Conservation Measure 10-03 $(2019)^{1,2}$	Species	all
Port inspections of fishing vessels ³ carrying	Area	all
Antarctic marine living resources	Season	all
Antarctic marine nying resources	Gear	all

- 1. Contracting Parties shall undertake inspections of all fishing vessels carrying *Dissostichus* spp.⁴ which enter their ports. The inspection shall be for the purpose of determining that if the vessel carried out harvesting activities in the Convention Area, these activities were carried out in accordance with CCAMLR conservation measures, and that if it intends to land or tranship *Dissostichus* spp., the catch to be unloaded or transhipped is accompanied by a *Dissostichus* catch document (DCD) required by Conservation Measure 10-05 and that the catch agrees with the information recorded on the document.
- 2. Contracting Parties shall inspect at least 50% of fishing vessels that enter their ports carrying species other than *Dissostichus* spp. that were harvested in the Convention Area and that have not been previously landed or transhipped at a port. The purpose of the inspection will be to determine whether harvesting activities in the Convention Area were carried out in accordance with CCAMLR conservation measures.
- 3. In determining which fishing vessels carrying species other than *Dissostichus* spp. to inspect pursuant to paragraph 2, Contracting Parties shall take into account:
 - (i) whether a vessel has previously been denied entry or use of a port in accordance with this or any other conservation measure;
 - (ii) requests from other Contracting Parties that a particular vessel be inspected; and
 - (iii) whether clear grounds exist for suspecting that a vessel has engaged in illegal, unreported and unregulated (IUU) fishing⁵, or fishing-related activities⁶ in support of IUU fishing, including information derived from regional fisheries management organisations.
- 4. To facilitate the inspections referred to in paragraphs 1 and 2, Contracting Parties shall require vessels seeking entry to their ports to provide the information contained in the template in Annex 10-03/A and to convey a written declaration that they have not engaged in, or supported, IUU fishing in the Convention Area and have complied with relevant CCAMLR requirements. The Contracting Party shall require vessels seeking entry to their ports to provide the information contained in Annex 10-03/A at least 48 hours in advance to allow adequate time to examine the required information. Contracting Parties may designate ports to which fishing vessels may seek entry. Any such designations, and any subsequent changes, shall be notified to the Secretariat at least 30 days before they take effect. The Secretariat shall post information regarding designated ports on the CCAMLR website.
- 5. Inspections shall be carried out in accordance with international law, and shall be conducted within 48 hours of port entry⁷ and shall be carried out in an expeditious fashion. The inspection shall impose no undue burdens on the vessel or its crew and shall be guided by the relevant provisions of the CCAMLR System of Inspection. The collection of information during a port inspection shall be guided by the template provided in Annex 10-03/B.

- 6. Consistent with the provisions of Conservation Measures 10-06 and 10-07, except for the purposes of inspection, enforcement action or emergency, Contracting Parties shall take all necessary measures, subject to, and in accordance with, their applicable laws and regulations and international law, to deny port access to fishing vessels not entitled to fly their flag that:
 - (i) are included in a list of IUU vessels adopted by CCAMLR in accordance with Conservation Measure 10-06 or 10-07;
 - (ii) declare that they have been involved in IUU fishing; or
 - (iii) fail to make a declaration or provide advance notice as required under paragraph 4.

Contracting Parties shall inspect any such fishing vessels that are granted port access for the purposes of inspection, enforcement action or emergency or that enter port without authorisation.

- 7. In the event that there is evidence that the vessel has fished in contravention of CCAMLR conservation measures, in particular when the fishing vessel is included in a list of IUU vessels adopted by CCAMLR in accordance with Conservation Measure 10-06 or 10-07, the Contracting Party shall prohibit the vessel from landing or transhipping the catch, or take other monitoring, control, surveillance or enforcement action of equivalent or greater severity in accordance with international law. The Contracting Party shall inform the Flag State of the vessel of its inspection findings and shall cooperate with the Flag State in taking such appropriate action as is required to investigate the alleged infringement and, if necessary, apply appropriate sanctions in accordance with national legislation.
- 8. Contracting Parties shall provide the Secretariat with a report, including photographs and other supporting documentation as appropriate, on the outcome of each inspection conducted under this conservation measure within 30 days of the port inspection or as soon as possible where compliance issues have arisen⁸. The Secretariat shall promptly convey the report to the Flag State of the inspected vessel.
- 9. All port inspection reports shall consist of the completed template provided in Annex 10-03/A and, if it is determined that harvesting activities were conducted in the Convention Area, the port inspection report will include the completed template provided in Annex 10-03/B. The Secretariat shall promptly convey reports of any vessels denied port access or permission to land or tranship *Dissostichus* spp., or any other species harvested in the Convention Area, to all Contracting Parties and to any non-Contracting Party participating in the Catch Documentation Scheme for *Dissostichus* spp. (CDS) under Conservation Measure 10-05, Annex 10-05/C.

¹ Except for waters adjacent to the Kerguelen and Crozet Islands

² Except for waters adjacent to the Prince Edward Islands

³ For the purposes of this conservation measure, 'fishing vessel' means any vessel of any size used for, equipped to be used for or intended for use for the purposes of fishing or fishing related activities, including support ships, fish-processing vessels, vessels engaged in transhipment and carrier vessels equipped for the transportation of fishery products except container vessels and excluding Members' marine science research vessels. In relation to only carrier vessels equipped for transportation of fishery products, Contracting Parties shall conduct a preliminary assessment of the relevant

documentation. If that assessment raises concerns regarding compliance with CCAMLR conservation measures, an inspection according to the provisions of this conservation measure shall be required.

- ⁴ Excluding by-catches of *Dissostichus* spp. by trawlers fishing outside the Convention Area. A by-catch shall be defined as no more than 5% of total catch of all species and no more than 50 tonnes for an entire fishing trip by a vessel.
- ⁵ For the purposes of this conservation measure, 'IUU fishing' refers to the activities described in Conservation Measure 10-06, paragraph 5, and Conservation Measure 10-07, paragraph 9.
- ⁶ For the purposes of this conservation measure, 'fishing-related activities' mean any operation in support of, or in preparation for, fishing, including the landing, packaging, processing, transhipping or transporting of fish that have not previously been landed at a port, as well as the provisioning of personnel, fuel, gear and other supplies at sea.
- ⁷ Unless weather conditions or other circumstances make accessing the vessel for inspection unsafe, in which case the inspection shall be carried out at the earliest opportunity and the inspection report shall note the reason for the delay.
- ⁸ Contracting Parties may elect not to submit to the Secretariat reports of inspections of their vessels if they determine that all fishing activity occurred in waters under their jurisdiction.

Annex 10-03/A

Part A: CCAMLR Port Inspection Report Port Entry Information

	Master to complete (in advance)	Inspector comments (to be completed during or following inspection)
Intended port and State of call		
Estimated date and time of arrival		
Purpose (e.g. refuelling, unloading, transhipping)		
Port and date of last port call		
Name of the vessel		
Flag State and home port		
Type of vessel and fishing gear used		
International radio call sign		
Vessel contact information		
Ship's agent while in port (name and contact details)		
Vessel owner and owner address		
Beneficial owner and address		
Vessel operator and address		
Certificate of registry ID		
IMO ship ID, if available		
External ID, if available		

	Master to complete		Inspector comment
VMS	No		
	Yes: National		
	Yes: CCAMLR		
	Type:		
	Official seal number(s), if any:		
Vessel dimensions	Length (m)		
	Beam (m)		
	Draft (m)		
Vessel master name and nationality			
Fishing master name and nationality			
Relevant fishing authorisation	Identifier		
	Issued by		
	Validity		
	Fishing areas (CCAMLR subarea/ division)		
	Species		
	Gear		
If transhipped product on board, provide transhipment authorisation details and a list of all vessels toothfish and/or other species were received from, including IMO number(s) and DCD number(s), if applicable		, 	

	Master to	complete	Inspector comment
Total catch on board (kg)	Species (including by-catch)		
	Product		
	Catch area (CCAMLR subarea/ division)		
	Quantity		
Catch to be landed or transhipped (kg)	Quantity		
If landing or transhipping toothfish, provide DCD number and Flag State confirmation number and provide a copy of the DCD to the Port State Authority			
Relevant documentary or photographic evidence, if any (attach)			
Provision of written declarations (see below)			

CCAMLR Illegal, Unreported, or Unregulated Fishing Declaration

Signed:	•••••
Date:	

CCAMLR Compliance Declaration

I,	[name], Master of the	[Flag State] flagged
vessel	.[vessel name] having decla	red my intention to enter
[name of port], hereby de	eclare that all fishing activit	ies undertaken in the CAMLR
Convention Area were fully compli	ant with the relevant CCAM	ILR requirements.

Signed:Date:

Annex 10-03/B

Part B: CCAMLR Port Inspection Report Results of CCAMLR Port Inspection

Vessel name	
Home port and Flag State of vessel	
Port and State of inspection	
Date and time of inspection	
Name of inspector(s)	
Inspecting authority	

A. Confirmation of advance notification information

Confirm information provided in advance notification. See Part A CCAMLR Port Inspection Report.

Detail/comment Ref. Requirement СМ **CCAMLR** licence details 10-02 Licence number Area of authorisation Authorised species Period of permit/ authorisation Name of issuing authority Country of issuing authority СМ **Operational Vessel** 10-04 **Monitoring System** Make Model Serial number Tamper-proof official

B. Compliance with CCAMLR Conservation Measures

seals, if used, are in place Time and position of inspection (lat/long)

Ref.	Requirement	Detail/comment
CM 10-05 (for toothfish	CCAMLR Catch Document (note: section D covers unloaded product)	
only)	Quantity (kg) of target and by-catch species and process state	
	Location(s), time(s) and date(s) of harvest	
	Valid DCD (Yes/No)	
	GRT and net RT tonnage	
	Conversion factor used to convert processed fish to whole weight	
Area	Fishing gear on board	
CMs	Longline: Type of system, e.g. Spanish, autoline	
	Longline length (m) Length of branch lines (m) Number of hooks	
	Spacing of branch lines	
	Type of bait	
	Other characteristics	
Q	Trawl gear: Net type (pelagic or bottom trawl)	
	Manufacturer or design reference	
	Single or double twine	
	Net material	
	Condition of net (rigging, wet/dry)	

Ref.	Requirement	Detail/comment
Area CMs	Trawl gear (continued) Mesh size (mm)	
	Other gear: General description	
CM 10-01	Vessel markings comply with the specifications and requirements set out in CM 10-01	
	Marker buoys and similar objects marked with the letter(s) and/or number(s) of the vessel to which they belong	
CM 24-02	Line sink rate trials Bottle tests or time- depth recorders used to monitor line sink rate?	
	System on board to weight lines, i.e. either weights to attach to lines or weight- integrated backbone?	
CM 25-02	Streamer line meets specifications	
CM 10-08	Crew details Names, nationalities and function (Attach copy of ship's crew list separately)	

C. Catch landed or transhipped in port from vessel (if relevant):

Species	Code*	Declared weight (kg)	Verified weight (kg)	Difference (kg)	Destination

* Product codes:

Description	CCAMLR code
Whole	WHO
Gutted	GUT
Head and tail removed	HAT
Mealed	MEA
Filleted	FLT
Headed and gutted	HAG
Headed, gutted and tail removed	HGT

D. Catch retained on board (if relevant):

Species	Code*	Declared weight (kg)	Verified weight (kg)	Difference (kg)	Destination

E. Additional comments/instructions/highlight areas of non-compliance

Examination of logbook(s) and other documentation:	Yes	No	Comments
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Inspector's findings:

Master's sta	atement:			

F. **Completion of inspection**

Inspecting Officer	
Full name	Signature
Date	-

Acknowledgement and receipt of report

I, the undersigned, Master of the vessel....., hereby confirm that a copy of this report has been delivered to me on this date. My signature does not constitute acceptance of any part of the contents of the report.

Vessel Master

vesser waster			
Full name	. Signature	 	 » • • • •

Date.....

Conservation Measure 10-09 (2019) Notification system for transhipments within the Convention Area

Species	all
Area	all
Season	all
Fishery	all

The Commission,

- <u>Desiring</u> to improve knowledge within CCAMLR of all vessels operating within the Convention Area, and in particular those which offer support to harvesting vessels,
- Noting that an increasing number of vessels are operating within the Convention Area, either engaged directly in harvesting activities or in providing support to those vessels,
- <u>Recognising</u> the need to increase the control over transhipment operations which support the harvesting of species within the Convention Area,
- <u>Concerned</u> that vessels involved in the support of illegal, unreported and unregulated (IUU) fishing may be operating inside the Convention Area,

<u>Taking account</u> of the need to combat IUU fishing activities because they undermine the effectiveness of the conservation measures already adopted by CCAMLR,

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

- 1. This conservation measure applies to all CCAMLR fisheries.
- 2. Each Contracting Party as a Flag State shall notify the Secretariat at least 72 hours in advance if any of its vessels intend to tranship¹ within the Convention Area. The Flag State may permit or direct that such notifications be provided by the vessel directly to the Secretariat.
- 3. Paragraph 2 does not apply to vessels licensed by CCAMLR Contracting Parties under Conservation Measure 10-02 within the Convention Area which propose to tranship items other than harvested marine living resources, bait or fuel. In this case, each Contracting Party shall notify the Secretariat at least 2 hours in advance of such transhipment. The Flag State may permit or direct that such notifications be provided by the vessel directly to the Secretariat.
- 4. Notifications of intended transhipment operations under paragraphs 2 or 3 above shall be submitted with respect to each Contracting Party vessel involved using the template shown in Annex 10-09/A and shall include the following information, for all vessels involved:
 - vessel name
 - IMO number
 - international radio call sign (IRCS)
 - Flag State
 - proposed time, date and position, in latitude and longitude, of transhipment
 - details of the type and amount of harvested marine living resources and any other goods or materials to be transhipped.

- 5. Within three (3) working days of any of its vessels having transhipped within the Convention Area, each Flag State shall confirm the information provided in accordance with paragraphs 2 or 3 to the Secretariat using the template shown in Annex 10-09/A or indicate if this information has changed. The Contracting Party as a Flag State may permit or direct that such details be provided by the vessel directly to the Secretariat.
- 6. The CCAMLR Secretariat shall maintain a list of all transhipments on the passwordprotected part of its website in a manner consistent with confidentiality requirements notified by CCAMLR Contracting Parties for their vessels.
- 7. The Secretariat shall provide, upon request from a Contracting Party, the information provided under paragraphs 4 and 5 without the permission of the Flag State for: (i) active surveillance operations and/or CCAMLR inspections to be undertaken by a Member in a specified CCAMLR subarea or division in accordance with the CCAMLR System of Inspection; or (ii) a port inspection undertaken pursuant to Conservation Measure 10-03.
- 8. No vessel covered by paragraph 1 may tranship with any vessel, within the Convention Area for which prior notification, pursuant to paragraphs 2, 3 and 4 above, has not been given.
 - ¹ Transhipment means the transfer of harvested marine living resources and any other goods or materials to or from fishing vessels.

Annex 10-09/A

Template for transhipment notifications

	Information notified	Information confirmed (Y/N, if N provide revised information)
To: Vessel name		
IMO number		
International radio call sign		
Flag State		
From: Vessel name		
IMO number		
International radio call sign		
Flag State		
Time, date and position, in latitude and longitude, of transhipment		
Details of the type and amount of harvested marine living resources and any other goods or materials to be transhipped		
If toothfish is to be transhipped:		
Species		
Type (e.g. HGT, collars)		
Area (e.g. 88.1)		
Estimated weight to be transhipped (kg)		

10 10

		10-10
Conservation Measure 10-10 (2019)	Species	all
CCAMLR Compliance Evaluation Procedure	Area	all
Commune L'unauton l'ideaute	Season	all
	Gear	all

The Commission,

- <u>Recalling</u> that the Commission has adopted a wide range of conservation measures to give effect to the objective of the Convention,
- <u>Recalling</u> further that in accordance with Article XXIV of the Convention the Commission has adopted the Scheme of International Scientific Observation,
- <u>Noting</u> Article XXI of the Convention which requires Contracting Parties to take appropriate measures within their competence to ensure compliance with the provisions of the Convention and with conservation measures adopted by the Commission,
- <u>Noting</u> that, in accordance with Article X of the Convention, the Commission has undertaken to draw the attention of all Contracting Parties to any activity which, in the opinion of the Commission, affects the implementation by a Contracting Party of the objective of the Convention or the compliance by that Contracting Party with its obligations under the Convention,
- <u>Noting also</u> that, in accordance with international law, as well as Conservation Measures 10-06 and 10-08, Contracting Parties have responsibilities to exercise effective control over their flagged vessels and with respect to their nationals,
- <u>Noting further</u> that, in a responsible, open, transparent and non-discriminatory manner, the Commission should be made aware of all available information that may be relevant to the work of the Commission in identifying and addressing instances of non-compliance with conservation measures,
- <u>Noting further</u> that in order to maintain the objectivity and scientific integrity of the data, the vessels on which scientific observers are deployed and the scientific observers themselves shall uphold and promote the provisions of Part D of the Scheme of International Scientific Observation,
- <u>Recalling</u> the obligation of Contracting Parties to notify and inform the Secretariat of possible instances of non-compliance and to respond to such instances in accordance with the requirements of existing conservation measures,

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

- 1. Draft CCAMLR Compliance Reports
 - (i) The Secretariat shall compile a Draft CCAMLR Compliance Report using the template in Annex 10-10/A for each Contracting Party where there is an issue identified in the implementation of any conservation measure contained in the *Schedule of Conservation Measures in Force* and Part D of the Scheme of International Scientific Observation. The Draft CCAMLR Compliance Report

shall cover compliance issues that were identified during the period from 1 July to 30 June of the following year and issues noted by the Commission as requiring additional information from a Contracting Party in the previous year's CCAMLR Compliance Report. In compiling Draft CCAMLR Compliance Reports, the Secretariat shall take into account appropriate compliance data holdings, as well as data from other relevant sources.

- (ii) The Secretariat shall circulate to each Contracting Party its respective Draft CCAMLR Compliance Report no later than 75 days before the annual Commission meeting.
- (iii) In considering its Draft CCAMLR Compliance Report, each Contracting Party shall provide in the 'Additional Information' column in Annex 10-10/A, detailed information relevant to the compliance issues raised in its report. This may include, but is not limited to, any relevant documentary or photographic evidence demonstrating implementation of any conservation measure contained in the *Schedule of Conservation Measures in Force* and Part D of the Scheme of International Scientific Observation or specific actions taken, or planned, to address any non-compliance. In the 'Additional Information' column, the concerned Contracting Party shall also suggest a preliminary compliance status for each compliance issue from Annex 10-10/B.
- (iv) Each Contracting Party shall return its Draft CCAMLR Compliance Report incorporating any additional information and suggested compliance status for each compliance issue to the Secretariat no later than 45 days before the annual Commission meeting. Where no response is received from a Contracting Party under paragraph 1(iii), the Secretariat shall note nil response in the relevant Draft CCAMLR Compliance Report.
- 2. Summary CCAMLR Compliance Report
 - (i) The Secretariat shall prepare a Summary CCAMLR Compliance Report based on the Draft CCAMLR Compliance Reports. This report shall include, *inter alia*, a summary of Contracting Parties' implementation of any conservation measure contained in the *Schedule of Conservation Measures in Force* and Part D of the Scheme of International Scientific Observation, Contracting Parties' suggested preliminary compliance status and details of any action taken or planned. The Draft CCAMLR Compliance Reports shall be annexed to the Summary CCAMLR Compliance Report.
 - (ii) The Summary CCAMLR Compliance Report shall be made available on the secure CCAMLR website for consideration no later than 42 days before the annual Commission meeting. As soon as practicable after posting the Summary CCAMLR Compliance Report, the Secretariat shall notify Contracting Parties of its availability.

- 3. Provisional CCAMLR Compliance Report
 - (i) At its annual meeting, SCIC shall consider the Summary CCAMLR Compliance Report, taking into account information received, including pursuant to paragraph 1(iii). SCIC will also consider the circumstances relating to any nil response.
 - (ii) In considering the Summary CCAMLR Compliance Report, SCIC may request any Contracting Parties that have relevant information to provide further additional details, so that SCIC may fully evaluate each compliance issue. This information may include, but is not limited to, any relevant documentary or photographic evidence.
 - (iii) On the basis of the information considered in paragraph 3(i), SCIC shall adopt an annual Provisional CCAMLR Compliance Report by consensus, in which it shall record its findings of non-compliance. The Provisional CCAMLR Compliance Report shall include an assessment of compliance status, in accordance with Annex 10-10/B, 'Compliance Status Categories' and identify any suggested actions to be taken (by SCIC, the relevant Contracting Party, or the Commission) to address the issue. For the purposes of this conservation measure, 'compliance status' refers to compliance with the conservation measures listed in Annex 10-10/A and 'suggested action' takes account of Contracting Parties' responses and corrective actions to address compliance issues identified. The Provisional CCAMLR Compliance Report shall also include recommendations to the Commission regarding:
 - (a) any remedial action taken, or proposed to be taken, by the Contracting Party;
 - (b) where appropriate, proposals to amend existing conservation measures;
 - (c) priority obligations to be monitored and reviewed; and
 - (d) other responsive action which may be considered by the Commission, as appropriate.
 - (iv) If any Contracting Party requests additional time for submitting further information to SCIC for a specific case included in a summary CCAMLR compliance report, SCIC shall record a compliance status for that case in the provisional CCAMLR Compliance Report based on the information available. At its next annual meeting, SCIC shall review any further information provided by the Contracting Party and shall recommend to the Commission a final compliance status that shall be recorded in that year's CCAMLR Compliance Report.

4. CCAMLR Compliance Report

(i) At its annual meeting, the Commission shall consider the Provisional CCAMLR Compliance Report.

- (ii) The annual CCAMLR Compliance Report will outline the Commission's response to the recommendations of SCIC in the Provisional CCAMLR Compliance Report.
- 5. Review of Conservation Measure 10-10
 - At its annual meeting, SCIC will consider the effectiveness of this conservation measure in evaluating and addressing non-compliance, and will report to the Commission on its findings and recommendations for improving this conservation measure.

Annex 10-10/A

Template for CCAMLR Compliance Reports Draft CCAMLR Compliance Report for 1 July [year] to 30 June [year] [Contracting Party]

Part A: Conservation Measures

Conservation measure contained in the Schedule of Conservation Measures in Force	Conservation measure implementation ¹ (description of what Secretariat records show with respect to implementation of conservation measure, including history) [To be completed by Secretariat]	Additional information (including, but not limited to, further documentary or photographic evidence demonstrating the implementation of conservation measures, specific actions taken/to be taken and expected time frame to effectively address possible non-compliance. Contracting Parties should also include a suggested compliance category from Annex 10-10/B and any proposed further action) [To be completed by Contracting Party]	SCIC comments/ compliance status/ recommended action(s) [To be completed by SCIC]

Part B: Obligations under Part D of the Scheme of International Scientific Observation

Obligations under Part D of the Scheme of International Scientific Observation	Information relevant to the obligations under Part D of the Scheme of International Scientific Observation	Action taken under Part D of the Scheme of International Scientific Observation	SCIC comments/ compliance status/ recommended action(s)
			[To be completed by SCIC]

Annex 10-10/B

Compliance status categories

Compliance status ¹	Criteria	Suggested action
Compliant	Contracting Party fully compliant with obligations	No action required
Minor non-compliant (non-compliance with conservation measures of CCAMLR) (Level 1)	Minor infringements evident	 Review by SCIC and Commission and recommend further action(s) Identify non-compliance of a technical or minor nature, or which requires the provision of further actions by Contracting Party Identify actions and time frames on matters including amendment to procedures and, in the case of a Contracting Party that requires additional capacity, request technical and capacity-building assistance Resolve implementation gap or misunderstanding If necessary, review conservation measure to address any technical impediments to implementation
Non-compliant (Level 2)	Non-compliance of moderate severity.	Review by SCIC and Commission and recommend further action(s) by the Contracting Party
Seriously, frequently or persistently non- compliant (Level 3) (non-compliance with conservation measures of CCAMLR)	Serious, frequent or persistent non-compliance in relation to breaches of conservation measures which undermines the objectives of CCAMLR	Review by SCIC and Commission and recommend further action(s) by Commission

Compliance status ¹	Criteria	Suggested action
Additional information required	Where there exists no/insufficient information for verification	Review by SCIC and the Commission and seek further information and action(s) by Contracting Party
	Insufficient, unclear or incorrect data Ambiguity or misunderstanding of relevant obligation	
Need of interpretation by SCIC	Ambiguity or misunderstanding of relevant obligation	If necessary, review conservation measure to address any technical impediments to implementation
No compliance status assigned	Cases of emergency relating to the safety of a ship and those on board or saving life at sea	No action required
^{1} For the purposes of this conservation measure, 'compliance status' refers to compliance with the conservation measures listed in Annex 10-10/A and 'suggested action'		

For the purposes of this conservation measure, 'compliance status' refers to compliance with the conservation measures listed in Annex 10-10/A and 'suggested action' takes account of Contracting Parties' responses and corrective actions to address compliance issues identified.

Conservation Measure 21-01 (2019)^{1,2} **Notification that Members are considering initiating a new fishery**

Species	all
Area	all
Season	all
Gear	all

The Commission,

- <u>Recognising</u> that in the past, Antarctic fisheries have been initiated in the Convention Area before sufficient information was available upon which to base management advice,
- <u>Noting</u> that in recent years new fisheries have started without adequate information being available to evaluate either the fishery potential or the possible impacts on the target stocks or species dependent on them,
- <u>Believing</u> that without prior notification of a new fishery, the Commission is unable to fulfil its function under Article IX,

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

- 1. A new fishery, for the purposes of this conservation measure, is a fishery on a species using a particular fishing method in a statistical subarea or division for which:
 - (i) information on distribution, abundance, demography, potential yield and stock identity from comprehensive research/surveys or exploratory fishing have not been submitted to CCAMLR; or
 - (ii) catch and effort data have never been submitted to CCAMLR; or
 - (iii) catch and effort data from the two most recent seasons in which fishing occurred have not been submitted to CCAMLR.
- 2. In addition to those fisheries identified according to paragraph 1, the use of fishing methods in high-seas areas of the Convention Area as specified in Annex 21-01/A will constitute new fisheries and will require approval of the Commission for specific areas before proceeding.
- 3. Any Member proposing to participate in a new fishery shall:
 - (i) notify its intention to the Commission by 1 June prior to the season in which it intends to fish. This notification shall include the information prescribed in paragraph 3 of Conservation Measure 10-02 in respect of vessels proposing to participate in the fishery, with the exception that the notification shall not be required to specify the information referred to in paragraph 3(ii) of Conservation Measure 10-02. Members shall, to the extent practicable, also provide in their notification the additional information detailed in paragraph 4 of Conservation Measure 10-02 in respect to each fishing vessel notified. Members are not hereby exempted from their obligations under Conservation Measure 10-02 to submit any necessary updates to vessel and licence details within the deadline established therein as of issuance of the licence to the vessel concerned;

- (a) the nature of the new fishery, including target species, methods of fishing, proposed region and maximum catch levels proposed for the forthcoming season;
- (b) biological information on the target species from comprehensive research/survey cruises, such as distribution, abundance, demographic data and information on stock identity;
- (c) details of dependent and related species and the likelihood of their being affected by the proposed fishery;
- (d) information from other fisheries in the region or similar fisheries elsewhere that may assist in the evaluation of potential yield;
- (e) if the proposed fishery will be undertaken using bottom trawl gear, information on the known and anticipated impacts of this gear on vulnerable marine ecosystems, including benthos and benthic communities.
- (iii) provide a commitment, in its proposal, to implement any Data Collection Plan developed by the Scientific Committee for the fishery.
- 4. The Member shall not initiate a new fishery pending the process specified in paragraphs 10 and 11 below.
- 5. If a Member proposing to participate in a new fishery fails to submit notification of this proposal to the Commission, including all of the information specified in paragraph 3, by the deadline specified in paragraph 3, and the notification fee required under paragraph 12 within 30 days, the Commission shall not consider the proposal, and the Member shall not authorise, under Conservation Measure 10-02, vessels flying its flag to participate in the proposed fishing activities.
- 6. Where such a proposed new fishery includes bottom fishing activities, the Member shall not authorise, under Conservation Measure 10-02, vessels flying their flag to participate in the proposed bottom fishing activities if the procedures outlined in Conservation Measure 22-06, paragraph 7, have not been fully complied with.
- 7. To ensure that adequate information is made available to the Scientific Committee for evaluation, during the period when a fishery is classified as new, the Scientific Committee shall develop (and update annually as appropriate) a Data Collection Plan, which should include research proposals, as appropriate. This shall identify the data needed and describe any operational research actions necessary to obtain the relevant data from the new fishery to enable an assessment of the stock to be made.

- 8. The Data Collection Plan shall include, where appropriate:
 - (i) a description of the catch, effort and related biological, ecological and environmental data required to undertake the evaluations described in paragraph 1, and the date by which such data are to be reported annually to CCAMLR;
 - (ii) a plan for directing fishing effort during the initial phase to permit the acquisition of relevant data to evaluate the fishery potential and the ecological relationships among harvested, dependent and related populations and the likelihood of adverse impacts;
 - (iii) where appropriate, a plan for the acquisition of any other research data by fishing vessels, including activities that may require the cooperative activities of scientific observers and the vessel, as may be required for the Scientific Committee to evaluate the fishery potential and the ecological relationships among harvested, dependent and related populations and the likelihood of adverse impacts;
 - (iv) an evaluation of the time scales involved in determining the responses of harvested, dependent and related populations to fishing activities.
- 9. New fisheries shall be open only to those vessels that are equipped and configured so that they can comply with all relevant conservation measures. A vessel with a confirmed involvement in illegal, unreported or unregulated fishing in respect of Conservation Measures 10-06 and 10-07 shall not be permitted to participate in new fisheries.
- 10. The information provided in accordance with paragraphs 3 to 9, together with any other relevant information, shall be considered by the Scientific Committee, which shall then advise the Commission.
- 11. After its review of the information on the proposed new fishery, taking full account of the recommendations and the advice of the Scientific Committee, the Commission may then take such action as it deems necessary.
- 12. Notifications for new fisheries pursuant to the provisions above shall be subject to the CCAMLR Notification Fees Procedure, with payment due by 1 July. If a notification pursuant to this conservation measure does not proceed because of a decision of the Commission the notifying Member(s) shall receive a refund of the whole fee. In all other circumstances a fee will not be refunded.

Except for waters adjacent to the Kerguelen and Crozet Islands

² Except for waters adjacent to the Prince Edward Islands

Annex 21-01/A

Additional Fishing Methods

Bottom trawling in high-seas areas of the Convention Area.

Conservation Measure 21-02 (2019)^{1,2} **Exploratory fisheries**

Species	all
Area	all
Season	all
Gear	all

The Commission,

- <u>Recognising</u> that in the past, some Antarctic fisheries had been initiated and subsequently expanded in the Convention Area before sufficient information was available upon which to base management advice,
- <u>Agreeing</u> that exploratory fishing should not be allowed to expand faster than the acquisition of information necessary to ensure that the fishery can and will be conducted in accordance with the principles set forth in Article II,

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

- 1. For the purposes of this conservation measure, exploratory fisheries are defined as follows:
 - (i) an exploratory fishery shall be defined as a fishery that was previously classified as a 'new fishery', as defined by Conservation Measure 21-01;
 - (ii) an exploratory fishery shall continue to be classified as such until sufficient information is available:
 - (a) to evaluate the distribution, abundance and demography of the target species, leading to an estimate of the fishery's potential yield;
 - (b) to review the fishery's potential impacts on dependent and related species;
 - (c) to allow the Scientific Committee to formulate and provide advice to the Commission on appropriate harvest catch levels, as well as effort levels and fishing gear, where appropriate.
- 2. To ensure that adequate information is made available to the Scientific Committee for evaluation, during the period when a fishery is classified as exploratory, the Scientific Committee shall develop (and update annually as appropriate) a Data Collection Plan, which should include research proposals, as appropriate. This plan shall identify the data needed and describe any operational research actions necessary to obtain the relevant data from the exploratory fishery to enable an assessment of the stock to be made.
- 3. The Data Collection Plan shall include, where appropriate:
 - (i) a description of the catch, effort and related biological, ecological and environmental data required to undertake the evaluations described in paragraph 1(ii), and the date by which such data are to be reported annually to CCAMLR;

- (iii) where appropriate, a plan for the acquisition of any other research data by fishing vessels, including activities that may require the cooperative activities of scientific observers and the vessel, as may be required for the Scientific Committee to evaluate the fishery potential and the ecological relationships among harvested, dependent and related populations and the likelihood of adverse impacts;
- (iv) an evaluation of the timescales involved in determining the responses of harvested, dependent and related populations to fishing activities.
- 4. The Commission shall annually determine a precautionary catch limit at a level not substantially above that necessary to obtain the information specified in the Data Collection Plan and required to undertake the evaluations described in paragraph 1(ii).
- 5. A Member intending to fish pursuant to this conservation measure may only notify in respect to vessels flying its flag or that of another CCAMLR Member at the time of the notification³.
- 6. Any Member proposing to participate in an exploratory fishery shall, by 1 June⁴ prior to the season in which it intends to fish:
 - (i) notify its intention to the Commission by submitting, to the Secretariat, a notification that includes the information prescribed in Conservation Measure 10-02, paragraph 3, in respect of vessels proposing to participate in the fishery, with the exception that the notification shall not be required to specify the information referred to in Conservation Measure 10-02, paragraph 3(ii). Members shall, to the extent practicable, also provide in their notification the additional information detailed in Conservation Measure 10-02, paragraph 4, in respect to each fishing vessel notified. Members are not hereby exempted from their obligations under Conservation Measure 10-02 to submit any necessary updates to vessel and licence details within the deadline established therein as of issuance of the licence to the vessel concerned;
 - (ii) as part of any notification, prepare and submit to the Secretariat by 1 June a Fishery Operations Plan for the fishing season, and a preliminary assessment of the impact of planned activities on vulnerable marine ecosystems if required under Conservation Measure 22-06, paragraph 7(i), for review by the Working Groups on Statistics, Assessments and Modelling (WG-SAM), Ecosystem Monitoring and Management (WG-EMM), Fish Stock Assessment (WG-FSA), the Scientific Committee and the Commission⁵. Fishery Operations Plans submitted after 1 June will not be considered by the relevant working group(s), the Scientific Committee or the Commission. The Fishery Operations Plan shall include as much of the following information as the Member is able to provide, so as to assist the Scientific Committee in its preparation of the Data Collection Plan:

- (a) the nature of the exploratory fishery, including target species, methods of fishing, proposed region and maximum catch levels proposed for the forthcoming season;
- (b) specification⁶ and full description^{7,8} of the types of fishing gear to be used;
- (c) biological information on the target species from comprehensive research/survey cruises, such as distribution, abundance, demographic data and information on stock identity;
- (d) details of dependent and related species and the likelihood of their being affected by the proposed fishery;
- (e) information from other fisheries in the region or similar fisheries elsewhere that may assist in the evaluation of potential yield;
- (f) if the proposed fishery will be undertaken using bottom trawl gear, information on the known and anticipated impacts of this gear on vulnerable marine ecosystems, including benthos and benthic communities;
- (iii) for notifications for participation in exploratory fisheries for *Dissostichus* spp. in Statistical Subarea 48.6 and Statistical Divisions 58.4.1, 58.4.2 and 58.4.3a, prepare and submit to the Secretariat a Research Plan for review by WG-SAM, WG-FSA, the Scientific Committee and Commission⁵. Research Plans shall be reported in accordance with the format of Conservation Measure 24-01, Annex 24-01/A, format 2. Research plans not submitted to the Secretariat by 1 June will not be considered by the relevant working group(s) or the Scientific Committee;
- (iv) provide a commitment, in its proposal, to implement any Data Collection Plan developed by the Scientific Committee for the fishery.
- 7. On the basis of the information submitted in accordance with paragraph 6, and taking into account the advice and evaluation provided by the Scientific Committee and the Standing Committee on Implementation and Compliance (SCIC), the Commission shall annually consider adoption of relevant conservation measures for each exploratory fishery.
- 8. Only the notifications containing all the information in accordance with paragraph 6, submitted by 1 June, and accompanied by the notification fee required under paragraph 15, submitted by 1 July, shall be included in the annual report of fisheries notifications prepared by the Secretariat to be considered by the Commission.⁹
- 9. The Secretariat shall, via Commission Circular, remind Members of the deadline and process for submitting notifications at least 30 days prior to the deadline, and again at least one week prior to the deadline. Reminders will also be sent, via email, to the notification contacts that have been nominated by Members.
- 10. If a Member proposing to participate in an exploratory fishery fails to submit a notification of this proposal to the Commission in accordance with the deadline and all other requirements specified in paragraphs 6 and 8, the Member shall not authorise, under Conservation Measure 10-02, vessels flying its flag to participate in the proposed fishing activities.

- 11. Notwithstanding paragraph 8, Members shall be entitled under Conservation Measure 10-02 to authorise participation in an exploratory fishery by a vessel other than that identified by the Commission in accordance with paragraph 6 if the notified vessel is prevented from participation due to legitimate operational or *force majeure* reasons. In such circumstances, the Member concerned shall immediately inform the Secretariat thereof, providing:
 - (i) full details of the intended replacement vessel(s) as prescribed in paragraph 6(i);
 - (ii) a comprehensive account of the reasons justifying the replacement and any relevant supporting evidence or references;
 - (iii) specification and full description of the types of fishing gear to be used by the replacement vessel.

The Secretariat shall immediately circulate this information to all Members.

- 12. Where such a proposed exploratory fishery includes bottom fishing activities, the Member shall not authorise, under Conservation Measure 10-02, vessels flying their flag to participate in the proposed bottom fishing activities if the procedures outlined in Conservation Measure 22-06, paragraph 7, have not been fully complied with.
- 13. Members whose vessels participate in exploratory fisheries in accordance with paragraphs 6, 8 and/or 11 shall:
 - (i) only use the types of fishing gear specified under paragraph 6(ii)(b) in the Fishery Operations Plan for the vessel notified, or under paragraph 11(iii) for any replacement vessel;
 - (ii) prohibit their vessel(s) from using fishing gear types other than those which were notified for a fishing season unless the gear change is required under research approved by the Scientific Committee for that vessel in that season;
 - (iii) ensure that their vessels are equipped and configured so that they can comply with all relevant conservation measures;
 - (iv) ensure that each vessel carries a CCAMLR-designated scientific observer to collect data in accordance with the Data Collection Plan, and to assist in collecting biological and other relevant data;
 - (v) annually (by the specified date) submit to CCAMLR the data specified by the Data Collection Plan;
 - (vi) be prohibited from continuing participation in the relevant exploratory fishing if the data specified in the Data Collection Plan have not been submitted to CCAMLR 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.
- 14. A vessel on either of the IUU Vessel Lists established under Conservation Measures 10-06 and 10-07 shall not be permitted to participate in exploratory fisheries.

- 15. Notifications for exploratory fisheries pursuant to the provisions above shall be subject to the CCAMLR Notification Fees Procedure, with payment due by 1 July. If a notification pursuant to this conservation measure does not proceed because of a decision of the Commission the notifying Member(s) shall receive a refund of the whole fee. In all other circumstances a fee will not be refunded.
 - ¹ Except for waters adjacent to the Kerguelen and Crozet Islands
 - ² Except for waters adjacent to the Prince Edward Islands
 - ³ Consistent with Conservation Measure 10-02, any vessel notified would need to be flagged to the notifying Member before entering the fishery.
 - ⁴ This deadline allows notifications to be considered by the Scientific Committee's working groups as appropriate. The working groups will review notifications and advise whether notifications for exploratory fisheries meet the scientific requirements, and whether a notifying Member is required to submit additional information (e.g. further detail in the Research Plan) for consideration by the Scientific Committee.
 - ⁵ For activities of more than one season in duration, the relevant Fishery Operations Plan and any associated Research Plan shall be reviewed by WG-SAM, WG-FSA and the Scientific Committee and considered by the Commission in the year of submission. Multi-year plans that have been endorsed by the Commission shall be reviewed by WG-FSA and the Scientific Committee every two years thereafter unless otherwise specified. In those cases, each notification shall indicate that the relevant plan(s) continue to apply. Members can also request a review of their plans by any relevant working group at any stage.
 - ⁶ For example, integrated weight longline, Spanish longline, trotline, trawl, continuous trawl or pot.
 - ⁷ For example, snood length, hook spacing, number of hooks per cluster, cluster spacing, net dimensions, trawl-door type, size and weight, footrope dimensions and type, net opening, pumping volume, pot dimensions and any factors affecting gear selectivity.
 - ⁸ In accordance with Conservation Measure 21-03, Annex 21-03/A, for krill fisheries.
 - ⁹ The annual report of fisheries notifications shall be considered by the Commission at its annual meeting.

Conservation Measure 21-03 (2019)		krill
Notifications of intent to participate in a fishery	Area	all
for Euphausia superba	Season	all
101 Euphausia superba	Gear	all

- 1. In order for the Scientific Committee to thoroughly study the notifications to fish for krill for the coming season, all Members of the Commission intending to fish for krill in the Convention Area shall notify the Secretariat of their intention not later than 1 June prior to the annual meeting of the Commission, immediately prior to the season in which they intend to fish, using the pro formas in Annex 21-03/A and Annex 21-03/B.
- 2. This notification shall include the information prescribed in paragraph 3 of Conservation Measure 10-02 in respect of each vessel proposing to participate in the fishery, with the exception that the notification shall not be required to specify the information referred to in paragraph 3(ii) of Conservation Measure 10-02. Members shall, to the extent practicable, also provide in their notification the additional information detailed in paragraph 4 of Conservation Measure 10-02 in respect to each fishing vessel notified. Members are not hereby exempted from their obligations under Conservation Measure 10-02 to submit any necessary updates to vessel and licence details within the deadline established therein as of issuance of the licence to the vessel concerned.
- 3. A Member intending to fish pursuant to this conservation measure may only notify in respect to vessels flying its flag or that of another CCAMLR Member at the time of the notification¹.
- 4. Only notifications containing all of the information required by paragraphs 1 and 2, submitted by 1 June, and accompanied by the notification fee required under paragraph 10, submitted by 1 July, shall be included in the annual report of fisheries notifications prepared by the Secretariat and considered by the Commission.²
- 5. The Secretariat shall, via Commission Circular, remind Members of the deadline and process for submitting notifications at least 30 days prior to the deadline, and again at least one week prior to the deadline. Reminders will also be sent, via email, to the notification contacts that have been nominated by Members.
- 6. If a Member proposing to participate in a krill fishery fails to submit notification of this proposal to the Commission in accordance with the deadline and all other requirements of paragraphs 1 and 2 above, the Member shall not authorise, under Conservation Measure 10-02, vessels flying its flag to participate in the proposed fishing activities.
- 7. Notwithstanding paragraph 4, Members shall be entitled under Conservation Measure 10-02 to authorise participation in a krill fishery by a vessel other than that notified to the Commission in accordance with paragraphs 1 and 2, if the notified vessel is prevented from participation due to legitimate operational reasons or *force majeure*. In such circumstances the Member concerned shall immediately inform the Secretariat providing:
 - (i) full details of the intended replacement vessel(s) as prescribed in paragraph 2;
 - (ii) a comprehensive account of the reasons justifying the replacement and any relevant supporting evidence or references.

The Secretariat shall immediately circulate this information to all Members.

- 8. A vessel on either of the IUU Vessel Lists established under Conservation Measures 10-06 and 10-07 shall not be permitted to participate in krill fisheries.
- 9. The Secretariat shall provide the Commission and its relevant subsidiary bodies with information regarding substantial discrepancies between notifications and actual catches in the krill fishery in the latest season.
- 10. Notifications for krill fisheries pursuant to the provisions above shall be subject to the CCAMLR Notification Fees Procedure, with payment due by 1 July. If a notification pursuant to this conservation measure does not proceed because of a decision of the Commission the notifying Member(s) shall receive a refund of the whole fee. In all other circumstances a fee will not be refunded.
 - ¹ Consistent with Conservation Measure 10-02, any vessel notified would need to be flagged to the notifying Member before entering the fishery.
 - ² The annual report of fisheries notifications shall be considered by the Commission at its annual meeting.

Annex 21-03/A

Notification of Intent to Participate in a Fishery for *Euphausia superba*

General information
Member:
Fishing season:
Name of vessel:
Expected level of catch (tonnes of green weight):
Vessel's daily processing capacity (tonnes of green weight):

Intended fishing subareas and divisions

This conservation measure applies to notifications of intentions to fish for krill in Statistical Subareas 48.1, 48.2, 48.3 and 48.4 and Statistical Divisions 58.4.1 and 58.4.2. Intentions to fish for krill in other subareas and divisions must be notified under Conservation Measure 21-02.

Subarea/division	Tick the appropriate boxes
48.1	
48.2	
48.3	
48.4	
58.4.1	
58.4.2	

Fishing technique: Tick the appropriate boxes

- □ Conventional trawl
- □ Continuous fishing system
- □ Pumping to clear codend
- □ Other method: Please specify

Product types and methods for direct estimation of green weight of krill caught

Product type	Method for direct estimation of green weight of krill caught, where relevant (refer to Annex 21-03/B) ¹
Whole frozen	
Boiled	
Meal	
Oil	
Other product, please specify	

¹ If the method is not listed in Annex 21-03/B, then please describe in detail

Net configuration

Net measurements	Net 1	Net 2	Other net(s)
Net-mouth opening height (m)			
Net-mouth opening width (m)			
Total net length (m) including codend, measured along the centreline of the net			
Codend-mouth opening height (m)			
Codend-mouth opening width (m)			
Codend length (m)			
Codend mesh size (mm; stretched mesh)			

Net diagram(s): _____

For each net used, or any change in net configuration, refer to the relevant net diagram in the CCAMLR fishing gear library if available (<u>www.ccamlr.org/node/74407</u>), or submit a detailed diagram and description to the forthcoming meeting of WG-EMM. Net diagrams must include:

- 1. Length and width of each trawl panel (in sufficient detail to allow calculation of the angle of each panel with respect to water flow.)
- 2. Mesh size (inside measurement of stretched mesh based on the procedure in Conservation Measure 22-01), shape (e.g. diamond shape) and material (e.g. polypropylene).
- 3. Mesh construction (e.g. knotted, fused).
- 4. Details of streamers used inside the trawl (design, location on panels, indicate 'nil' if streamers are not in use); streamers prevent krill fouling the mesh or escaping.

Marine mammal exclusion device

Device diagram(s): _____

For each type of device used, or any change in device configuration, refer to the relevant diagram in the CCAMLR fishing gear library if available (<u>www.ccamlr.org/node/74407</u>), or submit a detailed diagram and description to the forthcoming meeting of WG-EMM.

Collection of acoustic data

Provide information on the echosounders and sonars used by the vessel.

Type (e.g. echosounder, sonar)		
Manufacturer		
Model		
Transducer frequencies (kHz)		

Collection of acoustic data (detailed description):

Outline steps which will be taken to collect acoustic data to provide information on the distribution and abundance of Euphausia superba and other pelagic species such as myctophiids and salps (SC-CAMLR-XXX, paragraph 2.10).

Annex 21-03/B

Guidelines for estimating the green weight of krill caught	
ourdennes for estimating the green weight of Rim eaught	

Method	Equation (kg)	Parameter			
		Description	Туре	Estimation method	Unit
Holding tank volume	<i>W*L*H</i> *p*1 000	W = tank width L = tank length $\rho = \text{volume-to-mass conversion factor}$ H = depth of krill in tank	Constant Constant Variable Haul-specific	Measure at the start of fishing Measure at the start of fishing Volume-to-mass conversion Direct observation	m m kg/litre m
Flow meter (1)	$V^*F_{\text{krill}}^* ho$	V = volume of krill and water combined $F_{\text{krill}} =$ fraction of krill in the sample $\rho =$ volume-to-mass conversion factor	Haul ¹ -specific Haul ¹ -specific Variable	Direct observation Flow meter volume correction Volume-to-mass conversion	litre - kg/litre
Flow meter (2)	(V* ho)-M	V = volume of krill paste M = amount of water added to the process, converted to mass $\rho =$ density of krill paste	Haul ¹ -specific Haul ¹ -specific Variable	Direct observation Direct observation Direct observation	litre kg kg/litre
Flow scale	<i>M</i> *(1– <i>F</i>)	M = mass of krill and water combined F = fraction of water in the sample	Haul ² -specific Variable	Direct observation Flow scale mass correction	kg -
Plate tray	(<i>M</i> – <i>M</i> _{tray})* <i>N</i>	M_{tray} = mass of empty tray M = mean mass of krill and tray combined N = number of trays	Constant Variable Haul-specific	Direct observation prior to fishing Direct observation, prior to freezing with water drained Direct observation	kg kg
Meal conversion	$M_{\rm meal}*MCF$	$M_{\text{meal}} =$ mass of meal produced MCF = meal conversion factor	Haul-specific Variable	Direct observation Meal to whole krill conversion	kg -
Codend volume	<i>W*H*L</i> *ρ*π/4*1 000	W = codend width H = codend height ρ = volume-to-mass conversion factor L = codend length	Constant Constant Variable Haul-specific	Measure at the start of fishing Measure at the start of fishing Volume-to-mass conversion Direct observation	m m kg/litre m
Other	Please specify				

¹ Individual haul when using a conventional trawl, or integrated over a six-hour period when using the continuous fishing system.

² Individual haul when using a conventional trawl, or a two-hour period when using the continuous fishing system. **Observation steps and frequency**

Holding tank volume	
At the start of fishing	Measure the width and length of the holding tank (if the tank is not rectangular in shape, then additional measurements may be required; precision ± 0.05 m)
Every month ¹	Estimate the volume-to-mass conversion derived from the drained mass of krill in a known volume (e.g. 10 litres) taken from the holding
-	tank
Every haul	Measure the depth of krill in the tank (if krill are held in the tank between hauls, then measure the difference in depth; precision ± 0.1 m)
-	Estimate the green weight of krill caught (using equation)
Flow meter (1)	
Prior to fishing	Ensure that the flow meter is measuring whole krill (i.e. prior to processing)
More than once per month ¹	Estimate the volume-to-mass conversion (ρ) derived from the drained mass of krill in a known volume (e.g. 10 litres) taken from the flow meter
Every haul ²	Obtain a sample from the flow meter and:
	measure the volume (e.g. 10 litres) of krill and water combined
	estimate the flow meter volume correction derived from the drained volume of krill
	Estimate the green weight of krill caught (using equation)
Flow meter (2)	
Prior to fishing	Ensure that both flow meters (one for the krill product and one for the water added) are calibrated (i.e. show the same, correct reading)
Every week ¹	Estimate the density (p) of the krill product (ground krill paste) by measuring the mass of a known volume of krill product (e.g. 10 litres)
	taken from the corresponding flow meter
Every haul ²	Read both flow meters, and calculate the total volumes of the krill product (ground krill paste) and that of the water added; density of the
	water is assumed to be 1 kg/litre
	Estimate the green weight of krill caught (using equation)
Flow scale	
Prior to fishing	Ensure that the flow scale is measuring whole krill (i.e. prior to processing)
Every haul ²	Obtain a sample from the flow scale and:
	measure the mass of krill and water combined
	estimate the flow scale mass correction derived from the drained mass of krill
	Estimate the green weight of krill caught (using equation)
Plate tray	
Prior to fishing	Measure the mass of the tray (if trays vary in design, then measure the mass of each type; precision ± 0.1 kg)
Every haul	Measure the mass of krill and tray combined (precision ± 0.1 kg)
	Count the number of trays used (if trays vary in design, then count the number of trays of each type)
	Estimate the green weight of krill caught (using equation)
Meal conversion	
Every month ¹	Estimate the meal to whole krill conversion by processing 1 000 to 5 000 kg (drained mass) of whole krill

Every haul	Measure the mass of meal produced
	Estimate the green weight of krill caught (using equation)
Codend volume	
At the start of fishing	Measure the width and height of the codend (precision ± 0.1 m)
Every month ¹	Estimate the volume-to-mass conversion derived from the drained mass of krill in a known volume (e.g. 10 litres) taken from the codend
Every haul	Measure the length of codend containing krill (precision ± 0.1 m)
-	Estimate the green weight of krill caught (using equation)

A new period will commence when the vessel moves to a new subarea or division.
 Individual haul when using a conventional trawl, or integrated over a six-hour period when using the continuous fishing system.

22-06

Conservation Measure 22-06 (2019) ^{1,2} Bottom fishing in the Convention Area	Species Area	all see para- graphs 1, 2
	Season	all
	Gear	bottom fishing

The Commission,

- <u>Recognising</u> 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,
- <u>Conscious</u> 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,
- <u>Noting</u> also the importance of Article IX of the Convention, including the use of the best scientific evidence available,
- <u>Aware</u> 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,
- <u>Recognising</u> 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 Statistical 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.

- 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 by 1 June prior to the season in which it intends to fish, 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(ii), 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, by 1 June prior to the season in which it intends to fish. 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.
- (iv) For those vessels and associated gear configurations for which a Contracting Party provides notification under Conservation Measure 21-02, the Contracting Party does not need to submit the preliminary assessment based on the pro forma in Annex 22-06/A as required in paragraph 7(i) above if:
 - (a) a preliminary assessment has already been submitted for the vessel notified and the associated gear configurations for a prior fishing season; and
 - (b) the information submitted in that previously submitted preliminary assessment would continue to apply in the upcoming fishing season.

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, 23-03 or 23-07, 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.

Except for waters adjacent to the Kerguelen and Crozet Islands

Except for waters adjacent to the Prince Edward Islands

Annex 22-06/A

Pro forma for submitting preliminary assessments of the potential for proposed bottom fishing activities to have significant adverse impacts on vulnerable marine ecosystems (VMEs)

1.	Scope			
	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			
2.	Proposed fishing activity – please complete separately for each fishing gear method			
	2.1 Fishing gear details – refer to <u>CCAMLR fishing gear library</u> 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 on the diagrams available in the Scientific Observer's Manual – Finfish Fisheries). 			
<	 (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. 			

- (iv) Estimated footprint index (km² 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. km² 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).
 - 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).*

3. Methods used to avoid significant impacts on VMEs

2.2

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.

Annex 22-06/B

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.

Conservation Measure 23-06 (2019)	Species	krill
Data Reporting System for Euphausia superba fisheries	Area	all
Data Reporting System for Laphausia superba fisheries	Season	all
	Gear	all

- 1. This conservation measure is invoked by the conservation measures to which it is attached.
- 2. Catches shall be reported in accordance with the five-day Catch and Effort Reporting System set out in Conservation Measure 23-01.
- 3. At the end of each month, each Contracting Party shall obtain from each of its vessels the haul-by-haul data required to complete the CCAMLR fine-scale catch and effort data form (trawl fisheries Form C1). It shall transmit those data in the specified format to the Executive Secretary not later than the end of the following month. The multipliers used to convert the measured component of the catch to an estimate of green weight should be estimated at least once every month using the C1 form as a guideline.
- 4. This conservation measure shall be reviewed when catch limits for small-scale management units (SSMUs) are established in the relevant areas.
- 5. Each Flag State shall notify by email, or other means, the Executive Secretary within 24 hours of each entry to, exit from and movement between, subareas and divisions of the Convention Area by each of its fishing vessels. When a vessel intends to enter a closed area, or an area for which it is not licensed to fish, the Flag State shall provide prior notification to the Secretariat of the vessel's intentions. The Flag State may permit or direct that such notifications be provided by the vessel directly to the Secretariat.

Conservation Measure 24-01 (2019)^{1,2} **The application of conservation measures to scientific research**

Species	all
Area	all
Season	all
Gear	all

This conservation measure governs the application of conservation measures to scientific research and is adopted in accordance with Article IX of the Convention.

- 1. General application:
 - (a) Catches taken by any vessel for research purposes will be considered as part of any catch limits in force for each species taken unless the catch limit in an area³ is set at zero.
 - (b) In the event of research being undertaken in an area³ with a zero catch limit, then the catches adopted under paragraphs 2 or 3 below shall be considered to be the catch limit for the season in that area. When such an area sits within a group of areas to which an overall catch limit applies, that overall catch limit shall not be exceeded, including any catch taken for research purposes.
- 2. Application to Members taking less than 50 tonnes of finfish in a season, including no more than the amounts specified for finfish taxa in Annex 24-01/B and less than 0.1% of a given catch limit for non-finfish taxa indicated in Annex 24-01/B:
 - (a) Any Member planning to use a vessel or vessels for research purposes when the estimated seasonal catch is as above, shall notify the Secretariat of the Commission which in turn will notify all Members immediately, according to the format provided in Annex 24-01/A, format 1.
 - (b) Vessels to which the provisions of paragraph 2(a) above apply, shall be exempt from conservation measures relating to mesh size regulations, prohibition of types of gear, closed areas, fishing seasons and size limits, and reporting system requirements other than those specified in paragraph 4 below.

For krill and finfish, this paragraph does not apply for catches less than 1 tonne.

- 3. Application to Members taking more than 50 tonnes of finfish or more than the amounts specified for finfish taxa in Annex 24-01/B or more than 0.1% of a given catch limit for non-finfish taxa indicated in Annex 24-01/B:
 - (a) Any Member planning to use any type of vessel or vessels to conduct fishing for research purposes when the estimated seasonal research catch is as above, shall notify the Commission and provide the opportunity for other Members to review and comment on its Research Plan. The plan shall be submitted to the Secretariat by 1 June, for review by the relevant working group(s) of the Scientific Committee⁵. Plans submitted after 1 June will not be considered. The Secretariat shall post all Research Plans received by the 1 June deadline no later than 8 June on the password-protected part of the CCAMLR website. Based on the submitted Research Plan and any advice provided by the appropriate working group, the Scientific Committee will provide advice to the Commission where the review process will be concluded. Until the review process is complete, the planned fishing for research purposes shall not proceed.

- (b) Research Plans shall be no longer than three years and shall be reported in accordance with the standardised guidelines and format adopted by the Scientific Committee, given in Annex 24-01/A, format 2.
- (c) Each fishing vessel⁴ conducting fishing for research purposes shall have at least two scientific observers, one of whom shall be an observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period.
- (d) When the review process in paragraph 3(a) is complete, beginning with the 2018/19 season, the Commission shall annually update Conservation Measure 24-05 to include, for each research plan authorised to proceed pursuant to paragraph 3(a), all applicable requirements (not otherwise provided for in this paragraph or in paragraphs 4 and 5), and any exemptions pursuant to Annex 24-01/A, format 2, that are agreed by the Commission.
- 4. Reporting requirements for these research activities are:
 - (a) The CCAMLR within-season five-day reporting system shall apply, except for: (i) exploratory finfish fisheries, where the daily reporting system (Conservation Measure 23-07) shall apply; (ii) exploratory krill fisheries, where the reporting system in Conservation Measure 51-04 shall apply; and (iii) other krill fisheries with a catch limit greater than zero, where the reporting system in Conservation Measure 23-06 shall apply.
 - (b) All research catches shall be reported to CCAMLR as part of the annual STATLANT returns.
 - (c) A summary of the results of any research subject to the above provisions shall be provided to the Secretariat within 180 days of the completion of the research fishing. Members shall provide a full report to the Scientific Committee within 12 months for review and comment.
 - (d) Catch, effort and biological data resulting from research fishing shall be reported to the Secretariat according to the following haul-by-haul reporting formats:
 - (i) Fishing vessels conducting fishing for research purposes in accordance with this conservation measure or Conservation Measure 21-02 shall report catch and effort data according to Conservation Measure 23-04 (trawl fisheries form C1, longline fisheries form C2, or pot fisheries form C5) and biological data as required in Conservation Measure 23-05.
 - (ii) Vessels undertaking trawl surveys in accordance with this conservation measure should report catch, effort and biological data according to the reporting format for research vessels (C4) and would not be required to complete C1 data.

- 5. Other requirements for these research activities are:
 - (a) All vessels conducting research fishing under the research exemption, during a voyage that involves any commercial fishing, shall be linked to an automated satellite-linked vessel monitoring system in accordance with Conservation Measure 10-04.
- 6. Notifications for research activities pursuant to paragraph 3 of the provisions above shall be subject to the CCAMLR Notification Fees Procedure, with payment due by 1 July. If a notification pursuant to this conservation measure does not proceed because of a decision of the Commission the notifying Member(s) shall receive a refund of the whole fee. In all other circumstances a fee will not be refunded.
 - ¹ Except for waters adjacent to the Kerguelen and Crozet Islands
 - ² Except for waters adjacent to the Prince Edward Islands
 - ³ Any management area including subarea, division or SSRU, whichever is designated as a zero catch limit.
 - ⁴ In the case of krill research undertaken by fishing vessels, the presence of qualified research scientist(s) on board is needed to conduct the notified Research Plan. In areas where there are no existing catch limits for krill, in accordance with Conservation Measure 51-04, one additional scientist who is a national of a Member other than the Member undertaking the research, shall be deemed to fulfil the requirements of paragraph 3(c). Where the krill research is to be conducted in areas where there are existing catch limits, the vessel must carry at least one scientific observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation or at least one scientific observer appointed by the Contracting Party to fulfil the requirements of paragraph 3(c).
 - ⁵ For research activities of more than one season in duration, the relevant Research Plan shall be reviewed by WG-SAM and WG-FSA in the initial year and, once endorsed by the Commission, by WG-FSA every year thereafter unless otherwise specified.

Annex 24-01/A

Formats for notification of research vessel activity

Format 1

Notification of research vessel activity in accordance with paragraph 2 of Conservation Measure 24-01

Name and registration number of vessel

Division and subarea in which research is to be carried out

Estimated dates of entering and leaving CAMLR Convention Area

Purpose of research

Fishing equipment likely to be used:

Bottom trawl

Midwater trawl

Longline

Crab pots

Other fishing gear (specify)

Format 2

Format for submitting finfish research proposals in accordance with paragraph 3 of Conservation Measure 24-01 and paragraph 6(iii) of Conservation Measure 21-02

Category	Information
1. Main objective	 (a) Objectives for the research and why it is a priority for CCAMLR. (b) Detailed description of how the proposed research will meet the objectives, including annual research milestones (where applicable), and end date of research. (c) Rationale for research, including relevant existing information on the target species from this region, linkage between research objectives and the stock hypothesis and information from other fisheries in the region or similar fisheries
2. Fishery operations	 elsewhere. (a) Fishing Member (b) Vessel to be used: Vessel name Vessel owner Vessel type (research or commercial vessel) Port of registration and registration number Radio call sign Overall length and tonnage Equipment used for determining position Fishing capacity Fishing processing and storage capacity. (c) Target species (d) Fishing or acoustic gear to be used: Trawl type, mesh shape and size Longline type Other sampling gear Type of acoustic gear and frequency. (e) Fishing regions (divisions, subareas and SSRUs) and geographical boundaries (f) Estimated dates of entering and leaving the CAMLR Convention Area.
3. Survey design, data collection and analysis	 (a) Research survey/fishing design (description and rationale): Spatial arrangements or maps of stations/hauls (e.g. randomised or gridded) Stratification according to e.g. depth or fish density Calibration/standardisation of sampling gear Proposed number and duration of stations/hauls Tagging rates and other performance metrics such as tag overlap statistics for tagging programs at the scale of research blocks (where applicable). Other requirements. (b) Data collection: Types and sample size or quantities of catch, effort and related biological (including taxonomic resolution), ecological and environmental data (e.g. sample size by location/haul) with minimum observer sampling requirements as detailed in the <i>Observer Sampling Requirements</i> (Conservation Measure 41-01, Annex 41-01/A). (c) Method for data analysis to achieve the objective in 1(a). (d) How and when will the research outcomes meet the objectives of the research (e.g. lead to a robust estimate of stock status and precautionary catch limits). Include evidence that the proposed methods are highly likely to be successful.
4. Proposed catch limits	(a) Proposed catch limits and justification. (Note that the catch limits should be at a level not substantially above that necessary to obtain the information specified in the Research Plans and required to meet the objectives of the proposed research.)

	 (b) Evaluation of the impact of the proposed catch on stock status, including: rationale that proposed catch limits are consistent with Article II of the Convention evaluation of timescales involved in determining the responses of harvested, dependent and related populations to fishing activities information on estimated removals, including IUU fishing activities, where available. (c) Details of dependent and related species and the likelihood of their being affected by the proposed fishery.
5. Research capability	 (a) Name(s) and address of the chief scientist(s), research institute or authority responsible for planning and coordinating the research. (b) Number of scientists and crew to be on board the vessel. (c) Is there opportunity for inviting scientists from other Members? If so, indicate a number of such scientists. (d) Commitment that the proposed fishing vessel(s) and nominated research provider(s) have the resources and capability to fulfil all obligations of the proposed Research Plan.
6. Reporting for evaluation and review	 (a) List of dates by which specific actions will be completed and reported to CCAMLR. If the research is a stand-alone survey, Members shall commit to providing a progress report to the appropriate working group for review and comment, and a final report within 12 months of completion of the research to the Scientific Committee. (b) If research is multi-annual, Members shall commit to providing annual research reviews to be submitted to the appropriate working group, including a review of progress towards meeting research objectives and associated proposed time lines in initial proposal; a summary table comprising the applicable milestones of the research from the beginning of the plan, planned and actual achievement dates, papers submitted, and noting any changes in the milestone timeline; a review of previous working group and Scientific Committee commentary; and proposals for adjustments to the research proposal if required.
7. Conservation measure exemptions	(a) Intended exemptions from applicable conservation measures in whole or in part (other than those specified in Conservation Measure 24-01) and justification. Any intended exemptions shall be necessary for the Research Plan and objectives of the proposed research.

Annex 24-01/B

Taxa-specific schedule for notification of research vessel activity

	Taxon	Gear type	Expected Catch
(a)	Thresholds for finfish taxa		
	Dissostichus spp.	Longline	5 tonnes
		Trawl	5 tonnes
		Pot	5 tonnes
		Other	0 tonnes
	Champsocephalus gunnari	All	10 tonnes
(b)	Non-finfish taxa for which a c catch limit for a given area wo		of 0.1% of the
	Krill		
	Squid		
	Squiu		

Conservation Measure 24-05 (2019)
Fishing for research purposes pursuant to Conservation
Measure 24-01

Species	all
Area	all
Season	2019/20
Gear	all

The Commission,

- <u>Desiring</u> to increase clarity, traceability and transparency related to the details of fishing for research purposes,
- <u>Welcoming</u> the work of the Commission towards simplifying and harmonising the regulatory framework governing CCAMLR fisheries,
- <u>Recognising</u> the need to increase both transparency and documentation in relation to fishing for research purposes that has been authorised by the Commission,

hereby adopts the following conservation measure in accordance with Conservation Measure 24-01, paragraph 3(d):

- 1. For the 2019/20 season, the following research activities authorised each season pursuant to Conservation Measure 24-01, paragraph 3, or current multi-year research activities previously approved by the Commission, shall be conducted in accordance with the Research Plans endorsed by the Commission and the requirements of Conservation Measure 24-01 and this conservation measure (Table 1).
- 2. Unless otherwise specified in Conservation Measure 24-01 or column (e) of the table in paragraph 1 above, all relevant CCAMLR conservation measures apply to activities carried out under this conservation measure, including requirements related to mesh size, gear type, closed areas, size limits, incidental mortality, environmental protection, by-catch, compliance and data reporting.

Season

3. For the purposes of the definition of a season in this conservation measure, Conservation Measure 32-01 applies.

(a) Area/ subarea/ division	(b) Member(s)	(c) Target species or taxa	(d) Catch limit ¹ (tonnes) or effort limit (sets/hauls)	(e) Specific conservation measure exemptions necessary for research	(f) Scientific Committee paragraphs
48.1	Ukraine	Dissostichus mawsoni	43 tonnes/29 sets	None	SC-CAMLR-38, 4.24 to 4.28
58.4.4b	Japan and France	Dissostichus eleginoides	41 tonnes	None	SC-CAMLR-38, 4.35 to 4.38
88.1	New Zealand	Dissostichus mawsoni	45 tonnes/65 sets	CM 31-02	SC-CAMLR-38, 4.42
88.3	Republic of Korea, New Zealand and Ukraine	Dissostichus spp.	254 tonnes/187 sets	None	SC-CAMLR-38, 4.59 to 4.61

 Table 1:
 Research activities pursuant to Conservation Measure 24-01, paragraph 3, in 2019/20.

¹ If multiple Members are involved in a Research Plan, they will indicate the intended distribution of the catch limit, where specified, between them.

Conservation Measure 25-03 (2019)¹ Minimisation of the incidental mortality of seabirds and marine mammals in the course of trawl fishing in the Convention Area

Species	seabirds,
	marine mammals
Area	all
Season	all
Gear	trawl

The Commission,

Noting the need to reduce the incidental mortality of, or injury to, seabirds and marine mammals from fishing operations,

<u>Adopts</u> the following measures to reduce the incidental mortality of, or injury to, seabirds and marine mammals during trawl fishing.

- 1. The use of net monitor cables on vessels in the CAMLR Convention Area is prohibited².
- 2. Vessels operating within the Convention Area should at all times arrange the location and level of lighting so as to minimise illumination directed out from the vessel, consistent with the safe operation of the vessel.
- 3. The discharge of offal^{3,4} and discards⁵ shall be prohibited during the shooting and hauling of trawl gear.
- 4. Nets shall be cleaned prior to shooting to remove items that might attract birds.
- 5. Vessels should adopt shooting and hauling procedures that minimise the time that the net is lying on the surface of the water with the meshes slack. Net maintenance should, to the extent possible, not be carried out with the net in the water.
- 6. Vessels should be encouraged to develop gear configurations that will minimise the chance of birds encountering the parts of the net to which they are most vulnerable. This could include increasing the weighting or decreasing the buoyancy of the net so that it sinks faster, or placing coloured streamers or other devices over particular areas of the net where the mesh sizes create a particular danger to birds.
 - ¹ Except for waters adjacent to the Kerguelen and Crozet Islands
 - ² Net monitoring cables may be used on vessels using continuous trawling methods during the 2019/20 fishing season provided the vessels follow the specifications of a trial of mitigation devices outlined in SC-CAMLR-38, paragraphs 5.13 and 5.14. All vessels conducting the trial shall report results to WG-FSA, and this trial exemption will be reviewed at CCAMLR-39 following further advice from the Scientific Committee. This trial should compare different mitigation options for practicality and effectiveness in mitigating bird strikes on fishing-related cables (warps and net monitoring cables) in continuous trawling operations.
 - ³ 'Offal' is defined as bait and by-products from the processing of fish and other organisms, including parts or sections of fish or organisms which are by-products of processing.
 - ⁴ 'Stick water' is a liquid discharge produced as a by-product of processing of krill and fish. As stick water does not contain a source of food for birds, it is not considered as offal (see footnote 2).
 - ⁵ For the purpose of this conservation measure, 'discards' are defined as whole fish or other organisms, except elasmobranchs and invertebrates where the vessel is fishing north of 60°S, returned to the sea dead or with low expectation of survival, as described in the Observer Longline Logbook 'Observed Haul Catch' form instructions.

Conservation Measure 26-01 (2019) 1,2	Species	all
General environmental protection during fishing	Area	all
	Season	all
	Gear	all

The Commission,

- <u>Concerned</u> that certain activities associated with fishing may affect the Antarctic marine environment and that these activities have played a notable role in CCAMLR's efforts to minimise incidental mortality of non-target species such as seabirds and seals,
- <u>Noting</u> that CCAMLR recommendations, and the provisions of the MARPOL 73/78 Convention and its annexes, prohibit the disposal of all plastics at sea, including within the CAMLR Convention Area,
- <u>Noting</u> various provisions of the Protocol on Environmental Protection to the Antarctic Treaty, in particular its annexes as well as related Recommendations and Measures of the Antarctic Treaty Consultative Meetings,
- <u>Recollecting</u> that advice from the Scientific Committee has indicated that significant numbers of Antarctic fur seals have been entangled and killed in plastic packaging bands in the Convention Area, and that entanglement of fur seals is still continuing,
- <u>Recognising</u> that the bait boxes used on fishing vessels in particular, and other packages in general, need not be secured by plastic packaging bands because suitable alternatives exist,
- <u>Adopts</u> the following conservation measure to minimise possible effects on the marine environment arising from fishing-related activities in the context of mitigating incidental mortality of non-target species and protecting the marine environment in accordance with Article IX of the Convention.

Disposal of Plastics

- 1. Vessels fishing in the Convention Area shall be prohibited from discharging plastics³ into the sea, in accordance with MARPOL Annex V on Regulations from the Prevention of Pollution by Garbage from ships.
- 2. Consistent with MARPOL Annex V, paragraph 1 shall not apply to:
 - (i) the discharge of plastics from a vessel necessary for the purpose of securing the safety of a vessel and those on board or saving life at sea; or
 - (ii) the accidental loss of plastics resulting from damage to a vessel or its equipment provided that all reasonable precautions have been taken before and after the occurrence of the damage, to prevent or minimise the accidental loss; or,
 - (iii) the accidental loss of fishing gear consisting of or containing plastic from a vessel provided that all reasonable precautions have been taken to prevent such loss; or
 - (iv) the discharge of fishing gear consisting of or containing plastic from a vessel for the protection of the marine environment or for the safety of that vessel or its crew.

- 3. The use on fishing vessels of plastic packaging bands to secure bait boxes shall be prohibited.
- 4. The use of other plastic packaging bands for other purposes on fishing vessels which do not use on-board incinerators (closed systems) shall be prohibited.
- 5. Any packaging bands, once removed from packages, shall be cut into approximately 30 cm sections, so that they do not form a continuous loop and at the earliest opportunity burned in the on-board incinerator.
- 6. Any plastic residue shall be stored on board the vessel until it can be discharged at adequate port reception facilities and in no case discarded at sea.

Prohibition of Discharge

- 7. Vessels fishing in the Convention Area shall be prohibited from dumping or discharging oil or fuel products or oily mixtures into the sea, in accordance with MARPOL Annex I.
- 8. Vessels fishing south of 60°S shall also be prohibited from dumping or discharging:
 - (i) garbage;
 - (ii) food wastes not capable of passing through a screen with openings no greater than 25 mm;
 - (iii) poultry or parts (including egg shells);
 - (iv) sewage within 12 n miles of land or ice shelves, or sewage while the vessel is travelling at a speed of less than 4 knots;
 - (v) incineration ash.
- 9. Vessels fishing south of 60°S shall further be prohibited from dumping or discharging:
 - (i) $offal^4$
 - (ii) discards⁵.
- 10. Fish or other organisms taken during fishing operations with high expectation of survival⁶, and other benthic organisms⁷ may be returned to the sea, only after fulfilling the relevant requirements of Conservation Measure 22-07; paragraph 7 of Conservation Measure 41-01; and the relevant reporting requirements of other conservation measures.

Translocation of Poultry

- 11. Live poultry or other living birds shall not be brought into areas south of 60°S, and any dressed poultry not consumed shall be removed from those areas.
 - ¹ Except for waters adjacent to the Kerguelen and Crozet Islands
 - ² Except for waters adjacent to the Prince Edward Islands
 - ³ For the purpose of this conservation measure, the definition of plastics in MARPOL Annex V applies.
 - ⁴ 'Offal' is defined as bait and by-products from the processing of fish and other organisms, including parts or sections of fish or organisms which are by-products of processing.

- ⁵ 'Discards' are defined as whole fish or other organisms returned to the sea dead or with low expectation of survival, as described in the Observer Longline Logbook 'Observed Haul Catch' form instructions.
- ⁶ As described in the Observer Longline Logbook 'Observed Haul Catch' form instructions.
- ⁷ For the purposes of this conservation measure, 'other benthic organisms' refers to benthic organisms as defined in the CCAMLR VME Taxa Classification Guide and other habitat forming taxa, which are not included in the definitions of offal and discards in footnotes 3 and 4 respectively.

Conservation Measure 32-09 (2019)	Species	toothfish
Prohibition of directed fishing for <i>Dissostichus</i> spp. except	Area	48.5
in accordance with specific conservation measures	Season	2019/20
L L	Gear	all
in the 2019/20 season		

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

Directed fishing for *Dissostichus* spp. in Statistical Subarea 48.5 is prohibited from 1 December 2019 to 30 November 2020.

Conservation Measure 33-02 (2019)	Species	by-catch
Limitation of by-catch in Statistical Division 58.5.2	Area	58.5.2
in the 2019/20 season	Season	2019/20
III the 2017/20 season	Gear	all

- 1. There shall be no directed fishing for any species other than *Dissostichus eleginoides* and *Champsocephalus gunnari* in Statistical Division 58.5.2 in the 2019/20 fishing season.
- 2. In directed fisheries in Statistical Division 58.5.2 in the 2019/20 season, the by-catch of *Channichthys rhinoceratus* shall not exceed 1 663 tonnes, the by-catch of *Lepidonotothen* squamifrons shall not exceed 80 tonnes, the by-catch of *Macrourus caml* and *Macrourus whitsoni* combined shall not exceed 409 tonnes, the by-catch of *Macrourus holotrachys* and *Macrourus carinatus* combined shall not exceed 360 tonnes, and the by-catch of skates and rays shall not exceed 120 tonnes. For the purposes of this measure 'skates and rays' should be counted as a single species.
- 3. The by-catch of any fish species not mentioned in paragraph 2, and for which there is no other catch limit in force, shall not exceed 50 tonnes in Statistical Division 58.5.2.
- 4. If, in the course of a directed fishery, the by-catch in any one haul¹ is equal to, or greater than, 5 tonnes for *Channichthys rhinoceratus*, 3 tonnes for all *Macrourus* spp. combined, or 2 tonnes for *Lepidonotothen squamifrons*, or 2 tonnes of *Somniosus* spp., or 2 tonnes of skates and rays, then the fishing vessel shall not fish using that method of fishing at any point within 5 n miles² of the location where the by-catch limit is exceeded for a period of at least five days³. The location where the by-catch limit is exceeded is defined as the path⁴ followed by the fishing vessel.
- 5. If, in the course of a directed fishery, the by-catch in any one haul¹ of any other by-catch species for which by-catch limitations apply under this conservation measure is equal to, or greater than, 1 tonne, then the fishing vessel shall not fish using that method of fishing at any point within 5 n miles² of the location where the by-catch exceeded 1 tonne for a period of at least five days³. The location where the by-catch exceeded 1 tonne is defined as the path⁴ followed by the fishing vessel.
 - ¹ For the purposes of this conservation measure, for a longline, each haul applies to a single longline regardless of how contiguous sections of gear are connected.
 - ² This provision concerning the minimum distance separating fishing locations is adopted pending the adoption of a more appropriate definition of a fishing location by the Commission.
 - ³ The specified period is adopted in accordance with the reporting period specified in Conservation Measure 23-01, pending the adoption of a more appropriate period by the Commission.
 - ⁴ For a trawl, the path is defined from the point at which the fishing gear was first deployed from the fishing vessel to the point at which the fishing gear was retrieved by the fishing vessel. For a longline or a pot line, the path is defined from the point at which the first anchor of a set was deployed to the point at which the last anchor of that set was deployed.

Conservation Measure 33-03 (2019) ^{1,2}	Species	by-catch
Limitation of by-catch in new and exploratory fisheries	Area	various
in the 2019/20 season	Season	2019/20
III UIC 2017/20 SCASUI	Gear	all

- 1. This conservation measure applies to new and exploratory fisheries in the 2019/20 season, except where specific by-catch limits apply. Directed fishing shall not take place in the 2019/20 season in Statistical Divisions 58.4.1 and 58.4.3a.
- 2. The catch limits for all by-catch are set out in Annex 33-03/A. Within these catch limits, the total catch³ of by-catch, excluding individuals released alive in any small-scale research unit (SSRU), group of SSRUs or research block for which a specific catch limit (including a zero catch limit) is in place as defined in relevant conservation measures, shall not exceed the following limits:
 - skates and rays: 5% of the catch limit of *Dissostichus* spp.
 - *Macrourus* spp.: 16% of the catch limit for *Dissostichus* spp.
 - all other species 16% of the catch limit for *Dissostichus* spp.
- 3. For the purposes of this measure '*Macrourus* spp.' and 'skates and rays' should each be counted as a single species.
- 4. On all vessels, all skates and rays must be brought on board or alongside the vessel to be checked for tags and for their condition to be assessed. Recaptured tagged skates and rays, as per Conservation Measure 41-01, Annex 41-01/C, paragraphs 2(vii) and (ix), should not be re-released. Unless otherwise specified by scientific observers, all other skates and rays caught alive and with a high probability of survival should be released alive, by vessels, by cutting snoods, and when practical, removing the hooks, and the number should be recorded and reported to the Secretariat.
- 5. If the by-catch of any one species is equal to, or greater than, 1 tonne in any one haul or set⁴, then the fishing vessel shall move to another location at least 5 n miles⁵ distant. The fishing vessel shall not return to any point within 5 n miles of the location where the by-catch exceeded 1 tonne for a period of at least five days⁶. The location where the by-catch exceeded 1 tonne is defined as the path⁷ followed by the fishing vessel.
- 6. If the catch of *Macrourus* spp. taken by a single vessel in any two 10-day periods⁸ in any SSRU, group of SSRUs or research block for which a specific catch limit (including a zero catch limit) is in place exceeds 1 500 kg in each 10-day period and exceeds 16% of the catch of *Dissostichus* spp. by that vessel in that SSRU, group of SSRUs or research block for which a specific catch limit (including a zero catch limit) is in place in those periods, the vessel shall cease fishing in that SSRU, group of SSRUs or research block for which a specific catch limit (including a zero catch limit) is in place in those periods, the vessel shall cease fishing in that SSRU, group of SSRUs or research block for which a specific catch limit (including a zero catch limit) is in place for the remainder of the season.
 - ¹ Except for waters adjacent to the Kerguelen and Crozet Islands
 - ² Except for waters adjacent to the Prince Edward Islands
 - ³ Total green weight caught, excluding individuals released alive.
 - ⁴ For the purposes of this conservation measure, for a longline, each haul applies to a single longline regardless of how contiguous sections of gear are connected.
 - ⁵ This provision concerning the minimum distance separating fishing locations is adopted pending the adoption of a more appropriate definition of a fishing location by the Commission.

- ⁶ The specified period is adopted in accordance with the reporting period specified in Conservation Measure 23-01, pending the adoption of a more appropriate period by the Commission.
- ⁷ For a trawl, the path is defined from the point at which the fishing gear was first deployed from the fishing vessel to the point at which the fishing gear was retrieved by the fishing vessel. For a longline, the path is defined from the point at which the first anchor of a set was deployed to the point at which the last anchor of that set was deployed.
- ⁸ A 10-day period is defined as day 1 to day 10, day 11 to day 20, or day 21 to the last day of the month.

Annex 33-03/A

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Table 1: By-catch catch limits for new and exploratory fisheries in 2019/20.

Conservation Measure 41-01 (2019) ^{1,2}		
General measures for exploratory fisheries for <i>Dissostichus</i> spp.		
in the Convention Area in the 2019/20season		

Species	toothfish
Area	various
Season	2019/20
Gear	longline, trawl

The Commission hereby adopts the following conservation measure:

- 1. This conservation measure applies to exploratory fisheries using the trawl or longline methods, except for such fisheries where the Commission has given specific exemptions to the extent of those exemptions. In trawl fisheries, a haul comprises a single deployment of the trawl net. In longline fisheries, a haul comprises the setting of one or more lines in a single location.
- 2. Fishing should take place over as large a geographical and bathymetric range as possible to obtain the information necessary to determine fishery potential and to avoid over-concentration of catch and effort. To this end, fishing in any small-scale research unit (SSRU) shall cease when the reported catch reaches the specified catch limit and that SSRU shall be closed to fishing for the remainder of the season.
- 3. In order to give effect to paragraph 2, above:
 - (i) the precise geographic position of a haul in trawl fisheries will be determined by the midpoint of the path between the start point and end point of the haul for the purposes of catch and effort reporting;
 - (ii) the precise geographic position of a haul/set in longline fisheries will be determined by the centre point of the line or lines deployed for the purposes of catch and effort reporting;
 - (iii) the vessel will be deemed to be fishing in any SSRU from the beginning of the setting process until the completion of the hauling of all lines;
 - (iv) catch and effort information for each species by SSRU shall be reported to the Executive Secretary each day using the Daily Catch and Effort Reporting System set out in Conservation Measure 23-07;
 - (v) the Secretariat shall notify Contracting Parties participating in these fisheries when the total catch for *Dissostichus eleginoides* and *Dissostichus mawsoni* combined in any SSRU is likely to reach the specified catch limit, and of the closure of that SSRU when that limit is reached³. No part of a trawl path may lie within a closed SSRU and no part of a longline may be set within a closed SSRU.
- 4. The by-catch in each exploratory fishery shall be regulated as in Conservation Measure 33-03.
- 5. The total number and weight of *Dissostichus eleginoides* and *Dissostichus mawsoni* discarded, including those with the 'jellymeat' condition, shall be reported.
- 6. Each vessel participating in the exploratory fisheries for *Dissostichus* spp. during the 2019/20 season shall have one scientific observer appointed in accordance with the

41-01

CCAMLR Scheme of International Scientific Observation and, where possible, one additional scientific observer, on board throughout all fishing activities within the fishing season.

- 7. The Data Collection Plan (Annex 41-01/A), Research Plan (Annex 41-01/B) and Tagging Program (Annex 41-01/C) shall be implemented. Data collected pursuant to the Data Collection and Research Plans for the period up to 31 August 2020 shall be reported to CCAMLR by 30 September 2020 so that the data will be available to the meeting of the Working Group on Fish Stock Assessment (WG-FSA) in 2020. Such data taken after 31 August 2020 shall be reported to CCAMLR not later than three months after the closure of the fishery, but, where possible, submitted in time for the consideration of WG-FSA.
- 8. Members who choose not to participate in the fishery prior to the commencement of the fishery shall inform the Secretariat of changes in their plans no later than one month before the start of the fishery. If, for whatever reason, Members are unable to participate in the fishery, they shall inform the Secretariat no later than one week after finding that they cannot participate. The Secretariat will inform all Contracting Parties immediately after such notification is received.
 - ¹ Except for waters adjacent to the Kerguelen and Crozet Islands
 - ² Except for waters adjacent to the Prince Edward Islands
 - The closure of fisheries is governed by Conservation Measure 31-02.

Annex 41-01/A

Data Collection Plan for exploratory fisheries

- 1. All vessels will comply with the Daily Catch and Effort Reporting Systems (Conservation Measure 23-07) and Monthly Fine-scale Catch, Effort and Biological Data Reporting Systems (Conservation Measures 23-04 and 23-05).
- 2. The vessel shall ensure that sufficient samples are made available to the on-board observers to enable collection of all data required by the <u>Observer Sampling</u> <u>Requirements¹</u> and those specified for the current season, and as described in the <u>Scientific</u> <u>Observer's Manual Finfish Fisheries¹</u>.
- 3. Data specific to longline fisheries will be collected. These include:
 - (i) position and sea depth at each end of every line in a haul;
 - (ii) setting, soak and hauling times;
 - (iii) number and species of fish lost at surface;
 - (iv) number of hooks set;
 - (v) bait type;
 - (vi) baiting success (%);
 - (vii) hook type.
 - ¹ Available from the CCAMLR website.

Annex 41-01/B

Research Plan for exploratory fisheries

- 1. Activities under this Research Plan shall not be exempted from any conservation measure in force.
- 2. This plan applies to all small-scale research units (SSRUs) as defined in Table 1 and Figure 1.
- 3. Except when fishing in Statistical Subareas 88.1 and 88.2, any vessel must operate in accordance with the research activities agreed by the Scientific Committee for 2019/20. Only research hauls shall be deployed during these activities¹.
- 4. To be designated as a research haul:
 - (i) each research haul must be separated² by not less than 3 n miles from any other research haul, distance to be measured from the geographical midpoint of each research haul;
 - (ii) each haul shall comprise: for longlines, at least 3 500 hooks and no more than 5 000 hooks; this may comprise a number of separate lines set in the same location; for trawls, at least 30 minutes effective fishing time as defined in the *Draft Manual* for Bottom Trawl Surveys in the Convention Area³ (SC-CAMLR-XI, Annex 5, Appendix H, Attachment E, paragraph 4);
 - (iii) each haul of a longline shall have a soak time of not less than six hours, measured from the time of completion of the setting process to the beginning of the hauling process.
- 5. In the exploratory fisheries, all data specified in the Data Collection Plan (Annex 41-01/A) of this conservation measure shall be collected for every haul.
- 6. The vessel shall ensure that the observer has access to sufficient samples to enable collection of all data required by the <u>Observer Sampling Requirements</u>³ and those specified in the Data Collection Plan (Annex 41-01/A) for the current season, and as described in the <u>Scientific Observer's Manual Finfish Fisheries</u>³.
 - Vessels shall prioritise conducting research sets within the designated research blocks. However, in research blocks where access is reduced due to sea-ice, the following procedure shall be applied:
 - (i) in the event that a vessel attempts research fishing in a research block and finds that insufficient area is accessible to conduct research sets, the vessel shall notify the Secretariat, and may attempt to set research sets in a buffer zone up to one fine-scale rectangle wide around the research block, or move to another research block;
 - (ii) if this buffer zone is also inaccessible due to sea-ice, the vessel shall notify the Secretariat, and then the vessel may attempt to set research lines in an extended buffer zone up to two fine-scale rectangles wide around the research block, or move to another research block;
 - (iii) if, during the course of fishing in the buffer zone or the extended buffer zone, sea-ice conditions change such that sufficient area to conduct research sets in the original research block become accessible, then the vessel shall prioritise further research hauls within the original research block;
 - (iv) if the research block, buffer zone and/or extended buffer zone are all inaccessible, the vessel may move to any other designated research block where the catch limit has not been reached.
 - ² In the research activities conducted in 2019/20, 50% of research lines could be set with less than 3 n miles separation.
 - ³ Available from the CCAMLR website.

 Table 1:
 Description of small-scale research units (SSRUs) (see also Figure 1).

SSRU	Boundary line
486A	From 50°S 20°W, due east to 1°30'E, due south to 60°S, due west to 20°W, due north to 50°S.
486B	From 60°S 20°W, due east to 10°W, due south to coast, westward along coast to 20°W, due north to 60°S.
486C	From 60°S 10°W, due east to 0° longitude, due south to coast, westward along coast to 10°W, due north to 60°S.
486D	From 60°S 0° longitude, due east to 10°E, due south to coast, westward along coast to 0° longitude, due north to 60°S.
486E	From 60°S 10°E, due east to 20°E, due south to coast, westward along coast to 10°E, due north to 60°S.
486F	From 60°S 20°E, due east to 20°E, due south to coast, westward along coast to 10°E, due north to 60°S.
486F	From 60°S 20°E, due east to 30°E, due south to coast, westward along coast to 20°E, due north to 60°S.
486G	From 50°S 1°30'E, due east to 30°E, due south to 60°S, due west to 1°30'E, due north to 50°S.
5841A 5841B 5841C 5841D 5841E 5841F 5841G 5841H	From 55°S 86°E, due east to 150°E, due south to 60°S, due west to 86°E, due north to 55°S. From 60°S 86°E, due east to 90°E, due south to coast, westward along coast to 80°E, due north to 64°S, due east to 86°E, due north to 60°S. From 60°S 90°E, due east to 100°E, due south to coast, westward along coast to 90°E, due north to 60°S. From 60°S 100°E, due east to 110°E, due south to coast, westward along coast to 100°E, due north to 60°S. From 60°S 110°E, due east to 120°E, due south to coast, westward along coast to 110°E, due north to 60°S. From 60°S 120°E, due east to 130°E, due south to coast, westward along coast to 120°E, due north to 60°S. From 60°S 130°E, due east to 140°E, due south to coast, westward along coast to 120°E, due north to 60°S. From 60°S 130°E, due east to 140°E, due south to coast, westward along coast to 130°E, due north to 60°S. From 60°S 140°E, due east to 150°E, due south to coast, westward along coast to 130°E, due north to 60°S.
5842A	From 62°S 30°E, due east to 40°E, due south to coast, westward along coast to 30°E, due north to 62°S.
5842B	From 62°S 40°E, due east to 50°E, due south to coast, westward along coast to 40°E, due north to 62°S.
5842C	From 62°S 50°E, due east to 60°E, due south to coast, westward along coast to 50°E, due north to 62°S.
5842D	From 62°S 60°E, due east to 70°E, due south to coast, westward along coast to 60°E, due north to 62°S.
5842E	From 62°S 70°E, due east to 70°E, due south to coast, westward along coast to 60°E, due north to 62°S.
5843aA	Whole division, from 56°S 60°E, due east to 73°10'E, due south to 62°S, due west to 60°E, due north to 56°S.
5843bA	From 56°S 73°10'E, due east to 79°E, south to 59°S, due west to 73°10'E, due north to 56°S.
5843bB	From 60°S 73°10'E, due east to 86°E, south to 64°S, due west to 73°10'E, due north to 60°S.
5843bC	From 59°S 73°10'E, due east to 79°E, south to 60°S, due west to 73°10'E, due north to 59°S.
5843bD	From 59°S 79°E, due east to 86°E, south to 60°S, due west to 79°E, due north to 59°S.
5843bE	From 56°S 79°E, due east to 80°E, due north to 55°S, due east to 86°E, south to 55°S, due west to 79°E, due north to 59°S.
5844A	From 51°S 40°E, due east to 42°E, due south to 54°S, due west to 40°E, due north to 51°S.
5844B	From 51°S 42°E, due east to 46°E, due south to 54°S, due west to 42°E, due north to 51°S.
5844C	From 51°S 46°E, due east to 50°E, due south to 54°S, due west to 46°E, due north to 51°S.
5844D	Whole division excluding SSRUs A, B, C, and with outer boundary from 50°S 30°E, due east to 60°E, due south to 62°S, due west to 30°E, due north to 50°S.

continued

Table 1 (continued)

SSRU	Boundary line
586B 586C 586D	From 45°S 44°E, due east to 48°E, due south to 48°S, due west to 44°E, due north to 45°S. From 45°S 48°E, due east to 51°E, due south to 48°S, due west to 48°E, due north to 45°S. From 45°S 51°E, due east to 54°E, due south to 48°S, due west to 51°E, due north to 45°S.
587A 587B	From 45°S 37°E, due east to 40°E, due south to 48°S, due west to 37°E, due north to 45°S. From 45°S 40°E, due east to 44°E, due south to 48°S, due west to 40°E, due north to 45°S.
881A 881B 881C 881D 881E 881F 881G 881H 881I 881J 881K 881L 881M	From 60°S 150°E, due east to 170°E, due south to 65°S, due west to 150°E, due north to 60°S. From 60°S 170°E, due east to 179°E, due south to 66°40'S, due west to 170°E, due north to 60°S. From 60°S 179°E, due east to 170°W, due south to 70°S, due west to 178°W, due north to 66°40'S, due west to 179°E, due north to 60°S. From 65°S 150°E, due east to 160°E, due south to coast, westward along coast to 150°E, due north to 65°S. From 65°S 160°E, due east to 170°E, due south to 68°30'S, due west to 160°E, due north to 65°S. From 65°S 160°E, due east to 170°E, due south to coast, westward along coast to 160°E, due north to 68°30'S. From 68°30'S 160°E, due east to 170°E, due south to coast, westward along coast to 160°E, due north to 68°30'S. From 66°40'S 170°E, due east to 178°W, due south to 70°S, due west to 178°50'E, due south to 70°50'S, due west to 170°E, due north to 66°40'S. From 70°50'S 170°E, due east to 178°50'E, due south to 73°S, due west to 178°50'E, due north to 70°50'S, due north to 70°50'S. From 70°S 178°50'E, due east to 178°50'E, due south to 73°S, due west to 178°50'E, due north to 70°S. From 73°S at coast near 170°E, due east to 178°50'E, due south to 80°S, due west to 170°E, northward along coast to 73°S. From 73°S 178°50'E, due east to 170°W, due south to 76°S, due west to 178°50'E, due north to 73°S. From 76°S 178°50'E, due east to 170°W, due south to 80°S, due west to 178°50'E, due north to 73°S. From 73°S at coast near 170°E, due east to 170°E, due south to 80°S, due west to 170°E, four north to 73°S. From 73°S 178°50'E, due east to 170°W, due south to 80°S, due west to 178°50'E, due north to 73°S. From 76°S 178°50'E, due east to 170°W, due south to 80°S, due west to 178°50'E, due north to 73°S. From 73°S at coast near 169°30'E, due east to 170°E, due south to 80°S, due west to coast, northward along coast to 73°S.
882A 882B 882C 882D 882E 882F 882G 882H 882I 883A 883B 883C 883D	 From 60°S 170°W, due east to 160°W, due south to coast, westward along coast to 170°W, due north to 60°S. From 60°S 160°W, due east to 150°W, due south to coast, westward along coast to 160°W, due north to 60°S. From 70°50'S 150°W, due east to 140°W, due south to coast, westward along coast to 150°W, due north to 70°50'S. From 70°50'S 140°W, due east to 120°W, due south to coast, westward along coast to 140°W, due north to 70°50'S. From 70°50'S 130°W, due east to 120°W, due south to coast, westward along coast to 130°W, due north to 70°50'S. From 70°50'S 120°W, due east to 110°W, due south to coast, westward along coast to 120°W, due north to 70°50'S. From 70°50'S 120°W, due east to 105°W, due south to coast, westward along coast to 120°W, due north to 70°50'S. From 70°50'S 110°W, due east to 105°W, due south to coast, westward along coast to 110°W, due north to 70°50'S. From 65°S 150°W, due east to 105°W, due south to 65°S, due west to 150°W, due north to 65°S. From 60°S 150°W, due east to 95°W, due south to coast, westward along coast to 105°W, due north to 60°S. From 60°S 150°W, due east to 85°W, due south to coast, westward along coast to 95°W, due north to 60°S. From 60°S 85°W, due east to 75°W, due south to coast, westward along coast to 95°W, due north to 60°S. From 60°S 85°W, due east to 75°W, due south to coast, westward along coast to 95°W, due north to 60°S. From 60°S 75°W, due east to 75°W, due south to coast, westward along coast to 85°W, due north to 60°S.

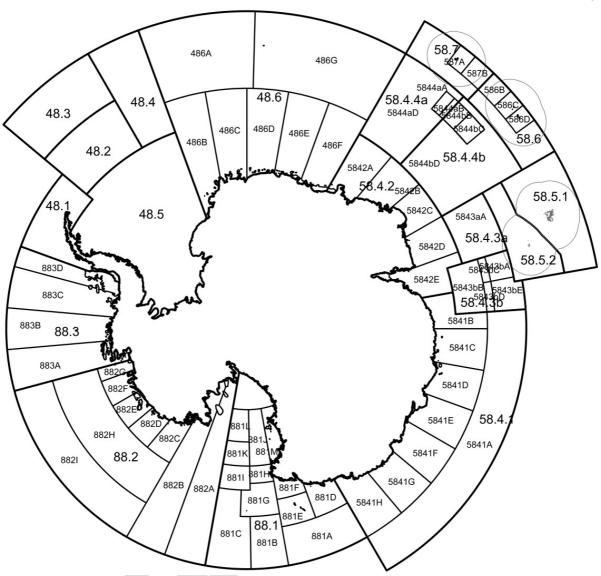


Figure 1: Small-scale research units for new and exploratory fisheries. The boundaries of these units are listed in Table 1. EEZ boundaries for Australia, France and South Africa are marked in order to address notifications for new and exploratory fisheries in waters adjacent to these zones.

41-01 Annex 41-01/C

Tagging program for *Dissostichus* spp. and skates in exploratory fisheries

- 1. The responsibility for ensuring tagging, tag recovery and correct reporting shall lie with the Flag State of the fishing vessel. The fishing vessel shall cooperate with the CCAMLR scientific observer in undertaking the tagging program.
- 2. This program shall apply in each exploratory longline fishery, and any vessel that participates in more than one exploratory fishery shall apply the following in each exploratory fishery in which that vessel fishes:
 - (i) Each longline vessel shall tag and release *Dissostichus* spp., continuously while fishing, at a rate specified in the conservation measure for that fishery according to the <u>CCAMLR Tagging Protocol</u>¹.
 - (ii) The program shall target toothfish of all sizes in order to meet the tagging requirements. Only fish suitable to tag using the suitability criteria in the CCAMLR Tagging Protocol shall be tagged and released. The availability of these fish shall be reported by the observer. All released toothfish must be double-tagged. All toothfish that are not tagged must be retained.
 - (iii) The length frequency of tagged toothfish shall reflect the length frequency of the catch². Each vessel shall achieve a minimum tag-overlap statistic³ of 60% for each species of *Dissostichus*. However, for any vessel fishing for *Dissostichus* spp. which meets the required tagging rate, the minimum tag overlap statistic of 60% shall not apply for a species of *Dissostichus* for which less than 30 fish have been tagged.
 - (iv) Releases should cover as broad a geographical area as possible. In regions where both species occur, the tagging rate shall be in proportion to the species and lengths of each *Dissostichus* spp. present in the catch.
 - (v) Members wishing to tag skates are advised to follow the protocols developed during the Year-of-the-Skate.
 - (vi) During the 2019/20 and 2020/21 seasons, each longline vessel operating in Statistical Subarea 88.1 and SSRUs 882A–B shall tag and release by-caught skates according to the CCAMLR Tagging Protocol, as specified in the conservation measure for that fishery. All tagged skates must be double-tagged and released alive.
 - (vii) All toothfish and skate tags for use in exploratory fisheries shall be sourced from the Secretariat.
 - (viii) All toothfish shall be examined for the presence of tags. All skates shall be brought on board or alongside the vessel to be checked for tags and for their condition to be assessed. Recaptured tagged fish (i.e. fish caught that have a previously inserted tag) shall not be re-released, even if at liberty for only a short period.

- (x) Recaptured tagged skates should be identified to the lowest possible taxonomic level and biologically sampled (pelvic length and disc width, weight, sex, gonad stage and caudal thorns for samples in Statistical Subarea 88.1 and SSRUs 882A–B), two electronic time-stamped photographs should be taken, one of the whole skate with tag attached and one close-up of the tag detailing the number and colour of the tag.
- 3. Toothfish that are tagged and released shall not be counted against the catch limits.
- 4. All relevant tag data, and any data recording tag recaptures, shall be reported electronically in the CCAMLR format⁴ to the Executive Secretary (i) by the vessel every month along with its monthly fine-scale catch and effort (C2) data, and (ii) by the observer as part of the data reporting requirements for observer data⁴.
- 5. All relevant tag data, any data recording tag recaptures, and specimens (tags and otoliths) from recaptures shall also be reported electronically in the CCAMLR format⁴ to the relevant regional tag data repository as detailed in the <u>CCAMLR Tagging Protocol</u>^{1,4}.
 - ¹ Available from the CCAMLR website.
 - ² Vessels may implement this requirement by tagging fish at an appropriate rate per number of fish brought alongside the hauler. See the CCAMLR Tagging Protocol for further guidance.
 - ³ The tag overlap statistic (θ) shall be calculated as follows:

$$\theta = \left(1 - \frac{\sum_{i=1}^{n} |P_i - P_c|}{2}\right) \times 100$$

4

where P_t is the proportion of all fish tagged in length bin *i*, P_c is the proportion of all fish caught (i.e. the sum of all fish caught and either landed or tagged and released), for 10 cm length bins. In accordance with the CCAMLR Tagging Protocol for exploratory fisheries.

Conservation Measure 41-02 (2019) Limits on the fishery for *Dissostichus eleginoides* in Statistical Subarea 48.3 in the 2019/20 and 2020/21 seasons

SpeciestoothfishArea48.3Season2019/20,2020/212020/21Gearlongline, pot

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 31-01:

- Access 1. The fishery for *Dissostichus eleginoides* in Statistical Subarea 48.3 shall be conducted by vessels using longlines or pots only.
 - 2. For the purpose of this fishery, the area open to the fishery is defined as that portion of Statistical Subarea 48.3 that lies within the area bounded by latitudes 52°30'S and 56°0'S and by longitudes 33°30'W and 48°0'W.
 - 3. A map illustrating the area defined by paragraph 2 is appended to this conservation measure (Annex 41-02/A). The portion of Statistical Subarea 48.3 outside that defined above shall be closed to directed fishing for *Dissostichus eleginoides* in the 2019/20 and 2020/21 seasons.
- Catch limit 4. The total catch of *Dissostichus eleginoides* in Statistical Subarea 48.3 in the 2019/20 and 2020/21 seasons shall be limited to 2 327 tonnes in each season. The catch limit shall be further subdivided between the Management Areas shown in Annex 41-02/A as follows:

Management Area A:	0 tonnes
Management Area B:	698 tonnes in each season
Management Area C:	1 629 tonnes in each season.

- Season
 5. For the purpose of the longline fishery for *Dissostichus eleginoides* in Statistical Subarea 48.3, the 2019/20 and 2020/21 seasons are defined as the period from 16 April to 14 September in each season, or until the catch limit is reached, whichever is sooner. For the purpose of the pot fishery for *Dissostichus eleginoides* in Statistical Subarea 48.3, the 2019/20 and 2020/21 seasons are defined as the period from 1 December to 30 November in each season, or until the catch limit is reached, whichever is sooner.
- By-catch 6. Any by-catch of crab shall, as far as possible, be released alive.
 - 7. The by-catch of finfish in the fishery for *Dissostichus eleginoides* in Statistical Subarea 48.3 in the 2019/20 and 2020/21 seasons shall not exceed 116 tonnes for skates and rays and 116 tonnes for *Macrourus* spp. in each season. For the purpose of these by-catch limits, '*Macrourus* spp.' and 'skates and rays' shall each be counted as a single species.
 - 8. If the by-catch of any one species is equal to, or greater than, 1 tonne in any one haul or set, then the fishing vessel shall move to another location at least 5 n miles¹ distant. The fishing vessel shall not return to any point

within 5 n miles of the location where the by-catch exceeded 1 tonne for a period of at least five days². The location where the by-catch exceeded 1 tonne is defined as the path³ followed by the fishing vessel.

- Mitigation 9. The operation of this fishery shall be carried out in accordance with Conservation Measure 25-02 so as to minimise the incidental mortality of seabirds in the course of fishing.
 - 10. Longlines shall be set at night only (i.e. during the hours of darkness between the times of nautical twilight⁴)⁵.
- Observers 11. Each vessel participating in this fishery shall have at least one scientific observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation and, where possible, one additional scientific observer on board throughout all fishing activities within the fishing period.
- For the purpose of implementing this conservation measure, the following 12. catch/effort shall apply:
 - (i) the Five-day Catch and Effort Reporting System set out in Conservation Measure 23-01;
 - the Monthly Fine-scale Catch and Effort Reporting System set out in (ii) Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis.
 - For the purpose of Conservation Measures 23-01 and 23-04, the target 13. species is Dissostichus eleginoides and 'by-catch species' are defined as any species other than Dissostichus eleginoides.
 - 14. The total number and weight of *Dissostichus eleginoides* discarded, including those with the 'jellymeat' condition, shall be reported. These fish will count towards the total allowable catch.
 - 15. Fine-scale biological data, as required under Conservation Measure 23-05, shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.
 - 16. Catches of Dissostichus eleginoides taken under the provisions of Conservation Measure 24-01 in the area of the fishery defined in this conservation measure shall be considered as part of the catch limit.
 - 17. Conservation Measure 26-01 applies.
 - This provision concerning the minimum distance separating fishing locations is adopted pending the adoption of a more appropriate definition of a fishing location by the Commission.
 - 2 The specified period is adopted in accordance with the reporting period specified in Conservation Measure 23-01, pending the adoption of a more appropriate period by the Commission.

Data:

Data: biological

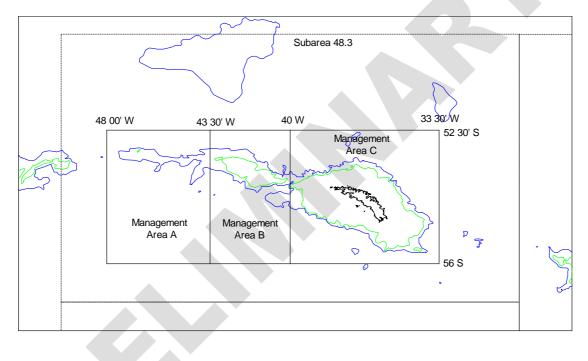
Research fishing

Environmental protection

- ³ For a longline or a pot, the path is defined from the point at which the first anchor of a set was deployed to the point at which the last anchor of that set was deployed.
- ⁴ The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).
- ⁵ Wherever possible, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).

Annex 41-02/A

Statistical Subarea 48.3 – the area of the fishery and the three management areas for catch allocation according to paragraph 4. 1 000 and 2 000 m contours are shown.



Conservation Measure 41-03 (2019)	Species	toothfish
Limits on the fishery for <i>Dissostichus</i> spp. in Statistical	Area	48.4
Subarea 48.4 in the 2019/20 season	Season	2019/20
Subarea 40.4 III tile 2019/20 season	Gear	longline

- Access 1. Directed fishing shall be by longlines only. The use of all other methods of directed fishing for *Dissostichus* spp. in Statistical Subarea 48.4 shall be prohibited.
 - 2. For the purpose of this fishery, the area open to fishing is defined as that portion of Statistical Subarea 48.4 that lies within the area bounded by latitudes 55°30'S and 57°20'S and by longitudes 25°30'W and 29°30'W, and by latitudes 57°20'S and 60°00'S and by longitudes 24°30'W and 29°00'W.
 - 3. A map illustrating the areas defined by paragraph 2 is appended to this conservation measure (Annex 41-03/A). The portion of Statistical Subarea 48.4 outside that defined above shall be closed to directed fishing for *Dissostichus* spp. in the 2019/20 season.
- Catch limit 4. The total catch of *Dissostichus eleginoides* shall be limited to 27 tonnes.
 - 5. The total catch of *Dissostichus mawsoni* shall be limited to 45 tonnes.
- Season
 6. For the purposes of the fishery for *Dissostichus* spp. in Statistical Subarea 48.4, the fishing season shall be 1 December 2019 to 30 November 2020, or until the catch limits for both species are reached, whichever is sooner. If the catch limit for *Dissostichus mawsoni* is reached prior to the closure of the fishery, the area south of latitude 57°20'S shall be closed. If the catch limit for *Dissostichus eleginoides* is reached prior to the closure of the fishery, the area north of 58°00'S shall be closed.
- By-catch

7.

- The by-catch of finfish shall not exceed 3.6 tonnes for skates and rays and 11.5 tonnes for *Macrourus* spp.
- 8. The by-catch of finfish shall trigger a move-on rule if the catch of skates and rays exceeds 5% of the catch of *Dissostichus* spp. in any one haul or set, or if the catch of *Macrourus* spp. reaches 150 kg and exceeds 16% of the catch of *Dissostichus* spp. in any one haul or set. If the move-on rule is triggered, then the fishing vessel shall move to another location at least 5 n miles¹ distant. The fishing vessel shall not return to any point within 5 n miles of the location where the move-on rule was triggered for a period of at least five days². The location where the move-on rule was triggered is defined as the path³ followed by the fishing vessel.
- 9. For the purpose of these by-catch limits, '*Macrourus* spp.' and 'skates and rays' shall each be counted as a single species.
- Mitigation 10. Fishing in Statistical Subarea 48.4 shall be carried out in accordance with the provisions of Conservation Measure 25-02.

- 11. Any vessel catching a total of three (3) seabirds shall immediately be required to set longlines at night only (i.e. during the hours of darkness between the times of nautical twilight 4)⁵.
- Observers 12. Each vessel participating in the fishery for *Dissostichus* spp. in Statistical Subarea 48.4 shall have at least one scientific observer, appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period.

For the purpose of implementing this conservation measure, the following 13. shall apply:

- the Five-day Catch and Effort Reporting System set out in (i) Conservation Measure 23-01:
- the Monthly Fine-scale Catch and Effort Data Reporting System set (ii) out in Conservation Measure 23-04. Data shall be reported on a haul-by-haul basis. For the purposes of Conservation Measure 23-04, the target species are Dissostichus eleginoides and Dissostichus mawsoni, and 'by-catch species' are defined as any species other than Dissostichus spp.
- 14. Fine-scale biological data, as required under Conservation Measure 23-05, shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.
 - Each vessel taking part in the fishery for *Dissostichus* spp. in Statistical 15. Subarea 48.4 shall undertake a tagging program in accordance with the CCAMLR Tagging Protocol. The following additional provisions shall apply:
 - fish should be tagged at an average rate of five fish per tonne of green (i) weight catch throughout the season;
 - (ii) fish should be tagged that have been caught across as broad a range of depths within the designated area as practicable;
 - (iii) fish of a range of total lengths should be tagged.

Environmental protection

- 16. Conservation Measure 26-01 applies.
 - This provision concerning the minimum distance separating fishing locations is adopted pending the adoption of a more appropriate definition of a fishing location by the Commission.
 - 2 The specified period is adopted in accordance with the reporting period specified in Conservation Measure 23-01, pending the adoption of a more appropriate period by the Commission.
 - 3 For a longline or a pot, the path is defined from the point at which the first anchor of a set was deployed to the point at which the last anchor of that set was deployed.

Data: catch/effort

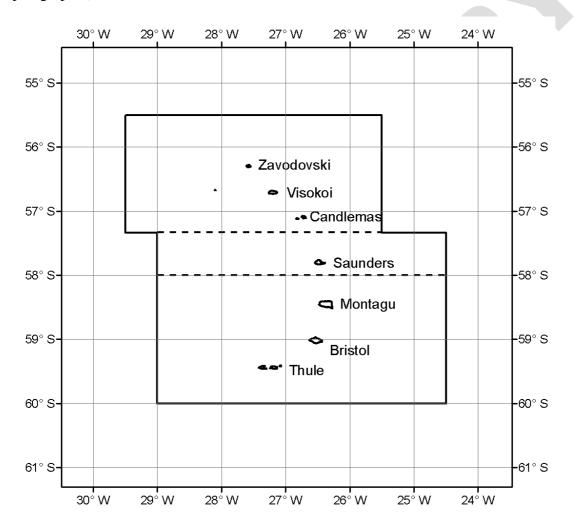
Data: biological

Tagging program

- ⁴ The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).
- ⁵ Wherever possible, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).

Annex 41-03/A

Statistical Subarea 48.4 – The fishery as defined in paragraph 2. Latitudes and longitudes are given in degrees, and the dashed lines indicate latitudes $57^{\circ}20$ 'S and $58^{\circ}00$ 'S (refer paragraph 6).



Conservation Measure 41-04 (2019)	Species	toothfish
Limits on the exploratory fishery for Dissostichus mawsoni	Area	48.6
in Statistical Subarea 48.6 in the 2019/20 season	Season	2019/20
III Statistical Subarta 40.0 III tile 2017/20 Stasoff	Gear	longline

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 21-02:

Access	1.	Fishing for <i>Dissostichus mawsoni</i> in Statistical Subarea 48.6 shall be limited to the exploratory longline fishery by Japan, South Africa and Spain. The fishery shall be conducted by Japanese, South African and Spanish flagged vessels using longlines only. No more than one vessel per country shall fish at any one time.
	2.	This fishery shall be subject to the conditions in Conservation Measure 41-01, Annex 41-01/B. For the purpose of this fishery, the area open to fishing is defined by the research blocks in Annex 41-04/A.
Catch limit	3.	The total catch of <i>Dissostichus mawsoni</i> in Statistical Subarea 48.6 in the 2019/20 season shall not exceed a precautionary catch limit of 670 tonnes applied as follows:
		Research block $48.6_2 - 140$ tonnes Research block $48.6_3 - 38$ tonnes Research block $48.6_4 - 163$ tonnes Research block $48.6_5 - 329$ tonnes.
Season	4.	For the purpose of the exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Subarea 48.6, the 2019/20 season is defined as the period from 1 December 2019 to 30 November 2020.
By-catch	5.	The by-catch in this fishery shall be regulated as set out in Conservation Measure 33-03.
Mitigation	6.	The exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Subarea 48.6 shall be carried out in accordance with the provisions of Conservation Measure 25-02.
	7.	Any vessel catching a total of three (3) seabirds shall immediately change to night setting only (i.e. setting only during the hours of darkness between the times of nautical twilight ¹) ² .
Observers	8.	Each vessel participating in the fishery shall have at least two scientific observers, one of whom shall be an observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period.
Data: catch/effort	9.	For the purpose of implementing this conservation measure in the 2019/20 season, the following shall apply:

- (i) the Daily Catch and Effort Reporting System set out in Conservation Measure 23-07;
- (ii) the Monthly Fine-scale Catch and Effort Reporting System set out in Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis.
- 10. For the purpose of Conservation Measures 23-07 and 23-04, the target species is *Dissostichus mawsoni* (any *Dissostichus eleginoides* caught shall be counted towards the overall catch limit for *Dissostichus mawsoni*) and 'by-catch species' are defined as any species other than *Dissostichus* spp.
- Data:
biological11.Fine-scale biological data, as required under Conservation Measure 23-05,
shall be collected and recorded. Such data shall be reported in accordance
with the CCAMLR Scheme of International Scientific Observation.
- Research 12. Each vessel participating in this exploratory fishery shall conduct fishery-based research in accordance with the Research Plan and Tagging Program described in Conservation Measure 41-01, Annex 41-01/B and Annex 41-01/C respectively.
 - 13. Toothfish shall be tagged at a rate of at least five fish per tonne green weight caught.
- Environmental protection
- 14. Conservation Measure 26-01 applies
 - 15. There shall be no offal³ discharge in this fishery.

Conservation Measures 22-06, 22-07 and 22-08 apply.

- ¹ The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).
- ² Wherever possible, when night setting, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).
- ³ 'Offal' is defined as bait and by-products from the processing of fish and other organisms, including parts or sections of fish or organisms which are by-products of processing.

Annex 41-04/A

Research blocks

Research block 48.6_2 coordinates

54°00'S	01°00'E
55°00'S	01°00'E
55°00'S	02°00'E
55°30'S	02°00'E
55°30'S	04°00'E
56°30'S	04°00'E

Research block 48.6	_2 coordinates (continued)	
56°30'S	07°00'E	
56°00'S	07°00'E	
56°00'S	08°00'E	
54°00'S	08°00'E	
54°00'S	09°00'E	
53°00'S	09°00'E	
53°00'S	03°00'E	
53°30'S	03°00'E	
53°30'S	02°00'E	
54°00'S	02°00'E	

Research block 48.6_3 coordinates

64°30'S	01°00'E
66°00'S	01°00'E
66°00'S	04°00'E
65°00'S	04°00'E
65°00'S	07°00'E
64°30'S	07°00'E

Research block 48.6_4 coordinates

68°20'S	10°00'E
68°20'S	13°00'E
69°30'S	13°00'E
69°30'S	10°00'E
69°45'S	10°00'E
69°45'S	06°00'E
69°00'S	06°00'E
69°00'S	10°00'E

Research block 48.6_5 coordinates

Scarch 010ck +0.0_	5 coordinates
71°00'S	15°00'W
71°00'S	13°00'W
70°30'S	13°00'W
70°30'S	11°00'W
70°30'S	10°00'W
69°30'S	10°00'W
69°30'S	09°00'W
70°00'S	09°00'W
70°00'S	08°00'W
69°30'S	08°00'W
69°30'S	07°00'W
70°30'S	07°00'W
70°30'S	10°00'W
71°00'S	10°00'W
71°00'S	11°00'W
71°30'S	11°00'W
71°30'S	15°00'W

Conservation Measure 41-05 (2019)	Species	toothfish
Limits on the exploratory fishery for Dissostichus mawsoni	Area	58.4.2
in Statistical Division 58.4.2 in the 2019/20 season	Season	2019/20
in Statistical Division 30.4.2 in the 2017/20 season	Gear	longline

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 21-02, and notes that this measure would be for one year and that data arising from these activities would be reviewed by the Scientific Committee:

Access	1.	Fishing for <i>Dissostichus mawsoni</i> in Statistical Division 58.4.2 shall be limited to the exploratory longline fishery by Australia, France and Japan. The fishery shall be conducted by one (1) Australian, one (1) French and one (1) Japanese vessel using longlines only.
	2.	This fishery shall be subject to the conditions in Conservation Measure 41-01, Annex 41-01/B. For the purpose of this fishery, the area open to fishing is defined by the research block in Annex 41-05/A.
Catch limit	3.	The total catch of <i>Dissostichus mawsoni</i> in Statistical Division 58.4.2 in the 2019/20 season shall not exceed a precautionary catch limit of 60 tonnes applied as follows:
		SSRU A – 0 tonnes SSRU B – 0 tonnes SSRU C – 0 tonnes SSRU D – 0 tonnes SSRU E Research block 58.4.2_1 – 60 tonnes.
Season	4.	For the purpose of the exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Division 58.4.2, the 2019/20 season is defined as the period from 1 December 2019 to 30 November 2020.
Fishing operations	5.	The exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Division 58.4.2 shall be carried out in accordance with the provisions of Conservation Measure 41-01, except paragraph 6.
By-catch	6.	The by-catch in this fishery shall be regulated as set out in Conservation Measure 33-03.
Mitigation	7.	The exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Division 58.4.2 shall be carried out in accordance with the provisions of Conservation Measure 25-02.
	8.	Any vessel catching a total of three (3) seabirds shall immediately change to night setting only (i.e. setting only during the hours of darkness between the times of nautical twilight ¹) ² .

Observers	9.	Each vessel participating in the fishery shall have at least two scientific observers, one of whom shall be an observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period.	
Research	10.	Each vessel participating in this exploratory fishery shall conduct fishery-based research in accordance with the Research Plan and Tagging Program described in Conservation Measure 41-01, Annex 41-01/B and Annex 41-01/C respectively.	
	11.	Toothfish shall be tagged at a rate of at least five fish per tonne green weight caught.	
Data: catch/effort	12.	For the purpose of implementing this conservation measure in the 2019/20 season, the following shall apply:	
		 the Daily Catch and Effort Reporting System set out in Conservation Measure 23-07; 	
		 (ii) the Monthly Fine-scale Catch and Effort Reporting System set out in Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis; 	
		 (iii) fishing vessels undertaking research in accordance with Conservation Measure 24-01 shall report data in accordance with the requirements (i) and (ii) above. 	
13.		For the purpose of Conservation Measures 23-07 and 23-04, the target species is <i>Dissostichus mawsoni</i> (any <i>Dissostichus eleginoides</i> caught shall be counted towards the overall catch limit for <i>Dissostichus mawsoni</i>) and 'by-catch species' are defined as any species other than <i>Dissostichus</i> spp.	
Data: biological	14.	Fine-scale biological data, as required under Conservation Measure 23-05, shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.	
Environ- mental	15.	Conservation Measure 26-01 applies.	
protection	16.	Conservation Measures 22-06, 22-07 and 22-08 apply.	
		¹ The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).	
		operations or observer reporting, shall be referenced to Coordinated Universal Tin	

² Wherever possible, when night setting, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).

Annex 41-05/A

Research blocks

Research block 58.4.2_1 coordinates

66°00'S	70°00'E
67°30'S	70°00'E
67°30'S	76°00'E
66°00'S	76°00'E.

Conservation Measure 41-06 (2019)	Species	toothfish
Limits on the exploratory fishery for Dissostichus eleginoides	Area	58.4.3a
on Elan Bank (Statistical Division 58.4.3a) outside areas	Season	2019/20
	Gear	longline
of national jurisdiction in the 2019/20 season		

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 21-02:

Access	1.	Fishing for <i>Dissostichus eleginoides</i> on Elan Bank (Statistical Division 58.4.3a) outside areas of national jurisdiction shall be limited to the exploratory fishery using longlines only. Directed fishing shall not take place in 2019/20.
	2.	This fishery shall be subject to the conditions in Conservation Measure 41-01, Annex 41-01/B. The area open to fishing is defined by the research block in Annex 41-06/A.
Catch limit	3.	The total catch of <i>Dissostichus eleginoides</i> on Elan Bank (Statistical Division 58.4.3a) outside areas of national jurisdiction in the 2019/20 season shall not exceed a precautionary catch limit of 24 tonnes applied as follows:
		Research block $58.4.3a_1 - 24$ tonnes.
Season	4.	For the purpose of the exploratory longline fishery for <i>Dissostichus eleginoides</i> on Elan Bank (Statistical Division 58.4.3a) outside areas of national jurisdiction, the 2019/20 season is defined as the period from 1 December 2019 to 30 November 2020, or until the catch limit is reached, whichever is sooner.
By-catch	5.	The by-catch in this fishery shall be regulated as set out in Conservation Measure 33-03.
Mitigation	6.	The operation of this fishery shall be carried out in accordance with Conservation Measure 25-02 so as to minimise the incidental mortality of seabirds in the course of fishing.
	7.	Any vessel catching a total of three (3) seabirds shall immediately change to night setting only (i.e. setting only during the hours of darkness between the times of nautical twilight ¹) ² .
Observers	8.	Each vessel participating in this fishery shall have at least one scientific observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation and, where possible, one additional scientific observer, on board throughout all fishing activities within the fishing period.
Data: catch/effort	9.	For the purpose of implementing this conservation measure in the 2019/20 season, the following shall apply:

- (i) the Daily Catch and Effort Reporting System set out in Conservation Measure 23-07;
- (ii) the Monthly Fine-scale Catch and Effort Reporting System set out in Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis.
- 10. For the purpose of Conservation Measures 23-07 and 23-04, the target species is *Dissostichus eleginoides* (any *Dissostichus mawsoni* caught shall be counted towards the overall catch limit for *Dissostichus eleginoides*) and 'by-catch species' are defined as any species other than *Dissostichus* spp.
- Data:11.Fine-scale biological data, as required under Conservation Measure 23-05,
shall be collected and recorded. Such data shall be reported in accordance
with the CCAMLR Scheme of International Scientific Observation.
- Research 12. Each vessel participating in this exploratory fishery shall conduct fishery-based research in accordance with the Research Plan and Tagging Program described in Conservation Measure 41-01, Annex 41-01/B and Annex 41-01/C respectively.
 - 13. Toothfish shall be tagged at a rate of at least five fish per tonne green weight caught.
- Environmental 14. Conservation Measure 26-01 applies.
- protection 15. Conservation Measures 22-06, 22-07 and 22-08 apply.
 - ¹ The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).
 - Wherever possible, when night setting, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).

Annex 41-06/A

Research blocks

Research block 58.4.3a_1 coordinates

56°00'S	65°00'E
57°30'S	65°00'E
57°30'S	73°00'E
56°00'S	73°00'E.

Research

Conservation Measure 41-07 (2019)	Species	toothfish
Limits on the exploratory fishery for Dissostichus mawsoni	Area	58.4.3b
on BANZARE Bank (Statistical Division 58.4.3b) outside	Season	2019/20
	Gear	longline
areas of national jurisdiction in the 2019/20 season		

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 21-02:

- Access 1. Fishing for *Dissostichus mawsoni* on BANZARE Bank (Statistical Division 58.4.3b) outside areas of national jurisdiction shall be limited to longlines only.
- Catch limit 2. The total catch of *Dissostichus mawsoni* on BANZARE Bank (Statistical Division 58.4.3b) outside areas of national jurisdiction in the 2019/20 season shall not exceed a precautionary catch limit of 0 tonnes applied as follows:

SSRU A - 0 tonnes SSRU B - 0 tonnes SSRU C - 0 tonnes SSRU D - 0 tonnesSSRU E - 0 tonnes.

- Season
 3. For the purpose of the exploratory longline fishery for *Dissostichus mawsoni* on BANZARE Bank (Statistical Division 58.4.3b) outside areas of national jurisdiction, the 2019/20 season is defined as the period from 1 December 2019 to 30 November 2020, or until the catch limit is reached, whichever is sooner.
- By-catch 4. The by-catch in this fishery shall be regulated as set out in Conservation Measure 33-03.
- Mitigation 5. The operation of this fishery shall be carried out in accordance with Conservation Measure 25-02 so as to minimise the incidental mortality of seabirds in the course of fishing.
 - 6. Any vessel catching a total of three (3) seabirds shall immediately change to night setting only (i.e. setting only during the hours of darkness between the times of nautical twilight¹)².
- Observers 7. Each vessel participating in this fishery shall have at least one scientific observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation and, where possible, one additional scientific observer, on board throughout all fishing activities within the fishing period.

Data:
catch/effort8.For the purpose of implementing this conservation measure in the 2019/20
season, the following shall apply:

- (i) the Daily Catch and Effort Reporting System set out in Conservation Measure 23-07;
- the Monthly Fine-scale Catch and Effort Reporting System set out in Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis.
- 9. For the purpose of Conservation Measures 23-07 and 23-04, the target species is *Dissostichus mawsoni* (any *Dissostichus eleginoides* caught shall be counted towards the overall catch limit for *Dissostichus mawsoni*) and 'by-catch species' are defined as any species other than *Dissostichus* spp.
- Data:
biological10.Fine-scale biological data, as required under Conservation Measure 23-05,
shall be collected and recorded. Such data shall be reported in accordance
with the CCAMLR Scheme of International Scientific Observation.
- Research 11. Each vessel participating in this exploratory fishery shall conduct fishery-based research in accordance with the Research Plan and Tagging Program described in Conservation Measure 41-01, Annex 41-01/B and Annex 41-01/C respectively.
 - 12. Research shall be conducted in accordance with Conservation Measure 24-01.
 - 13. Toothfish shall be tagged at a rate of at least five fish per tonne green weight caught.

Environ- 14. Conservation Measure 26-01 applies.

mental protection

- 15. Conservation Measures 22-06, 22-07 and 22-08 apply.
 - ¹ The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).

Wherever possible, when night setting, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).

Conservation Measure 41-08 (2019) Limits on the fishery for <i>Dissostichus eleginoides</i> in Statistical Division 58.5.2 in the 2019/20 and 2020/21 seasons	Species Area Season	toothfish 58.5.2 2019/20, 2020/21
	Gear	various

- Access 1. The fishery for *Dissostichus eleginoides* in Statistical Division 58.5.2 shall be conducted by vessels using trawls, pots or longlines only.
- Catch limit 2. The total catch of *Dissostichus eleginoides* in Statistical Division 58.5.2 in the 2019/20 and 2020/21 seasons shall be limited to 3 030 tonnes in each season west of 79°20'E.
- Season
 3. For the purpose of the trawl and pot fisheries for *Dissostichus eleginoides* in Statistical Division 58.5.2, the 2019/20 and 2020/21 seasons are defined as the period from 1 December to 30 November in each season, or until the catch limit is reached, whichever is sooner. For the purpose of the longline fishery for *Dissostichus eleginoides* in Statistical Division 58.5.2, the 2019/20 and 2020/21 seasons are defined as the period from 1 May to 14 September in each season, or until the catch limit is reached, whichever is sooner. The season for longline fishing operations shall be extended from 1 April to 30 April and 15 September to 30 November. The extension period will be subject to a total catch limit of three (3) seabirds per vessel. If three (3) seabirds are caught during the season extension, fishing throughout the season extension shall cease immediately for that vessel for the remainder of that fishing season.
- By-catch 4. Fishing shall cease if the by-catch of any species reaches its by-catch limit as set out in Conservation Measure 33-02.
- Mitigation 5. The operation of the trawl fishery shall be carried out in accordance with Conservation Measure 25-03 so as to minimise the incidental mortality of seabirds and mammals through the course of fishing. The operation of the longline fishery shall be carried out in accordance with Conservation Measure 25-02.

During the periods 1 April to 30 April in the 2019/20 and 2020/21 seasons, vessels shall use IWL gear in conjunction with paired streamer lines.

Observers 6. Each vessel participating in this fishery shall have at least one scientific observer, and may include one appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period, with the exception of the period 1 April to 30 April when two scientific observers shall be carried.

Data: catch/effort

- 7. For the purpose of implementing this conservation measure, the following shall apply:
 - (i) the Ten-day Catch and Effort Reporting System set out in Annex 41-08/A;

- (ii) the Monthly Fine-scale Catch and Effort Reporting System set out in Annex 41-08/A. Fine-scale data shall be submitted on a haul-by-haul basis.
- 8. For the purpose of Annex 41-08/A, the target species is *Dissostichus eleginoides* and by-catch species are defined as any species other than *Dissostichus eleginoides*.
- 9. The total number and weight of *Dissostichus eleginoides* discarded, including those with the 'jellymeat' condition, shall be reported. These fish will count towards the total allowable catch.
- 10. Fine-scale biological data, as required under Annex 41-08/A, shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.

Environmental protection 11. Conservation Measure 26-01 applies.

Annex 41-08/A

Data reporting system

- 1. A ten-day catch and effort reporting system shall be implemented:
 - (i) for the purpose of implementing this system, the calendar month shall be divided into three reporting periods, viz: day 1 to day 10, day 11 to day 20 and day 21 to the last day of the month. The reporting periods are hereafter referred to as periods A, B and C;
 - (ii) at the end of each reporting period, each Contracting Party participating in the fishery shall obtain from each of its vessels information on total catch and total days and hours fished for that period and shall, by electronic transmission, transmit the aggregated catch and days and hours fished for its vessels so as to reach the Executive Secretary no later than the end of the next reporting period;
 - (iii) a report must be submitted by every Contracting Party taking part in the fishery for each reporting period for the duration of the fishery, even if no catches are taken;
 - (iv) the catch of *Dissostichus eleginoides* and of all by-catch species must be reported;
 - (v) such reports shall specify the month and reporting period (A, B and C) to which each report refers;
 - (vi) immediately after the deadline has passed for receipt of the reports for each period, the Executive Secretary shall notify all Contracting Parties engaged in fishing activities in the division of the total catch taken during the reporting period and the total aggregate catch for the season to date;

Data: biological

- 2. A fine-scale catch, effort and biological data reporting system shall be implemented:
 - (i) the scientific observer(s) on board each vessel shall collect the data required to complete the CCAMLR fine-scale catch and effort data form C1 for trawl fishing, form C2 for longline fishing, or form C5 for pot fishing, latest versions. These data shall be submitted to the CCAMLR Secretariat not later than one month after the vessel returns to port;
 - (ii) the catch of *Dissostichus eleginoides* and of all by-catch species must be reported;
 - (iii) the numbers of seabirds and marine mammals of each species caught and released or killed must be reported;
 - (iv) the scientific observer(s) on board each vessel shall collect data on the length composition from representative samples of *Dissostichus eleginoides* and by-catch species:
 - (a) length measurements shall be to the nearest centimetre below;
 - (b) representative samples of length composition shall be taken from each fine-scale grid rectangle (0.5° latitude by 1° longitude) fished in each calendar month;
 - (v) the above data shall be submitted to the CCAMLR Secretariat not later than one month after the vessel returns to port.

Conservation Measure 41-09 (2019)	Species	toothfish
Limits on the exploratory fishery for Dissostichus mawsoni	Area Season	88.1
in Statistical Subarea 88.1 in the 2019/20 season		2019/20
in Statistical Subarca 66.1 in the 2017/20 season	Gear	longline

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 21-02:

- Access
 1. Fishing for *Dissostichus mawsoni* in Statistical Subarea 88.1 shall be limited to the exploratory longline fishery by Australia, Chile, Japan, Republic of Korea, New Zealand, Russia, Spain, Ukraine, the UK and Uruguay. The fishery shall be conducted by a maximum in the season of one (1) Australian, one (1) Chilean, one (1) Japanese, four (4) Korean, three (3) New Zealand, three (3) Russian, one (1) Spanish, five (5) Ukrainian, three (3) UK and one (1) Uruguayan flagged vessel using longlines only.
- Catch limit 2. In accordance with Conservation Measure 91-05, paragraph 28, the precautionary catch limits for Statistical Subarea 88.2 small-scale research units (SSRUs) A–B are included in the catch limits in this paragraph.

The total catch of *Dissostichus mawsoni* in the 2019/20 season shall not exceed a precautionary catch limit of 3 140 tonnes applied as follows:

(i) all areas outside the Ross Sea region marine protected area and north of 70°S, which in Statistical Subarea 88.1 include SSRU A and SSRUs B, C and G –

597 tonnes

(ii) all areas outside the Ross Sea region marine protected area and south of 70°S, which in Statistical Subarea 88.1 include SSRUs G, H, I, J and K -

2 072 tonnes

(iii) Special Research Zone of the Ross Sea region marine protected area -

426 tonnes.

- A discrete research catch limit of 45 tonnes has been set aside in the 2019/20 season as follows:
 - (i) for the Ross Sea shelf survey notified by New Zealand under Conservation Measure 24-01, to be undertaken by the vessel San Aotea II 45 tonnes

This research catch limit is fixed and shall not be modified by any overrun of the individual or combined SSRU catch limits for target or by-catch species in Statistical Subarea 88.1.

Season 4. For the purpose of the exploratory longline fishery for *Dissostichus mawsoni* in Statistical Subarea 88.1, the 2019/20 season is defined as the period from 1 December 2019 to 31 August 2020.

Fishing operations

- 5. The exploratory longline fishery for *Dissostichus mawsoni* in Statistical Subarea 88.1 shall be carried out in accordance with the provisions of Conservation Measure 41-01, except paragraph 6.
- By-catch 6. The by-catch limits for Statistical Subarea 88.2 SSRUs A–B are included in the by-catch limits in this paragraph. This paragraph also applies to Statistical Subarea 88.2 SSRUs A–B.

The total by-catch¹ in the 2019/20 season shall not exceed a precautionary catch limit of 157 tonnes of skates and rays, and 485 tonnes of *Macrourus* spp. Within these total by-catch limits, individual limits will apply as follows:

(i) all areas outside the Ross Sea region marine protected area and north of 70°S, which in Statistical Subarea 88.1 include SSRU A and SSRUs B, C and G –

30 tonnes of skates and rays, 96 tonnes of *Macrourus* spp., 30 tonnes of other species

(ii) all areas outside the Ross Sea region marine protected area and south of 70°S, which in Statistical Subarea 88.1 include SSRUs G, H, I, J and K -

104 tonnes of skates and rays, 317 tonnes of *Macrourus* spp., 104 tonnes of other species

(iii) Special Research Zone of the Ross Sea region marine protected area -

23 tonnes of skates and rays, 72 tonnes of *Macrourus* spp., 23 tonnes of other species.

For the purposes of this paragraph '*Macrourus* spp.' and 'skates and rays' should each be counted as a single species.

During the 2019/20 season all live skates up to 15 per line shall be tagged in accordance with the CCAMLR tagging protocol and following the requirements of CM 41-01, Annex 41-01/C. Vessels may tag more than 15 skates per line and may also tag skates with a low probability of survival, provided the condition of the skate is recorded along with the tag number. In respect to any skates tagged, the species, disc width and injury category shall be recorded along with the tag numbers.

On all vessels, all skates and rays must be brought on board or alongside the vessel to be checked for tags and for their condition to be assessed. Recaptured tagged skates and rays, as per Conservation Measure 41-01, Annex 41-01/C, paragraphs 2(vii) and (ix), should not be re-released.

		Unless otherwise specified by scientific observers, all other skates and rays caught alive and with a high probability of survival should be released alive, by vessels, by cutting snoods, and when practical, removing the hooks, and the number should be recorded and reported to the Secretariat.
		If the by-catch of any one species is equal to, or greater than, 1 tonne in any one haul or set ² , then the fishing vessel shall move to another location at least 5 n miles ³ distant. The fishing vessel shall not return to any point within 5 n miles of the location where the by-catch exceeded 1 tonne for a period of at least five days ⁴ . The location where the by-catch exceeded 1 tonne is defined as the path ⁵ followed by the fishing vessel.
		If the catch of <i>Macrourus</i> spp. taken by a single vessel in any two 10-day periods ⁶ in any SSRU exceeds 1 500 kg in each 10-day period and exceeds 16% of the catch of <i>Dissostichus</i> spp. by that vessel in that SSRU, the vessel shall cease fishing in that SSRU for the remainder of the season.
Mitigation	7.	The exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Subarea 88.1 shall be carried out in accordance with the provisions of Conservation Measure 25-02.
	8.	Any vessel catching a total of three (3) seabirds shall immediately change to night setting only (i.e. setting only during the hours of darkness between the times of nautical twilight ⁷) ⁸ .
Observers	9.	Each vessel participating in the fishery shall have at least two scientific observers, one of whom shall be an observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period.
VMS	10.	Each vessel participating in this exploratory longline fishery shall be required to operate a VMS at all times, in accordance with Conservation Measure 10-04.
CDS	11.	Each vessel participating in this exploratory longline fishery shall be required to participate in the Catch Documentation Scheme for <i>Dissostichus</i> spp., in accordance with Conservation Measure 10-05.
Research	12.	Each vessel participating in this exploratory fishery shall conduct fishery-based research in accordance with the Research Plan and Tagging Program described in Conservation Measure 41-01, Annex 41-01/B and Annex 41-01/C respectively. The setting of research hauls (Conservation Measure 41-01, Annex 41-01/B, paragraphs 3 and 4) is not required.
	13.	Toothfish shall be tagged at a rate of at least one fish per tonne green weight caught in each SSRU.
Data: catch/effort	14.	For the purpose of implementing this conservation measure in the 2019/20 season, the following shall apply:

- (i) the Daily Catch and Effort Reporting System set out in Conservation Measure 23-07;
- (ii) the Monthly Fine-scale Catch and Effort Reporting System set out in Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis.
- For the purpose of Conservation Measures 23-07 and 23-04, the target 15. species is Dissostichus mawsoni (any Dissostichus eleginoides caught shall be counted towards the overall catch limit for Dissostichus mawsoni) and 'by-catch species' are defined as any species other than Dissostichus spp.

Fine-scale biological data, as required under Conservation Measure 23-05, 16. biological shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.

Environmental protection

Data:

- 17. Conservation Measure 26-01 applies.
- Conservation Measures 22-06, 22-07, 22-08 and 22-09 apply. 18.
 - 1 Total green weight caught, excluding individuals released alive.
 - 2 For the purposes of this conservation measure, for a longline, each haul applies to a single longline regardless of how contiguous sections of gear are connected.
 - 3 This provision concerning the minimum distance separating fishing locations is adopted pending the adoption of a more appropriate definition of a fishing location by the Commission. 4
 - The specified period is adopted in accordance with the reporting period specified in Conservation Measure 23-01, pending the adoption of a more appropriate period by the Commission.
 - 5 For a longline, the path is defined from the point at which the first anchor of a set was deployed to the point at which the last anchor of that set was deployed.
 - A 10-day period is defined as day 1 to day 10, day 11 to day 20, or day 21 to the last day of the month.
 - The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).
 - Wherever possible, when night setting, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).

Conservation Measure 41-10 (2019)	Species	toothfish
Limits on the exploratory fishery for Dissostichus mawsoni	Area	88.2
in Statistical Subarea 88.2 in the 2019/20 season	Season Gear	2019/20 longline

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 21-02:

Access
1. Fishing for *Dissostichus mawsoni* in Statistical Subarea 88.2 shall be limited in the 2019/20 season to the exploratory longline fishery by Australia, Chile, the Republic of Korea, New Zealand, Russia, Ukraine, UK and Uruguay. The fishery in small-scale research units (SSRUs) C, D, E, F, G, H and I shall be conducted by one (1) Australian, one (1) Chilean, four (4) Korean, three (3) New Zealand, three (3) Russian, five (5) Ukrainian, three (3) UK and two (2) Uruguayan flagged vessels using longlines only.

Catch limit 2. The total catch of *Dissostichus mawsoni* in Statistical Subarea 88.2 in the 2019/20 season shall not exceed a precautionary catch limit applied as follows:

- (i) SSRUs A and B outside the Ross Sea region marine protected area and north of 70°S – included in the catch limit in Conservation Measure 41-09, paragraph 2(i)
- (ii) SSRUs A and B outside the Ross Sea region marine protected area and south of 70°S – included in the catch limit in Conservation Measure 41-09, paragraph 2(ii)
- (iii) The part of SSRU A within the Special Research Zone of the Ross Sea region marine protected area – included in the catch limit in Conservation Measure 41-09, paragraph 2(iii)
- (iv) Research block 1 as defined in Annex 41-10/A 192 tonnes
- (v) Research block 2 as defined in Annex 41-10/A 232 tonnes
- (vi) Research block 3 as defined in Annex 41-10/A 182 tonnes
- (vii) Research block 4 as defined in Annex 41-10/A 128 tonnes
- (viii) SSRU H 160 tonnes
- (ix) SSRU I 0 tonnes.

Season

3. For the purpose of the exploratory longline fishery for *Dissostichus mawsoni* in Statistical Subarea 88.2, the 2019/20 season is defined as the period from 1 December 2019 to 31 August 2020.

- 4. The exploratory longline fishery for *Dissostichus mawsoni* in Statistical Subarea 88.2 shall be carried out in accordance with the provisions of Conservation Measure 41-01, except paragraph 6.
- By-catch 5. The by-catch in SSRU H and in each of the research blocks defined in Annex 41-10/A in Statistical Subarea 88.2 in the 2019/20 season shall be regulated as set out in Conservation Measure 33-03.

The by-catch in SSRUs A and B shall be regulated under Conservation Measure 41-09, paragraph 6.

- Mitigation 6. The exploratory longline fishery for *Dissostichus mawsoni* in Statistical Subarea 88.2 shall be carried out in accordance with the provisions of Conservation Measure 25-02.
 - 7. Any vessel catching a total of three (3) seabirds shall immediately change to night setting only (i.e. setting only during the hours of darkness between the times of nautical twilight¹)².
- Observers 8. Each vessel participating in the fishery shall have at least two scientific observers, one of whom shall be an observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period.
- VMS 9. Each vessel participating in this exploratory longline fishery shall be required to operate a VMS at all times, in accordance with Conservation Measure 10-04.
- CDS 10. Each vessel participating in this exploratory longline fishery shall be required to participate in the Catch Documentation Scheme for *Dissostichus* spp., in accordance with Conservation Measure 10-05.
- Research 11. The activities in SSRUs C, D, E, F, G and H will be conducted under the two-year data collection plan³.
 - 12. Each vessel participating in this exploratory fishery shall conduct fishery-based research in accordance with the Research Plan and Tagging Program described in Conservation Measure 41-01, Annex 41-01/B and Annex 41-01/C respectively. The setting of research hauls (Conservation Measure 41-01, Annex 41-01/B, paragraphs 3 and 4) is not required.
 - 13. Toothfish shall be tagged at a rate of at least three fish per tonne green weight caught in SSRU H and at a rate of at least three fish per tonne green weight in each of the research blocks in SSRUs C–G. Tag-overlap statistics shall be calculated separately for SSRU H; and SSRUs C, D, E, F and G combined.

Tagging in SSRUs A and B shall be in accordance with Conservation Measure 41-09, paragraph 13.

Data: 14. For the purpose of implementing this conservation measure in the catch/effort 2019/20 season, the following shall apply:

- the Daily Catch and Effort Reporting System set out in (i) Conservation Measure 23-07;
- the Monthly Fine-scale Catch and Effort Reporting System set out (ii) in Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis.
- 15. For the purpose of Conservation Measures 23-07 and 23-04, the target species is Dissostichus mawsoni (any Dissostichus eleginoides caught shall be counted towards the overall catch limit for Dissostichus mawsoni) and 'by-catch species' are defined as any species other than Dissostichus spp.
- Data: 16. Fine-scale biological data, required under Conservation as biological Measure 23-05, shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.

Environ-17. Conservation Measure 26-01 applies.

> Conservation Measures 22-06, 22-07 and 22-08 apply. 18.

- 1 The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).
- Wherever possible, when night setting, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels). As set out in SC-CAMLR-XXXIII, paragraph 3.173 (2014).

Annex 41-10/A

Research blocks

Research block 88.2_1 coordinates

73°48'S	108°00'W
73°48'S	105°00'W
75°00'S	105°00'W
75°00'S	108°00'W

Research block 88.2_2 coordinates

73°18'S	119°00'W
73°18'S	111°30'W
74°12'S	111°30'W
74°12'S	119°00'W

mental protection

Research block	88.2_3 coordinates
72°12'S	122°00'W
70°50'S	115°00'W
71°42'S	115°00'W
73°12'S	122°00'W
Research block	88.2_4 coordinates
72°36'S	140°00'W
72°36'S	128°00'W
74°42'S	128°00'W
74°42'S	140°00'W.

Conservation Measure 41-11 (2019)	Species	toothfish
Limits on the exploratory fishery for Dissostichus mawsoni	Area	58.4.1
in Statistical Division 58.4.1 in the 2019/20 season	Season	2019/20
	Gear	longline

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 21-02 and notes that this measure would be for one year and that data arising from these activities would be reviewed by the Scientific Committee:

Access	1.	Fishing for <i>Dissostichus mawsoni</i> in Statistical Division 58.4.1 shall be limited to the exploratory longline fishery. Directed fishing shall not take place in 2019/20.
	2.	This fishery shall be subject to the conditions in Conservation Measure 41-01, Annex 41-01/B.
Catch limit	3.	The total catch of <i>Dissostichus mawsoni</i> in Statistical Division 58.4.1 in the 2019/20 season shall not exceed a precautionary catch limit of 583 tonnes applied as follows:
		$\begin{array}{llllllllllllllllllllllllllllllllllll$
Season	4.	For the purpose of the exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Division 58.4.1, the 2019/20 season is defined as the period from 1 December 2019 to 30 November 2020.
Fishing operations	5.	The exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Division 58.4.1 shall be carried out in accordance with the provisions of Conservation Measure 41-01, except paragraph 6.
By-catch	6.	The by-catch in this fishery shall be regulated as set out in Conservation Measure 33-03.
Mitigation	7.	The exploratory longline fishery for <i>Dissostichus mawsoni</i> in Statistical Division 58.4.1 shall be carried out in accordance with the provisions of Conservation Measure 25-02.
	8.	Any vessel catching a total of three (3) seabirds shall immediately change to night setting only (i.e. setting only during the hours of darkness between the times of nautical twilight ¹) ² .

Observers	9.	Each vessel participating in the fishery shall have at least two scientific observers, one of whom shall be an observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period.		
Research	10.	Each vessel participating in this exploratory fishery shall conduct fishery-based research in accordance with the Research Plan and Tagging Program described in Conservation Measure 41-01, Annex 41-01/B and Annex 41-01/C respectively.		
	11.	Toothfish shall be tagged at a rate of at least five fish per tonne green weight caught.		
Data: catch/effort	12.	For the purpose of implementing this conservation measure in the 2019/20 season, the following shall apply:		
		 the Daily Catch and Effort Reporting System set out in Conservation Measure 23-07; 		
		 (ii) the Monthly Fine-scale Catch and Effort Reporting System set out in Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis; 		
		(iii) fishing vessels undertaking research in accordance with Conservation Measure 24-01 shall report data in accordance with the requirements (i) to (ii) above.		
	13.	For the purpose of Conservation Measures 23-07 and 23-04, the target species is <i>Dissostichus mawsoni</i> (any <i>Dissostichus eleginoides</i> caught shall be counted towards the overall catch limit for <i>Dissostichus mawsoni</i>) and 'by-catch species' are defined as any species other than <i>Dissostichus</i> spp.		
Data: biological	14.	Fine-scale biological data, as required under Conservation Measure 23-05, shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.		
Environ- mental protection	15.	Conservation Measure 26-01 applies.		
	16.	There shall be no offal ³ discharge in this fishery.		
	17.	Conservation Measures 22-06, 22-07, 22-08 and 22-09 apply.		
		¹ The exact times of nautical twilight are set forth in the Nautical Almanac tables for the relevant latitude, local time and date. A copy of the algorithm for calculating these times is available from the CCAMLR Secretariat. All times, whether for ship operations or observer reporting, shall be referenced to Coordinated Universal Time (UTC).		

Wherever possible, when night setting, setting of lines should be completed at least three hours before sunrise (to reduce loss of bait to/catches of white-chinned petrels).

³ 'Offal' is defined as bait and by-products from the processing of fish and other organisms, including parts or sections of fish or organisms which are by-products of processing.

Annex 41-11/A

Research blocks

Research block 58.4	1.1.1 coordinates
64°30'S	90°00'E
66°00'S	90°00'E
66°00'S	90'00'E 94°00'E
65°30'S	94°00'E 94°00'E
65°30'S	95°00'E
64°00'S	95°00'E
64°00'S	92°00'E
64°30'S	92°00'E
D	
Research block 58.4	
62°30'S	96°00'E
64°00'S	96°00'E
64°00'S	97°00'E
65°00'S	97°00'E
65°00'S	100°00'E
62°30'S	100°00'E
Research block 58.4	4.1_3 coordinates
64°00'S	112°00'E
66°00'S	112°00'E
66°00'S	115°00'E
64°00'S	115°00'E
Research block 58.4	4.1_4 coordinates
64°30'S	118°00'E
66°00'S	118°00'E
66°00'S	120°00'E
64°30'S	120°00'E
Research block 58.4	4.1 5 coordinates
64°30'S	137°00'E
66°00'S	137°00'E
66°00'S	138°00'E
66°30'S	138°00'E
66°30'S	140°00'E
64°30'S	140°00'E 140°00'E
04 30 5	140 00 L

Research block 58.4.1_6 coordinates

64°00'S	130°00'E
65°30'S	130°00'E
65°30'S	134°00'E
64°00'S	134°00'E

Conservation Measure 42-01 (2019)	Species	icefish
Limits on the fishery for <i>Champsocephalus gunnari</i>		
in Statistical Subarea 48.3 in the 2019/20 and 2020/21 seasons	Season	2019/20,
in Stausulai Subarea 40.5 in uie 2019/20 anu 2020/21 seasons		2020/21
	Gear	trawl

The Commission hereby adopts the following conservation measure in accordance with Conservation Measure 31-01:

- Access 1. The fishery for *Champsocephalus gunnari* in Statistical Subarea 48.3 shall be conducted by vessels using trawls only. The use of bottom trawls in the directed fishery for *Champsocephalus gunnari* in Statistical Subarea 48.3 is prohibited.
 - 2. Fishing for *Champsocephalus gunnari* shall be prohibited within 12 n miles of the coast of South Georgia during the period 1 March to 31 May.
- Catch limit 3. The total catch of *Champsocephalus gunnari* in Statistical Subarea 48.3 in the 2019/20 season shall be limited to 3 225 tonnes and in the 2020/21 season shall be limited to 2 132 tonnes.
 - 4. Where any haul contains more than 100 kg of *Champsocephalus gunnari*, and more than 10% of *Champsocephalus gunnari* by number are smaller than 240 mm total length, the fishing vessel shall move to another fishing location at least 5 n miles distant¹. The fishing vessel shall not return to any point within 5 n miles of the location where the catch of small *Champsocephalus gunnari* exceeded 10% for a period of at least five days². The location where the catch of small *Champsocephalus gunnari* exceeded 10% for a period of at least five days². The location where the catch of small *Champsocephalus gunnari* exceeded 10% is defined as the path followed by the fishing vessel from the point at which the fishing gear was first deployed from the fishing vessel.
- Season 5. For the purpose of the trawl fishery for *Champsocephalus gunnari* in Statistical Subarea 48.3, the 2019/20 and 2020/21 seasons are defined as the period from 1 December to 30 November in each season, or until the catch limit is reached, whichever is sooner.
- 6. The by-catch in this fishery shall be regulated as set out in Conservation Measure 33-01. If, in the course of the directed fishery for *Champsocephalus gunnari*, the by-catch in any one haul of any of the species named in Conservation Measure 33-01 is greater than 100 kg and exceeds 5% of the total catch of all fish by weight, or is equal to, or greater than, 2 tonnes, then the fishing vessel shall move to another location at least 5 n miles distant¹. The fishing vessel shall not return to any point within 5 n miles of the location where the by-catch of species named in Conservation Measure 33-01 exceeded 5% for a period of at least five days². The location where the by-catch exceeded 5% is defined as the path followed by the

fishing vessel from the point at which the fishing gear was first deployed from the fishing vessel to the point at which the fishing gear was retrieved by the fishing vessel.

- Mitigation 7. The operation of this fishery shall be carried out in accordance with Conservation Measure 25-03 so as to minimise the incidental mortality of seabirds in the course of the fishery. Vessels shall use net binding³ and consider adding weight to the codend to reduce seabird captures during shooting operations.
 - 8. Should any vessel catch a total of 20 seabirds in a season, it shall cease fishing and shall be excluded from further participation in the fishery in that season.
- Observers 9. Each vessel participating in this fishery shall have at least one scientific observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation and, where possible, one additional scientific observer, on board throughout all fishing activities within the fishing period.
- Data:
catch/effort10.For the purpose of implementing this conservation measure in the 2019/20
and 2020/21 seasons, the following shall apply:
 - (i) the Five-day Catch and Effort Reporting System set out in Conservation Measure 23-01;
 - (ii) the Monthly Fine-scale Catch and Effort Reporting System set out in Conservation Measure 23-04. Fine-scale data shall be submitted on a haul-by-haul basis.
 - 11. For the purpose of Conservation Measures 23-01 and 23-04, the target species is *Champsocephalus gunnari* and 'by-catch species' are defined as any species other than *Champsocephalus gunnari*.
 - 12. Fine-scale biological data, as required under Conservation Measure 23-05, shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.

Conservation Measure 26-01 applies.

- ¹ This provision concerning the minimum distance separating fishing locations is adopted pending the adoption of a more appropriate definition of a fishing location by the Commission.
- ² The specified period is adopted in accordance with the reporting period specified in Conservation Measure 23-01, pending the adoption of a more appropriate period by the Commission.
- ³ The following guidelines are provided to assist in the uptake of best-practice mitigation measures:
 - (i) When the net is on the deck, prior to shooting, the application of 3-ply sisal string (which typically has a breaking strength of around 110 kg), or a similar organic/biodegradable material, at intervals of 5 m or less prevents the net from spreading and lofting at the surface. Net binding should be applied to mesh

Environ-

biological

Data:

mental protection

13.

ranging from 120 to 800 mm. These mesh sizes have been shown to cause the majority of entanglements of white-chinned petrels and black-browed albatrosses, which are the species most vulnerable to this form of mortality in Statistical Subarea 48.3.

- (ii) When applying the 'string', tie an end to the net to prevent the string from slipping down the net and ensure that it can be removed when the net is hauled.
- (iii) Since 2003, weights of 200–1 250 kg have been added to the codend, belly, mouth and groundrope of the net to increase the sink rate and increase the angle of the net's ascent during hauling, thus minimising surface net time. Evidence suggests that this has been effective in reducing bird entanglements during the haul. Vessels are encouraged to further experiment with appropriate net weighting.
- (iv) Net cleaning should be used in conjunction with added weight and net binding to reduce seabird captures during shooting operations.
- (v) Other additional steps should be taken to minimise the time that the net is on the water's surface during shooting and hauling.

Conservation Measure 42-02 (2019) Limits on the fishery for <i>Champsocephalus gunnari</i> in Statistical Division 58.5.2 in the 2019/20 and 2020/21 seasons	Species Area Season	icefish 58.5.2 2019/20, 2020/21
	Gear	trawl

- Access 1. The fishery for *Champsocephalus gunnari* in Statistical Division 58.5.2 shall be conducted by vessels using trawls only.
 - 2. For the purpose of this fishery for *Champsocephalus gunnari*, the area open to the fishery is defined as that portion of Statistical Division 58.5.2 that lies within the area enclosed by a line:
 - starting at the point where the meridian of longitude 72°15'E intersects the Australia–France Maritime Delimitation Agreement Boundary then south along the meridian to its intersection with the parallel of latitude 53°25'S;
 - (ii) then east along that parallel to its intersection with the meridian of longitude 74°E;
 - (iii) then northeasterly along the geodesic to the intersection of the parallel of latitude $52^{\circ}40$ 'S and the meridian of longitude $76^{\circ}E$;
 - (iv) then north along the meridian to its intersection with the parallel of latitude 52°S;
 - (v) then northwesterly along the geodesic to the intersection of the parallel of latitude 51°S with the meridian of longitude 74°30'E;
 - (vi) then southwesterly along the geodesic to the point of commencement.
 - 3. A chart illustrating the above definition is appended to this conservation measure (Annex 42-02/A). Areas in Statistical Division 58.5.2 outside that defined above shall be closed to directed fishing for *Champsocephalus gunnari*.
- Catch limit 4. The total catch of *Champsocephalus gunnari* in Statistical Division 58.5.2 in the 2019/20 season shall be limited to 527 tonnes and 406 tonnes in the 2020/21 season.
 - 5. Where any haul contains more than 100 kg of *Champsocephalus gunnari*, and more than 10% of *Champsocephalus gunnari* by number are smaller than the specified minimum legal total length, the fishing vessel shall move to another fishing location at least 5 n miles distant¹. The fishing vessel shall not return to any point within 5 n miles of the location where the catch of small *Champsocephalus gunnari* exceeded 10% for a period of at least five days². The location where the catch of small *Champsocephalus*

gunnari exceeded 10% is defined as the path followed by the fishing vessel from the point at which the fishing gear was first deployed from the fishing vessel to the point at which the fishing gear was retrieved by the fishing vessel. The minimum legal total length shall be 240 mm.

- Season
 6. For the purpose of the trawl fishery for *Champsocephalus gunnari* in Statistical Division 58.5.2, the 2019/20 and 2020/21 seasons are defined as the period from 1 December to 30 November in each season, or until the catch limit is reached, whichever is sooner.
- By-catch 7. Fishing shall cease if the by-catch of any species reaches its by-catch limit as set out in Conservation Measure 33-02.
- Mitigation 8. The operation of this fishery shall be carried out in accordance with Conservation Measure 25-03 so as to minimise the incidental mortality of seabirds in the course of fishing.
- Observers 9. Each vessel participating in this fishery shall have at least one scientific observer, and may include one appointed in accordance with the CCAMLR Scheme of International Scientific Observation, on board throughout all fishing activities within the fishing period.

Data:
catch/effort10.For the purpose of implementing this conservation measure in the 2019/20
and 2020/21 seasons, the following shall apply:

- (i) the Ten-day Catch and Effort Reporting System set out in Annex 42-02/B;
- (ii) the Monthly Fine-scale Catch and Effort Reporting System set out in Annex 42-02/B. Fine-scale data shall be submitted on a haul-by-haul basis.
- 11. For the purpose of Annex 42-02/B, the target species is *Champsocephalus* gunnari and 'by-catch species' are defined as any species other than *Champsocephalus gunnari*.
- 12. Fine-scale biological data, as required under Annex 42-02/B, shall be collected and recorded. Such data shall be reported in accordance with the CCAMLR Scheme of International Scientific Observation.

Environmental protection

biological

Data:

- 13. Conservation Measure 26-01 applies.
 - ¹ This provision concerning the minimum distance separating fishing locations is adopted pending the adoption of a more appropriate definition of a fishing location by the Commission.
 - ² The specified period is adopted in accordance with the reporting period specified in Conservation Measure 23-01, pending the adoption of a more appropriate period by the Commission.

Annex 42-02/A

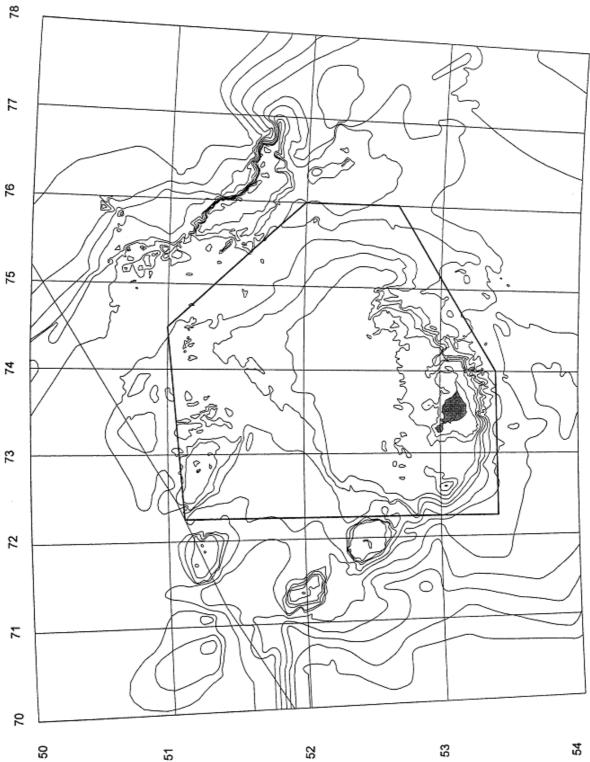


Chart of the Heard Island Plateau

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Data reporting system

- 1. A ten-day catch and effort reporting system shall be implemented:
 - (i) for the purpose of implementing this system, the calendar month shall be divided into three reporting periods, viz: day 1 to day 10, day 11 to day 20 and day 21 to the last day of the month. The reporting periods are hereafter referred to as periods A, B and C;
 - (ii) at the end of each reporting period, each Contracting Party participating in the fishery shall obtain from each of its vessels information on total catch and total days and hours fished for that period and shall, by electronic transmission, transmit the aggregated catch and days and hours fished for its vessels so as to reach the Executive Secretary no later than the end of the next reporting period;
 - (iii) a report must be submitted by every Contracting Party taking part in the fishery for each reporting period for the duration of the fishery, even if no catches are taken;
 - (iv) the catch of *Champsocephalus gunnari* and of all by-catch species must be reported;
 - (v) such reports shall specify the month and reporting period (A, B and C) to which each report refers;
 - (vi) immediately after the deadline has passed for receipt of the reports for each period, the Executive Secretary shall notify all Contracting Parties engaged in fishing activities in the division of the total catch taken during the reporting period and the total aggregate catch for the season to date;
 - (vii) at the end of every three reporting periods, the Executive Secretary shall inform all Contracting Parties of the total catch taken during the three most recent reporting periods and the total aggregate catch for the season to date.
- 2. A fine-scale catch, effort and biological data reporting system shall be implemented:
 - (i) the scientific observer(s) on board each vessel shall collect the data required to complete the CCAMLR fine-scale catch and effort data form C1, latest version. These data shall be submitted to the CCAMLR Secretariat not later than one month after the vessel returns to port;
 - (ii) the catch of *Champsocephalus gunnari* and of all by-catch species must be reported;
 - (iii) the numbers of seabirds and marine mammals of each species caught and released or killed must be reported;
 - (iv) the scientific observer(s) on board each vessel shall collect data on the length composition from representative samples of *Champsocephalus gunnari* and by-catch species:
 - (a) length measurements shall be to the nearest centimetre below;

- (b) representative samples of length composition shall be taken from each fine-scale grid rectangle (0.5° latitude by 1° longitude) fished in each calendar month;
- (v) the above data shall be submitted to the CCAMLR Secretariat not later than one month after the vessel returns to port.

Conservation Measure 51-04 (2019) General measure for exploratory fisheries for *Euphausia superba* in the Convention Area in the 2019/20 season

Species	krill
Area	various
Season	2019/20
Gear	various

The Commission hereby adopts the following conservation measure:

- 1. This conservation measure applies to exploratory fisheries for Antarctic krill (*Euphausia superba*), except for such fisheries where the Commission has given specific exemptions, and only to the extent of those exemptions.
- 2. Fishing in any statistical subarea or division shall cease when the reported catch reaches the specified catch limit¹ and that subarea or division shall be closed to fishing for the remainder of the season. No more than 75% of the catch limit shall be taken within 60 n miles of known breeding colonies of land-based krill-dependent predators.
- 3. In order to give effect to paragraph 2 above:
 - (i) the precise geographic position of a trawl haul will be determined by the midpoint of the path between the start point and end point of the haul for the purposes of catch and effort reporting;
 - (ii) for the purposes of this conservation measure, fishing is defined as any time that fishing gear, conventional trawls, pumped codends and continuous pumping gear are in the water;
 - (iii) the Secretariat shall notify Contracting Parties participating in these fisheries when the total catch of *Euphausia superba* combined in any statistical subarea or division is likely to reach the specified catch limit, and of the closure of that subarea or division when that limit is reached². No part of a trawl path may lie within a closed subarea or division.
- 4. The total green weight of krill caught and lost shall be reported.
- 5. Each vessel participating in the exploratory fisheries for krill during the 2019/20 season shall have one observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation and, where possible, one additional scientific observer, on board throughout all fishing activities within the fishing season.
- 6. The Data Collection Plan (Annex 51-04/A) and Research Plan (Annex 51-04/B) shall be implemented. Data collected pursuant to the Data Collection and Research Plans for the period up to 1 May 2020 shall be reported to CCAMLR by 1 June 2020 so that the data will be available to the meeting of the Working Group on Ecosystem Monitoring and Management (WG-EMM) in 2020. Such data taken after 1 June 2020 shall be reported to CCAMLR not later than three months after the closure of the fishery, but, where possible, submitted in time for the consideration of the Scientific Committee.
- 7. Contracting Parties choosing not to participate in the fishery prior to the commencement of the fishery shall inform CCAMLR of changes in their plans no later than one month before the start of the fishery. If, for whatever reason, Contracting Parties are unable to

51-04

participate in the fishery, they shall inform CCAMLR no later than one week after finding that they cannot participate. The Secretariat will inform all Contracting Parties immediately after such notification is received.

- 8. The use of marine mammal exclusion devices on trawls is mandatory.
 - ¹ Unless otherwise specified, the catch limit for krill shall be 15 000 tonnes in any statistical subarea or division.
 - ² The closure of fisheries is governed by Conservation Measure 31-02.

Annex 51-04/A

Data Collection Plans for exploratory krill fisheries

- 1. During normal fishing operations, all vessels will comply with the Ten-day Catch and Effort Reporting System (Conservation Measure 23-02) and the Monthly Fine-scale Catch, Effort and Biological Data Reporting Systems (Conservation Measures 23-04 and 23-05), including requirements for the provision of haul-by-haul data.
- 2. During normal fishing operations, all data specified in the Observer Krill Trawl logbook and *Scientific Observer's Manual Krill Fisheries* will be collected.
- 3. Detailed information on the configuration of every commercial trawl used during normal fishing operations and every research net used during required research operations will be reported to CCAMLR in accordance with Conservation Measure 21-03, Annex 21-03/A, no later than one month after the conclusion of each fishing trip.
- 4. Data collected from research net hauls shall include:
 - (i) the start and end positions and times of the haul;
 - (ii) the date on which the haul was conducted;
 - (iii) characteristics of the haul such as tow speed, the maximum amount of wire payed out during a tow, the average wire angle during the tow, and calibrated flow-meter values that can be used to provide accurate measures of volume filtered;
 - (iv) an estimate of the total catch (in numbers or weight) of krill; and
 - (v) a random sample of up to 200 krill or the entire catch, whichever is less, to be taken from the haul by the observer the length, sex and maturity stage should be measured and recorded for all krill according to protocols specified in the Observer Krill Trawl logbook and <u>Scientific Observer's Manual Krill Fisheries</u>.
 - 5. At a minimum, data collected from acoustic transects shall:
 - (i) as far as possible, be recorded following protocols specified for the CCAMLR-2000 Survey;
 - (ii) be linked to position data recorded from a GPS;

- (iii) be continuously recorded and then electronically archived every five days or whenever the vessel moves between exploratory units, whichever occurs most frequently.
- 6. Data collected during research operations conducted by fishing vessels shall be reported to CCAMLR no later than one month after the conclusion of each fishing trip.
- 7. Data collected by Contracting Parties conducting fishery-independent research operations shall, as applicable, be submitted to CCAMLR following guidelines for the submission of CEMP data and data collected during the CCAMLR-2000 Survey. These data shall be submitted in sufficient time to be considered by the next meeting of the Working Group on Ecosystem Monitoring and Management (WG-EMM).

Annex 51-04/B

Research Plans for exploratory krill fisheries

- 1. Activities under this Research Plan shall not be exempted from any conservation measure in force.
- 2. This plan applies to all subareas or divisions.
- 3. A schematic representation of the plans described herein is provided in Figure 1.
- 4. Contracting Parties intending to conduct exploratory krill fisheries shall choose one of the following four Research and Data Collection Plans and advise CCAMLR of their choice at least one month prior to initiating any fishing activities:
 - (i) predator monitoring;
 - (ii) a research survey conducted from a scientific vessel;
 - (iii) acoustic transects by fishing vessels; or
 - (iv) research trawls by fishing vessels.
- 5. Where a Contracting Party's vessel collaborates with a research institute to conduct the research plan, the Contracting Party shall identify the collaborating institute.
- 6. In cases where Contracting Parties select plan (i), predator monitoring, from the list in paragraph 4 above, those Parties shall, as far as possible, follow CEMP Standard Methods. Monitoring shall be conducted for a period of time sufficient both to cover the entire breeding period of land-based predators and to cover the duration of any exploratory fishing that occurs during their breeding season.
- 7. In cases where Contracting Parties select plan (ii), a research survey conducted from a scientific vessel, from the list in paragraph 4 above, Contracting Parties shall, as far as possible, follow all data collection and analysis protocols specified for the CCAMLR-2000 Survey.
- 8. In cases where Contracting Parties select plans (iii), acoustic transects by fishing vessels, or (iv), research trawls by fishing vessels, from the list in paragraph 4 above, vessels

participating in exploratory krill fisheries may carry out the research plan either before (preferred option) or after normal exploratory fishing operations. The research requirements must be completed within a fishing season.

- 9. For the purposes of this conservation measure, exploratory units are defined as areas of 1° latitude by 1° longitude size, and the vertices of these units shall occur at integer points of latitude and longitude within statistical subareas or divisions.
- 10. If the vessel undertakes plan (iii), acoustic transects by fishing vessels, or plan (iv), research trawls by fishing vessels, before normal exploratory fishing operations, then the research plan shall be conducted as follows:
 - (i) undertake a research plan for the exploratory units based on the area where it intends to fish;
 - (ii) during normal exploratory fishing operations, vessels can choose to fish in any exploratory unit;
 - (iii) complete additional research operations so that the number of exploratory units in which research operations are conducted by the end of fishing is greater than, or equal to, the catch obtained during normal fishing operations divided by 2 000 tonnes;
 - (iv) carry out its work so that exploratory units in which research operations are conducted surround and include the units where normal fishing operations are conducted.
- 11. If the vessel undertakes plan (iii), acoustic transects by fishing vessels, or plan (iv), research trawls by fishing vessels, after normal exploratory fishing operations, then the research plan shall be conducted as follows:
 - during normal exploratory fishing operations, vessels can choose to fish in any exploratory unit, however, one set of acoustic transects or one set of research hauls must be conducted in each exploratory unit visited during normal fishing operations;
 - (ii) upon completion (either voluntarily or if the catch limit has been reached) of normal exploratory fishing operations, the vessel will transit to the nearest previously unvisited exploratory unit and begin research operations;
 - (iii) the vessel will determine how many previously unvisited exploratory units must be surveyed during research operations by dividing the catch obtained during normal exploratory fishing operations by 2 000 tonnes and rounding that number to the nearest integer;
 - (iv) the vessel will then select a number of exploratory units equal to the number of units determined by the calculation in item 11(ii) above and conduct one set of acoustic transects or one set of research hauls in each of these units;
 - (v) exploratory units visited during research operations must not have been visited during normal exploratory fishing operations;

- (vi) the survey will be conducted in a way that ensures the exploratory units visited during research operations will surround the units in which normal exploratory fishing operations previously occurred.
- 12. Research hauls shall be conducted with nekton trawls commonly used in scientific research (e.g. IKMT or RMT type nets) that have 4–5 mm mesh, including the codend. Every research haul shall be a randomly located oblique haul made to a depth of 200 m or 25 m above the bottom (whichever is less) with a duration of 0.5 h. A set of research hauls is defined as three research hauls separated by a minimum of 10 n miles.
- 13. Acoustic transects shall be conducted using a scientific-quality echosounder collecting information at a minimum frequency of 38 kHz with a minimum observing depth of 200 m. The echosounder should be calibrated prior to the vessel leaving port and, to the extent possible, on the actual fishing ground, and calibration data shall be reported with research transect data. If a vessel is unable to calibrate its echosounder on the fishing grounds:
 - (i) acoustic transects comparable with transects visited in previous fishing seasons should be conducted on subsequent visits;
 - (ii) vessels undertaking continuous trawling should attempt to match some acoustic observations with respective trawl catches since they may be able to trawl more or less immediately after acoustic data have been recorded.

Every acoustic transect shall be a randomly located continuous path travelled at constant speed of 10 knots or less and in a constant direction. The minimum distance between the start and end points of a transect shall be 30 n miles, and a set of acoustic transects is defined as two transects separated by at least 10 n miles.

14. All acoustic transects, both during normal exploratory fishing operations and research operations, shall be accompanied by at least one net haul. These hauls can be conducted either with commercial trawls or with research trawls. Trawls that accompany acoustic transects can be conducted during the transect or immediately after the completion of the transect. In the latter case, the trawl shall be conducted along a previous segment of the transect line. Trawls that accompany acoustic transects shall be at least 0.5 h in duration, or of sufficient time to achieve a representative sample, and the data collected from these hauls shall be the same as those required for research hauls.

This is a preliminary version of the conservation measures– further checking and verification is to be done by the Secretariat

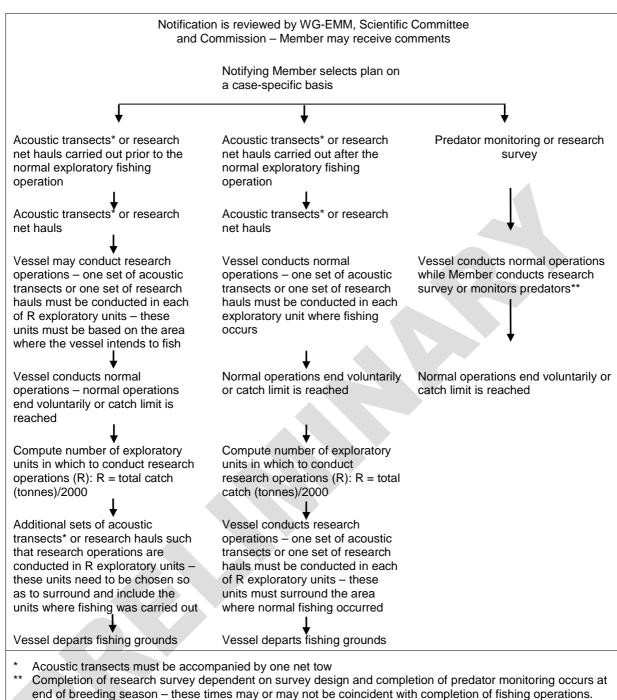


Figure 1: Schematic description of main operations to be conducted during the planning and prosecution of exploratory krill fisheries.

51-04

This is a preliminary version of the conservation measuresfurther checking and verification is to be done by the Secretariat

Conservation Measure 51-06 (2019)
General measure for scientific observation in fisheries
for Euphausia superba

Species	krill
Area	all
Season	all
Gear	all

The Commission,

Recognising the importance of krill within the Antarctic ecosystem,

Noting the increased demand for krill products and the expansion in krill fisheries,

Mindful of major data gaps in biological data reporting in most areas of this fishery,

<u>Reaffirming</u> the need for adequate monitoring and management of the krill fishery to ensure that it remains consistent with the objective of the Convention,

<u>Bearing in mind</u> the recommendation of the Scientific Committee that scientific observer coverage is required in the krill fishery, and that in order to determine an appropriate deployment scheme, which will deliver adequate data for its assessments of the impact of the krill fishery on the ecosystem, the Scientific Committee has recommended an initial comprehensive and systematic approach to observer coverage, such as a 100% observer coverage on krill vessels.

hereby adopts the following conservation measure in accordance with Article IX.2(i) of the Convention:

- 1. Each Contracting Party shall make best efforts to ensure that its fishing vessels engaging in the krill fishery carry on board at least one scientific observer appointed in accordance with the CCAMLR Scheme of International Scientific Observation or any other observer appointed by the Contracting Party¹ and, where possible, one additional scientific observer, throughout all fishing activities in all fishing seasons.
- 2. Unless specified in any other conservation measure, each Contracting Party shall ensure that its fishing vessels engaging in the krill fishery carry out a systematic scientific observer coverage scheme in accordance with the CCAMLR Scheme of International Scientific Observation, or by any other observer appointed by the Contracting Party¹, throughout all fishing activities in all fishing seasons.
- 3. The systematic observer coverage scheme referred to in paragraph 2 above shall entail:
 - (i) a target coverage rate of no less than 50% of vessels during the 2016/17 and 2017/18 fishing seasons; no less than 75% of vessels during the 2018/19 and 2019/20 fishing seasons; and 100% coverage in subsequent fishing seasons;
 - (ii) vessels shall ensure that the scientific observer has access to sufficient samples to fulfil the sampling and data collection as per the requirements specified in the Observer Krill Trawl logbook and <u>Scientific Observer's Manual Krill Fisheries</u>²;
 - (iii) all vessels being observed at least once every two fishing seasons until 100% coverage is in force.

51-06

- 4. For the purpose of implementing this conservation measure, the data requirements set out in Conservation Measure 23-06 apply.
- 5. Total green weight of krill caught and brought on board shall be reported. The method used to estimate green weight shall be reported in accordance with the requirements of Conservation Measure 21-03. An estimate of the total green weight of krill caught but not brought on board is encouraged to be reported as a separate category.
 - ¹ The scientific data collection and sampling protocols followed by a Contracting Party appointed observer shall conform to the requirements of the CCAMLR Scheme of International Scientific Observation and the protocols specified in the Observer Krill Trawl logbook and <u>Scientific Observer's</u> <u>Manual – Krill Fisheries</u>, including application of the priorities and work plan defined by the Scientific Committee. Data and observer reports shall be submitted to CCAMLR according to the requirements of the CCAMLR Scheme of International Scientific Observation for inclusion in the CCAMLR database and analysis by the Scientific Committee and its working groups.
 - ² This includes three-day sampling intervals during the period November–February and five-day sampling intervals between March and October for krill length measurements, and sampling according to the instructions in the observer logbook for finfish by-catch.

This is a preliminary version of the conservation measuresfurther checking and verification is to be done by the Secretariat

CCAMLR Notification Fees Procedure

CCAMLR Notification Fees Procedure

- 1. The Secretariat shall include an annual CPI adjustment to notification fees in its annual budget papers, presented to the Commission in October each year.
- 2. The Secretariat shall inform Members, by COMM CIRC in mid-April each year, of the relevant fees, deadlines and relevant procedures for all notification types.
- 3. The Secretariat shall invoice Members as appropriate after the notification deadline and prior to the fee deadline each year.
- 4. The Secretariat shall report annually to the Commission on the notifications made within these deadlines.
- 5. If notification under CM 24-01, or in any other fishery, does not proceed because of a decision of the Commission, the notifying Member(s) shall receive a refund of the whole fee. In all other circumstances, a fee will not be refunded.

Type of fishery	Notification unit	Notification requirements	Notification deadline	Applicable fee	Fee deadline
Exploratory fishery for toothfish or other non-krill species where there is an existing specific conservation measure	One notification per vessel per fishing season per conservation measure	CM 21-02	1 June	Non-krill fee	1 July
New or exploratory fisheries for non-krill species that are not subject to an existing conservation measure	One notification per vessel per fishing season per subarea/division	CM 21-01, CM 21-02	1 June	Non-krill fee	1 July
Established krill fisheries	One notification per vessel per fishing season per krill fishery conservation measure	CM 21-03. For notifications under CM 51-01 (Area 48) the notification shall also specify the subareas that will be fished	1 June	Krill fee	1 July
New or exploratory fisheries for krill that are not subject to an existing conservation measure	One notification per vessel per subarea/division	CM 21-01, CM 21-02	1 June	Krill fee	1 July
Fisheries under CM 24-01, paragraph 3: proposals for a single vessel	One notification per research plan, as listed as a row in CM 24-05, Table 1	CM 24-01	1 June	50% of the non-krill fee	1 July
Fisheries under CM 24-01, paragraph 3: proposals involving more than one vessel	One notification per research plan, as listed as a row in CM 24-05, Table 1	CM 24-01	1 June	Non-krill fee The fee will be divided between Members participating in the research plan, as decided by them	1 July

This is a preliminary version of the conservation measuresfurther checking and verification is to be done by the Secretariat