THE HIGH SEAS

<sup>3</sup> REFER TO ANNEX 1 FAO INTERNATIONAL GUIDELINES FOR THE MANAGEMENT OF DEEP-SEA FISHERIES IN THE HIGH SEAS

**NOTE: DATA REPORTING SHOULD FOLLOW A STANDARDIZED SPECIFICATION, FOR EXAMPLE, AS ADOPTED BY SCIENTIFIC OBSERVER PROGRAMS.**

## ANNEX 4

### New Article 5 Chapter 1bis: - Interim Encounter Provision

Definition of an Encounter –is an encounter, above threshold levels as set out in paragraph 3, with indicator species of coral identified as antipatharians, gorgonians, cerianthid anemone fields, lophelia, and sea pen fields or other VME elements. Any encounter with a VME indicator species or merely detecting the presence of an element itself is not sufficient to identify a VME. That identification should be made on a case-by-case basis through assessment by relevant bodies.

Contracting Parties shall require that vessels flying their flag and conducting bottom fishing activities within the Regulatory Area abide by the following rules, where, in the course of fishing operations, evidence of vulnerable marine ecosystems is encountered:

#### 1) Existing fishing areas

a) Vessels shall quantify catch of VME indicator species, i.e. coral and sponge.

b) if the quantity of VME elements or indicator species caught in a fishing operation (such as trawl tow or set of a gillnet or longline) is beyond the threshold defined in paragraph 3 below, the following shall apply:

- The vessel master shall report the incident to the flag state, which without delay shall forward the information to the Executive Secretary. Contracting Parties may if they so wish require their vessels to also report the incident directly to the Executive Secretary. The Executive Secretary shall archive the information and report it to all Contracting Parties. The Contracting Parties shall immediately alert all fishing vessels flying their flag.
- The vessel master shall cease fishing and move away at least 2 nautical miles from the endpoint of the tow/set in the direction least likely to result in further encounters. The captain shall use his best judgment based on all available sources of information.
- The Executive Secretary shall make an annual report on single and multiple encounters in discrete areas within existing fishing areas to the Scientific Council. The Scientific Council shall evaluate and, on a case-by-case basis the information and provide advice to the Fisheries Commission on whether a VME exists. The advice shall be based on annually updated assessments of the accumulated information on encounters and the Scientific Council's advice on the need for action, using FAO guidelines as a basis. The Fisheries Commission shall consider the advice in accordance with Article 4, paragraph 5.

#### 2) Unfished areas that are defined as 'New fishing areas'

a) Vessels shall quantify catch of VME indicator species, i.e. coral and sponge. Observers deployed shall identify corals, sponges and other organisms to the lowest possible taxonomical level. The sampling protocol found in Annex x shall be used (templates).

b) If the quantity of VME element or indicator species caught in a fishing operation (such as trawl tow or set of a gillnet or longline) is beyond the threshold defined in paragraph 3 below, the following shall apply:

- The vessel master shall report the incident without delay to its flag state, which shall forward the information to the Executive Secretary. Contracting Parties may if they so wish require their vessels to also report the incident directly to the Executive Secretary. The Executive Secretary shall archive the information and without delay transmit it to all Contracting Parties. The Contracting Parties shall issue an immediate alert to all vessels flying their flag.
- The Executive Secretary shall at the same time request Contracting Parties to implement a temporary closure of a two mile radius around the reporting position. The reporting position is that provided by the vessel, either the endpoint of the tow/set or another position that the evidence suggests is closest to the exact encounter location.
- The Scientific Council at its next meeting shall examine the temporary closure. If the Scientific Council advises that the area consists of a vulnerable marine ecosystem the Executive Secretary shall

request Contracting Parties to maintain the temporary closure until such time that the Fisheries Commission has acted upon the advice from the Scientific Council in accordance with Article 4, paragraph 5 in chapter 1 bis. If the Scientific Council does not conclude that the proposed area is a VME, the Executive Secretary shall inform Contracting Parties which may re-open the area to their vessels.

- The vessel shall cease fishing and move away at least 2 nautical miles from the endpoint of the tow/set in the direction least likely to result in further encounters. The captain shall use his best judgment based on all available sources of information.

- The Executive Secretary shall make an annual report on archived reports from encounters in *new fishing areas* to the Scientific Council. This report shall also include reports from the exploratory fishing activities that were conducted in the last year. The Scientific Council shall evaluate the information and provide advice to the Fisheries Commission on the appropriateness of temporary closures and other measures. The advice should be based on annually updated assessments of the accumulated information on encounters as well as other scientific information. The Scientific Council's advice should reflect provisions outlined in the FAO guidelines. The Fisheries Commission shall consider the advice in accordance with Article 4, paragraph 5.

3) For both existing and new fishing areas, an encounter with primary VME indicator species is defined as a catch per set (e.g. trawl tow, longline set, or gillnet set) of more than 100 kg of live coral and/or 1000kg of live sponge. These thresholds are set on a provisional basis and may be adjusted as experience is gained in the application of this measure.