

33RD ANNUAL MEETING - SEPTEMBER 2011

**Amendment to NCEM Chapter Ibis – Bottom Fisheries in the NAFO Regulatory Area  
(as recommended by the WGFMS-VME)**

**Article 1bis – Purpose and definitions**

1. The purpose of this chapter is to ensure the implementation by NAFO of effective measures to prevent significant adverse impacts of bottom fishing activities on vulnerable marine ecosystems known to occur or likely to occur in the Regulatory Area based on the best available scientific information. For the purposes of this Chapter, NAFO will take into account the guidance provided by the FAO in the framework of the Code of Conduct for Responsible Fisheries and any other internationally agreed standards, as appropriate.
2. The term ‘bottom fishing activities’ means bottom fishing activities where the fishing gear is likely to contact the seafloor during the normal course of fishing operations.
3. The term "existing bottom fishing areas" means that portion of the Regulatory Area where bottom fishing has historically occurred and is defined by the coordinates shown in Table 1 and illustrated in Figure 3.
4. The term "new bottom fishing areas" means all other areas within the Regulatory Area which are not defined as existing bottom fishing areas.
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 VME indicator species refers to species of coral identified as antipatharians, gorgonians, lophelia, and sea pen fields; cerianthid anemone fields; and sponges that constitute sponge grounds or aggregations, and other VME elements.
7. 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.
8. The term “exploratory fisheries” means all bottom fishing activities outside of the existing bottom fishing area (footprint), or if there are significant changes to the conduct or technology of existing bottom fishing activities within the footprint.
9. The term “encounter” means catch of a VME indicator species above threshold levels as set out in Article 6bis, paragraph 3. Any encounter with a VME indicator species or merely detecting its presence is not sufficient to identify a VME. That identification should be made on a case-by-case basis through assessment by relevant bodies.

**Article 2bis - Seamount, Coral, and Sponge Protection Zones**

1. Until December 31, 2014, no vessel shall engage in bottom fishing activities in the areas defined by connecting the following coordinates (in numerical order and back to coordinate 1).

Area	Coordinate 1	Coordinate 2	Coordinate 3	Coordinate 4
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
Orphan Knoll	50°00'30"N 45°00'30"W	51°00'30"N 45°00'30"W	51°00'30"N 47°00'30"W	50°00'30"N 47°00'30"W
Corner Seamounts	35°00'00"N 48°00'00"W	36°00'00"N 48°00'00"W	36°00'00"N 52°00'00"W	35°00'00"N 52°00'00"W
Newfoundland Seamounts	43°29'00"N 43°20'00"W	44°00'00"N 43°20'00"W	44°00'00"N 46°40'00"W	43°29'00"N 46°40'00"W
New England Seamounts	35°00'00"N 57°00'00"W	39°00'00"N 57°00'00"W	39°00'00"N 64°00'00"W	35°00'00"N 64°00'00"W

2. The Fisheries Commission shall consider providing access to a small scale and restricted exploratory fishery, not to exceed 20% of the fishable area of each seamount.
3. A request to conduct exploratory bottom contact fishing, in the areas defined by paragraph 1 shall be in accordance with the Exploratory Protocol for New Fishing Areas (Annex XXV). In addition to the protocol, vessels fishing in the areas defined in paragraph 1, shall have a scientific observer onboard.
4. If vessels fishing in the areas defined in paragraph 1 encounter a VME indicator species, as defined in paragraph 3 of Article 6bis of Chapter Ibis, interim encounter provisions as set out in paragraph 2 of Article 6bis of Chapter Ibis will apply.
5. Until December 31, 2014, no vessel shall engage in bottom fishing activities in the following area in Division 30 defined by connecting the following coordinates (as illustrated in Figure 1).

Point No.	Latitude	Longitude
1	42° 53' 00" N	51° 00' 00" W
2	42° 52' 04" N	51° 31' 44" W
3	43° 24' 13" N	51° 58' 12" W
4	43° 24' 20" N	51° 58' 18" W
5	43° 39' 38" N	52° 13' 10" W
6	43° 40' 59" N	52° 27' 52" W
7	43° 56' 19" N	52° 39' 48" W
8	44° 04' 53" N	52° 58' 12" W
9	44° 18' 38" N	53° 06' 00" W
10	44° 18' 36" N	53° 24' 07" W
11	44° 49' 59" N	54° 30' 00" W
12	44° 29' 55" N	54° 30' 00" W
13	43° 26' 59" N	52° 55' 59" W
14	42° 48' 00" N	51° 41' 06" W
15	42° 33' 02" N	51° 00' 00" W

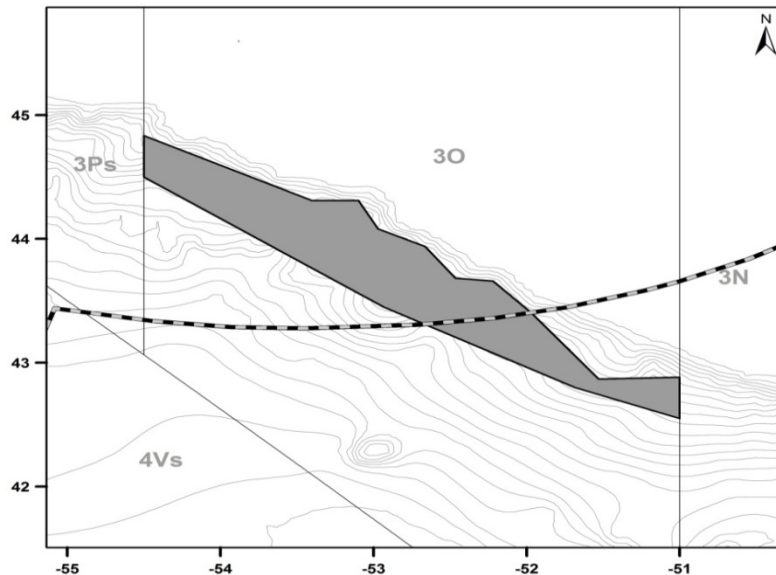


Figure 1. Polygon Delineating Area of 30 Coral Closure referred to in Article 2bis paragraph 5.

6. Until December 31, 2014, no vessel shall engage in bottom fishing activities in the areas defined by connecting the following coordinates (as illustrated in Figure 2).

Area	Description	Point No.	Latitude	Longitude
1	Tail of the Bank	1.1	44° 02' 53.88" N	48° 49' 9.48" W
		1.2	44° 21' 31.32" N	48° 46' 48" W
		1.3	44° 21' 34.56" N	48° 50' 32.64" W
		1.4	44° 11' 48.12" N	48° 50' 32.64" W
		1.5	44° 02' 54.6" N	48° 52' 52.32" W
2	Flemish Pass/ Eastern Canyon	2.1	44° 50' 56.4" N	48° 43' 45.48" W
		2.2	46° 18' 54.72" N	46° 47' 51.72" W
		2.3	46° 25' 28.56" N	46° 47' 51.72" W
		2.4	46° 46' 32.16" N	46° 55' 14.52" W
		2.5	47° 03' 29.16" N	46° 40' 4.44" W
		2.6	47° 11' 47.04" N	46° 57' 38.16" W
		2.7	46° 40' 40.8" N	47° 03' 4.68" W
		2.8	46° 24' 24.12" N	46° 51' 23.04" W
		2.9	46° 07' 1.56" N	47° 30' 36.36" W
		2.10	45° 49' 6.24" N	47° 41' 17.88" W
		2.11	45° 19' 43.32" N	48° 29' 14.28" W
		2.12	44° 53' 47.4" N	48° 49' 32.52" W
3	Beothuk Knoll	3.1	45° 49' 10.2" N	46° 06' 2.52" W
		3.2	45° 59' 47.4" N	46° 06' 2.52" W
		3.3	45° 59' 47.4" N	46° 18' 8.28" W
		3.4	45° 49' 10.2" N	46° 18' 8.28" W
4	Eastern Flemish Cap	4.1	46° 48' 35.28" N	43° 20' 51.72" W
		4.2	47° 03' 58.68" N	43° 20' 51.72" W
		4.3	47° 03' 58.68" N	43° 34' 16.32" W
		4.4	46° 48' 35.28" N	43° 34' 16.32" W
5	Northeast Flemish Cap	5.1	47° 37' 42.24" N	43° 37' 29.64" W
		5.2	47° 58' 30.72" N	43° 44' 47.04" W
		5.3	48° 29' 52.44" N	44° 14' 42.72" W
		5.4	48° 27' 19.44" N	44° 21' 7.92" W
		5.5	47° 51' 14.4" N	43° 48' 35.64" W
		5.6	47° 35' 57.48" N	43° 43' 9.12" W
6	Sackville Spur	6.1	48° 18' 51.12" N	46° 37' 13.44" W
		6.2	48° 28' 51.24" N	46° 08' 33.72" W
		6.3	48° 49' 37.2" N	45° 27' 20.52" W
		6.4	48° 56' 30.12" N	45° 08' 59.99" W
		6.5	49° 00' 9.72" N	45° 12' 44.64" W
		6.6	48° 21' 12.24" N	46° 39' 11.16" W
7	Northern Flemish Cap	7.1	48° 20' 29.76" N	44° 54' 38.16" W
		7.2	48° 25' 2.28" N	44° 54' 38.16" W
		7.3	48° 25' 2.28" N	45° 17' 16.44" W
		7.4	48° 20' 29.76" N	45° 17' 16.44" W
8	Northern Flemish Cap	8.1	48° 35' 56.4" N	45° 05' 35.52" W
		8.2	48° 40' 9.84" N	45° 05' 35.52" W
		8.3	48° 40' 9.84" N	45° 11' 44.88" W
		8.4	48° 35' 56.4" N	45° 11' 44.88" W
9	Northern Flemish Cap	9.1	48° 34' 23.52" N	45° 26' 18.96" W
		9.2	48° 36' 55.08" N	45° 31' 15.96" W
		9.3	48° 30' 18.36" N	45° 39' 42.48" W
		9.4	48° 27' 30.6" N	45° 34' 40.44" W
10	Northwest Flemish Cap	10.1	47° 47' 17.16" N	46° 17' 27.96" W
		10.2	47° 58' 42.24" N	46° 06' 43.92" W
		10.3	48° 01' 6.6" N	46° 12' 3.96" W
		10.4	47° 49' 41.52" N	46° 22' 48" W
11	Northwest Flemish Cap	11.1	47° 25' 48" N	46° 21' 23.76" W
		11.2	47° 30' 1.44" N	46° 21' 23.76" W
		11.3	47° 30' 1.44" N	46° 27' 33.12" W
		11.4	47° 25' 48" N	46° 27' 33.12" W

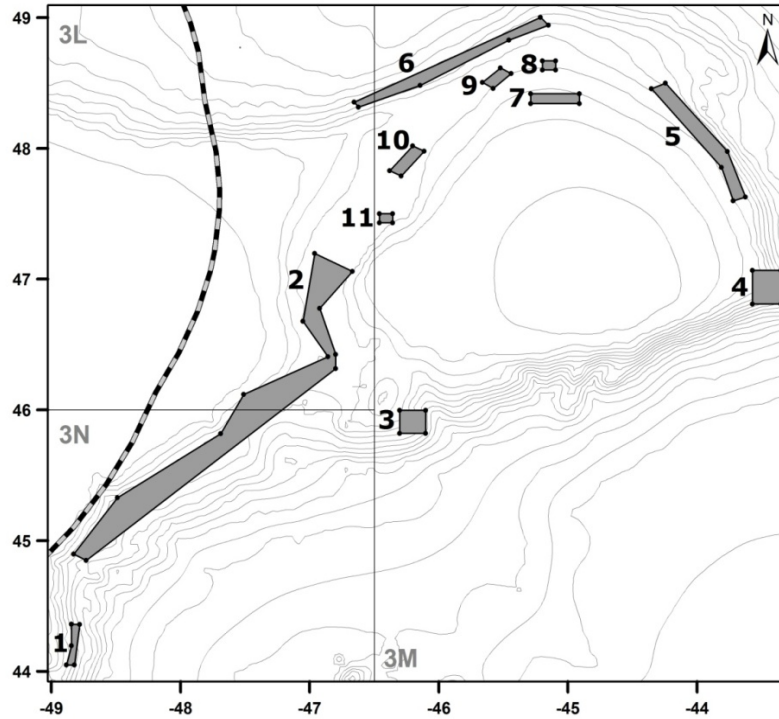


Figure 2. Polygons Delineating Areas of Higher Sponge and Coral Concentrations Referred to in Article 2bis paragraph 6.

7. The measures referred to in Article 2bis paragraph 6 shall be reviewed in 2014 by the Fisheries Commission, taking account of the advice from the Scientific Council and the Working Group of Fisheries Managers and Scientists, and a decision shall be taken on future management measures.
8. Contracting Parties shall establish/incorporate a coral and sponge monitoring program into government and/or industry research programs.

### Article 3bis - Map of existing bottom fishing areas (footprint)

The comprehensive map of existing bottom fishing areas (as delineated by the coordinates shown in Table 1 and illustrated in Figure 3), shall be revised regularly to incorporate any new relevant information. Contracting Parties may, in the future, consider the possibility of refining the comprehensive map on the basis of haul by haul information, if available.

Table 1. Boundary points delineating the eastern side of the footprint in the NRA. The Canadian EEZ boundary delineates the western side of the footprint map (see Figure 3).

Point No.	Latitude	Longitude	Point No.	Latitude	Longitude
1	48°17'39"N	EEZ boundary <sup>1</sup>	26	46°26'32"N	46°58'53"W
2	48°16'51"N	47°25'37"W	27	46°27'40"N	47°12'01"W
3	48°19'15"N	46°53'48"W	28	46°04'15"N	47°09'10"W
4	48°29'21"N	46°21'17"W	29	46°04'53"N	47°31'01"W
5	48°32'43"N	46°08'04"W	30	45°48'17"N	47°37'16"W
6	48°48'10"N	45°37'59"W	31	45°33'14"N	47°52'41"W
7	48°59'54"N	45°17'46"W	32	45°27'14"N	48°10'15"W
8	49°02'20"N	44°53'17"W	33	45°16'17"N	48°26'50"W
9	48°56'46"N	44°33'18"W	34	44°54'01"N	48°43'58"W
10	48°33'53"N	44°10'25"W	35	44°33'10"N	48°50'25"W
11	48°08'29"N	43°57'28"W	36	44°09'57"N	48°48'49"W
12	47°42'00"N	43°36'44"W	37	43°50'44"N	48°52'49"W
13	47°12'44"N	43°28'36"W	38	43°34'34"N	48°50'12"W

14	46°57'14"N	43°26'15"W	39	43°23'13"N	49°03'57"W
15	46°46'02"N	43°45'27"W	40	43°03'48"N	48°55'23"W
16	46°38'10"N	44°03'37"W	41	42°54'42"N	49°14'26"W
17	46°27'43"N	44°20'38"W	42	42°48'18"N	49°32'51"W
18	46°24'41"N	44°36'01"W	43	42°39'49"N	49°58'46"W
19	46°19'28"N	45°16'34"W	44	42°37'54"N	50°28'04"W
20	46°08'16"N	45°33'27"W	45	42°40'57"N	50°53'36"W
21	46°07'13"N	45°57'44"W	46	42°51'48"N	51°10'09"W
22	46°15'06"N	46°14'21"W	47	42°45'59"N	51°31'58"W
23	45°54'33"N	46°24'03"W	48	42°51'06"N	51°41'50"W
24	45°59'36"N	46°45'33"W	49	43°03'56"N	51°48'21"W
25	46°09'58"N	46°58'53"W	50	43°22'12"N	EEZ boundary <sup>2</sup>

<sup>1</sup>approximately 47°47'45"W

<sup>2</sup>approximately 52°09'46"W

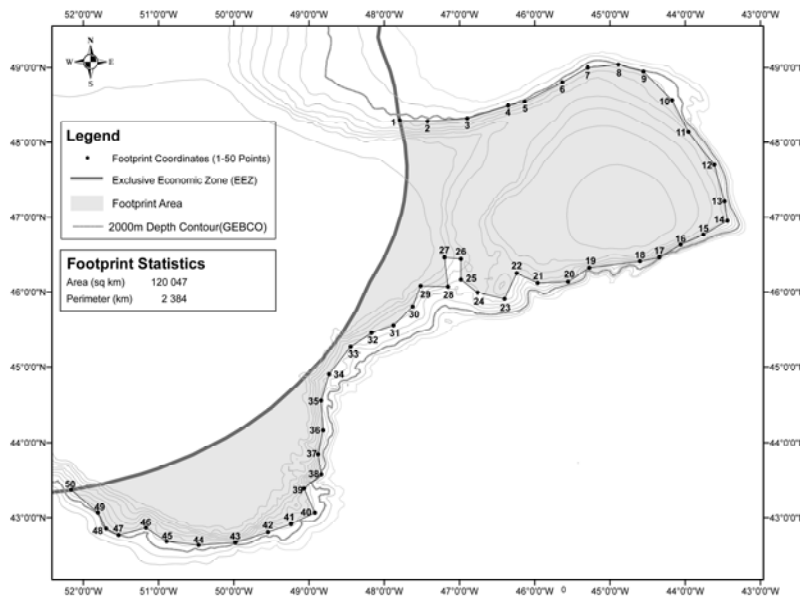


Figure 3. NAFO Regulatory Area footprint map (shaded).

### Article 4bis - Bottom fishing activities in new fishing areas

1. Exploratory fisheries shall be conducted in accordance with the exploratory fisheries protocol set out in Parts I-IV of Annex XXV.
2. Contracting Parties shall communicate a 'Notice of Intent to Undertake Exploratory Fishing' (Annex XXV, Parts I and IV) to the Executive Secretary for forwarding to the Scientific Council for review and to all Contracting Parties for information, together with the preliminary impact assessment referred to in Article 5bis, paragraph 2 (i), below.
3. The exploratory bottom fishing shall be subject to the assessment procedure set forth in Article 5bis, with the understanding that particular care will be taken in the evaluation of risks of the significant adverse impact on vulnerable marine ecosystems, in line with the precautionary approach.
4. Prior to commencing new bottom fishing activities based upon the results of exploratory fisheries conducted in the prior two years, the Fisheries Commission shall review the assessments undertaken and the results of the fishing protocols implemented by the participating fleets and take decision in accordance with Article 5bis.
5. Contracting Parties shall ensure that vessels flying their flag conducting exploratory fisheries have a scientific observer on board.
6. Contracting Parties shall provide promptly an 'Exploratory Fishing Trip Report' of the results of such activities to the Executive Secretary for circulation to the Scientific Council and all Contracting Parties.

## **Article 5bis - Assessment of bottom fishing**

1. The Scientific Council, with the co-operation of Contracting Parties, shall identify, on the basis of best available scientific information, vulnerable marine ecosystems in the Regulatory Area and map sites where these vulnerable marine ecosystem are known to occur or likely to occur and provide such data and information to the Executive Secretary for circulation to all Contracting Parties.
2. Assessment for proposed bottom fishing activities in the Regulatory Area shall follow the procedures below:
  - i. If proposed bottom fishing activities is outside of the existing bottom fishing area (footprint), or if there are significant changes to the conduct or technology of existing bottom fisheries within the footprint, or new scientific information indicating a VME in a given area, the Contracting Party proposing to participate in bottom fishing shall submit to the Executive Secretary information and a preliminary assessment of the known and anticipated impacts of its bottom fishing activities on vulnerable marine ecosystems no less than two weeks in advance of the opening of the June meeting of the Scientific Council. Assessments should address the elements as set forth in Part V of Annex XXV. The Executive Secretary shall promptly forward these submissions to the Scientific Council and the Fisheries Commission.
  - ii. The submission of such information shall be carried out in accordance with guidance developed by the Scientific Council, or, in the absence of such guidance, to the best of the Contracting Party's ability.
  - iii. The Scientific Council shall undertake an assessment, according to procedures and standards it develops, and provide advice to the Fisheries Commission as to whether the proposed bottom fishing activity would have significant adverse impacts on vulnerable marine ecosystems and, if so, whether mitigation measures would prevent such impacts. The Scientific Council may use in its assessment additional information available to it, including information from other fisheries in the region or similar fisheries elsewhere.
3. The Working Group of Fishery Managers and Scientists on VMEs shall examine the advice of the Scientific Council and shall make recommendations to the Fisheries Commission in accordance with its mandate.
4. The Fisheries Commission shall, taking account of advice and recommendations provided by the Scientific Council and the Working Group of Fishery Managers and Scientists, concerning bottom fishing activities, including data and information arising from reports pursuant to Article 6bis adopt conservation and management measures to prevent significant adverse impacts on vulnerable marine ecosystems. These may include:
  - i. allowing, prohibiting or restricting bottom fishing activities;
  - ii. requiring specific mitigation measures for bottom fishing activities;
  - iii. allowing, prohibiting or restricting bottom fishing with certain gear types, or changes in gear design and/or deployment; and/or
  - iv. any other relevant requirements or restrictions to prevent significant adverse impacts to vulnerable marine ecosystems.
5. Fisheries Commission will periodically ask Scientific Council and the Working Group of Fishery Managers and Scientists on VMEs to provide advice to Fisheries Commission on the timing and requirement for assessment of a previously assessed bottom fishery.

## **Article 6bis – Interim Encounter Provision**

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
  - i. Vessels shall quantify catch of VME indicator species.
  - ii. if the quantity of VME 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 Contracting Party, which without delay shall forward the information to the Executive Secretary, including the position that is provided by the vessel, either the end point of the tow or set or another position that is closest to the exact encounter location, the VME indicator species encountered, and the quantity (kg) of VME indicator species encountered. 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 5bis, paragraph 4.

2. Unfished areas that are defined as 'New bottom fishing areas'
  - i. Vessels shall quantify catch of VME indicator species. Observers deployed shall identify corals, sponges and other organisms to the lowest possible taxonomical level. The sampling protocol found in Annex XXV shall be used (templates).
  - ii. If the quantity of VME 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 Contracting Party, which shall forward the information to the Executive Secretary, including the position that is provided by the vessel, either the end point of the tow or set or another position that is closest to the exact encounter location, the VME indicator species encountered, and the quantity (kg) of VME indicator species encountered. 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 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 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 Executive Secretary shall make an annual report on single and multiple encounters in discrete areas within existing fishing areas to the Scientific Council. This report should also include reports from the exploratory fishing activities conducted in the last year. 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 adopted conservation and management measures in accordance with Article 5bis, paragraph 4 in Chapter Ibis. 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 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 5bis, paragraph 4.
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 60 kg of live coral and/or 800 kg 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.

## **Article 7bis - Review**

The provisions of this chapter shall be reviewed by the Fisheries Commission at its Annual Meeting in 2014.