

**CONSERVATION MEASURE 22-06 (2010)<sup>1,2</sup>**  
**Bottom fishing in the Convention Area**

Species	all
Area	see paragraphs 1, 2
Season	all
Gear	bottom fishing

The Commission,

Recognising the commitment made by Members to implement the CCAMLR precautionary and ecosystem approaches to fisheries management by embracing principles of conservation as stated in Article II of the Convention,

Conscious of the urgent need to protect vulnerable marine ecosystems (VMEs) from bottom fishing activities that have significant adverse impacts on such ecosystems,

Noting that United Nations General Assembly Resolution 61/105, adopted on 8 December 2006, calls on regional fisheries management organisations or arrangements with the competence to regulate bottom fisheries to adopt and implement measures to prevent significant adverse impacts of bottom fisheries on VMEs, and noting further that all CCAMLR Members joined in the consensus by which this resolution was adopted,

Noting also the importance of Article IX of the Convention, including the use of the best scientific evidence available,

Aware of the steps already taken by CCAMLR to address the impacts of deep-sea gillnetting and bottom trawling in the Convention Area, through the implementation of Conservation Measures 22-04 and 22-05 respectively,

Recognising that CCAMLR has responsibilities for the conservation of Antarctic marine living resources, part of which include the attributes of a regional fisheries management organisation,

Noting that all CCAMLR conservation measures are published on the [CCAMLR website](#),

hereby adopts the following conservation measure in accordance with Article IX of the Convention:

Management of bottom fishing

1. This conservation measure applies to areas in the Convention Area south of 60°S, and to the rest of the Convention Area with the exception of subareas and divisions where an established fishery was in place in 2006/07 with a catch limit greater than zero.
2. This conservation measure also applies to the area of Division 58.4.1 north of 60°S.
3. For the purposes of this measure, the term ‘vulnerable marine ecosystems’ in the context of CCAMLR includes seamounts, hydrothermal vents, cold water corals and sponge fields.
4. For the purposes of this measure, the term ‘bottom fishing activities’ includes the use of any gear that interacts with the bottom.

5. Contracting Parties whose vessels wish to engage in any bottom fishing activities shall follow the procedures described in paragraphs 7 to 11 below.
6. Contracting Parties shall not authorise vessels flying their flag to participate in bottom fishing activities, except in accordance with the provisions of this conservation measure and Conservation Measure 10-02. Specifically, notwithstanding a timely notification of intention to participate in a new fishery in accordance with Conservation Measure 21-01 or to participate in an exploratory fishery under Conservation Measure 21-02, Contracting Parties shall not authorise, under Conservation Measure 10-02, vessels flying their flag to participate in bottom fishing activities if:
  - (i) a preliminary assessment was not submitted to the Scientific Committee and the Commission at least three months prior to the annual meeting of the Commission, in accordance with paragraph 7(i); or
  - (ii) the Commission determines, based upon advice and recommendations from the Scientific Committee and pursuant to paragraph 7(iii), that the proposed bottom fishing activities should not proceed.

#### Assessment of bottom fishing

7. All bottom fishing activities shall be subject to assessment by the Scientific Committee, based on the best available scientific information, to determine if such activities, taking account of the history of bottom fishing in the areas proposed, would contribute to having significant adverse impacts on VMEs, and to ensure that if it is determined that these activities would make such contributions, that they are managed to prevent such impacts or are not authorised to proceed. The assessments shall include the following procedures:
  - (i) Each Contracting Party proposing to participate in bottom fishing activities shall submit to the Scientific Committee and Commission information and a preliminary assessment based on the pro forma in Annex 22-06/A, with the best available data, of the known and anticipated impacts of its bottom fishing activities on VMEs, including benthos and benthic communities, not less than three months prior to the annual meeting of the Commission. These submissions shall also include the mitigation measures proposed by the Contracting Party to prevent such impacts.
  - (ii) The Scientific Committee shall undertake an assessment, according to procedures and standards it develops, and provide advice to the Commission as to whether the proposed bottom fishing activities would contribute to having significant adverse impacts on VMEs and, if so, whether the proposed or additional mitigation measures would prevent such impacts. In its assessment, the Scientific Committee may use additional information available to it, including information from other fisheries in the region or similar fisheries elsewhere. The Scientific Committee will not consider, or provide advice on, preliminary assessments provided after the deadline for submission of preliminary assessments set forth in paragraph 7(i).

- (iii) The Commission shall, taking account of advice and recommendations provided by the Scientific Committee concerning bottom fishing activities, including data and information arising from reports pursuant to paragraph 7, adopt conservation measures to prevent significant adverse impacts on VMEs, that as appropriate:
  - (a) allow, prohibit or restrict bottom fishing activities within particular areas;
  - (b) require specific mitigation measures for bottom fishing activities;
  - (c) allow, prohibit or restrict bottom fishing with certain gear types; and/or
  - (d) contain any other relevant requirements or restrictions to prevent significant adverse impacts to VMEs.

#### Encounters with VMEs

- 8. Annex 22-06/B provides guidelines specifying categories of information to be included in the notification to be submitted to the Secretariat by Contracting Parties when evidence of VMEs has been encountered, and has not otherwise been reported under Conservation Measure 22-07.
- 9. Contracting Parties, in the absence of site-specific or other conservation measures to prevent significant adverse impact on VMEs, shall require vessels flying their flag to cease bottom fishing activities in any location where evidence of a VME is encountered in the course of fishing activities, and to report the encounter to the Secretariat in accordance with the schedule of the Catch and Effort Reporting System (Conservation Measures 23-01, 23-02 or 23-03, whichever is applicable), so that appropriate conservation measures can be adopted in respect of the relevant site.
- 10. The Scientific Committee shall provide advice to the Commission on the known and anticipated impacts of bottom fishing activities on VMEs and recommend practices, including ceasing fishing activities if needed, when evidence of a VME is encountered in the course of bottom fishing activities. Taking account of this advice, the Commission shall adopt conservation measures to be applied when evidence of a VME is encountered in the course of bottom fishing activities.

#### Monitoring and control of bottom fishing activities

- 11. Notwithstanding Members' obligations pursuant to Conservation Measure 21-02, all Contracting Parties whose vessels participate in bottom fishing activities shall:
  - (i) ensure that their vessels are equipped and configured so that they can comply with all relevant conservation measures;
  - (ii) ensure that each vessel carries at least one CCAMLR-designated scientific observer to collect data in accordance with this and other conservation measures;
  - (iii) submit data pursuant to Data Collection Plans for bottom fisheries to be developed by the Scientific Committee and included in conservation measures;
  - (iv) be prohibited from continuing participation in the relevant bottom fishery if data arising from conservation measures relevant to that bottom fishery have not been submitted to CCAMLR pursuant to paragraph 11(iii) for the most recent season in

which fishing occurred, until the relevant data have been submitted to CCAMLR and the Scientific Committee has been allowed an opportunity to review the data.

12. The Secretariat shall annually compile a list of vessels authorised to fish pursuant to this conservation measure and shall make this list publicly available on CCAMLR's website.

#### Data collection and sharing and scientific research

13. The Scientific Committee shall, based on the best available scientific information, advise the Commission on where VMEs are known to occur or are likely to occur, and advise on potential mitigation measures. Contracting Parties shall provide the Scientific Committee with all relevant information to assist in this work. The Secretariat shall maintain an inventory including digital maps of all known VMEs in the Convention Area for circulation to all Contracting Parties and other relevant bodies.
14. Scientific bottom fishing research activities notified under Conservation Measure 24-01, paragraph 2, shall proceed according to Conservation Measure 24-01 and shall be undertaken with due regard to potential impacts on VMEs. Scientific bottom fishing research activities notified under Conservation Measure 24-01, paragraph 3, shall be treated in accordance with all aspects of paragraph 9 of this conservation measure, notwithstanding the procedures in Conservation Measure 24-01. Consistent with existing reporting requirements in Conservation Measure 24-01, paragraph 4, information regarding the location and the type of any VME encountered, in the course of scientific bottom fishing research activities, shall be reported to the Secretariat.

#### Review

15. This conservation measure will be reviewed at the next regular meeting of the Commission, based on the findings of the Scientific Committee. In addition, beginning in 2009 and biennially thereafter, the Commission will examine the effectiveness of relevant conservation measures in protecting VMEs from significant adverse impacts, based on advice from the Scientific Committee.

<sup>1</sup> Except for waters adjacent to the Kerguelen and Crozet Islands

<sup>2</sup> Except for waters adjacent to the Prince Edward Islands

**PRO FORMA FOR SUBMITTING PRELIMINARY ASSESSMENTS OF  
THE POTENTIAL FOR PROPOSED BOTTOM FISHING ACTIVITIES  
TO HAVE SIGNIFICANT ADVERSE IMPACTS ON  
VULNERABLE MARINE ECOSYSTEMS (VMEs)**

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**Preliminary assessment of bottom fishing activities – Required Information**

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**1. Scope**

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- 1.1 Fishing method(s) notified  
*Longline type (e.g. Spanish, auto, trotline), pots etc.*
  - 1.2 Subarea/division where fishing has been notified  
*e.g. Subareas 88.1 and 88.2*
  - 1.3 Period of notification  
*Fishing season*
  - 1.4 Names of fishing vessels  
*Please provide the name of all vessels notified to fish*
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**2. Proposed fishing activity – *please complete separately for each fishing gear method***

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- 2.1 Fishing gear details  
– refer to [CCAMLR fishing gear library](#) for examples noted below.
    - (i) Fishing gear configuration  
*Provide a detailed description of each fishing gear type and its deployment process including diagrams of the different components of the gear and their dimensions – include line type, weight, anchors, size, spacing, material properties (e.g. breaking strain), sink rates in water etc. – so that the fishing footprint can be estimated separately for each gear component. This description can simply cross reference gear descriptions included in the CCAMLR fishing gear library (see examples or the diagrams available in the CCAMLR observer logbooks).*
    - (ii) Expected behaviour of fishing gear  
*Provide a detailed description of the fishing process and the known or expected interaction of the gear with the seafloor, including gear movement (e.g. movement in contact with the seafloor) during the setting, soaking and hauling processes. This description can reference other gear performance descriptions in documents previously adopted and available in the CCAMLR fishing gear library.*
    - (iii) Estimated footprint associated with possible unusual fishing events  
*Provide a description of other fishing gear deployment events (e.g. line breakage, gear loss) that can be expected to have a footprint size or impact level associated with fishing activity, with estimates of how frequently such events occur and their associated footprint as in (ii) above. This estimate may reference other gear performance description documents previously adopted and available in the CCAMLR fishing gear library.*
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(iv) Estimated footprint index (km<sup>2</sup> per unit of fishing effort)  
*Using the description of fishing gear configuration (i) and the expected behaviour of the fishing gear (ii), provide an estimate of the footprint index – i.e. the estimated maximum area within which contact with the seafloor may occur per unit of fishing effort (e.g. km<sup>2</sup> impacted per km mainline deployed or other unit defined in the fishing gear configuration description, or see examples). Describe uncertainties used in estimating the fishing gear footprint (e.g. extent of gear movement in contact with the seafloor). This estimate may reference other footprint estimation documents previously adopted and available in the CCAMLR fishing gear library.*

(v) Estimated ‘impact index’  
*Estimate the impact index per standard unit of fishing gear (i.e. the footprint index multiplied by the composite mortality rate expected within the footprint, see examples).*

2.2 Scale of proposed fishing activity

*Please provide proposed estimated effort within each subarea/division in which activities have been notified, including the expected depth range of fishing activities (e.g. expected effort in units used in (iv) – total km of mainline).*

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**3. Methods used to avoid significant impacts on VMEs**

*Please provide details of modifications (if any) to gear configuration or methods of deployment aimed at preventing or reducing significant impacts on VMEs during the course of fishing.*

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## **GUIDELINES FOR THE PREPARATION AND SUBMISSION OF NOTIFICATIONS OF ENCOUNTERS WITH VULNERABLE MARINE ECOSYSTEMS (VMEs)**

### **1. General information**

Include contact information, nationality, vessel name(s) and dates of data collection.

Preferably, the notification should be prepared as a proposal, using these guidelines and submitted as a meeting document to WG-EMM for review.

### **2. VME location**

Start and end positions of all gear deployments and/or observations.

Maps of sampling locations, underlying bathymetry or habitat and spatial scale of sampling.

Depth(s) sampled.

### **3. Sampling gear**

Indicate sampling gears used at each location.

### **4. Additional data collected**

Indicate additional data collected at or near the locations sampled.

Data such as multibeam bathymetry, oceanographic data such as CTD profiles, current profiles, water chemistry, substrate types recorded at or near those locations, other fauna observed, video recordings, acoustic profiles etc.

### **5. Supporting evidence**

Provide supporting evidence, rationale, analysis, and justification to classify the indicated areas as vulnerable marine ecosystems.

### **6. VME taxa**

For each station sampled, provide details of all the VME taxa observed, including their relative density, absolute density, or number of organisms if possible.