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

- \Box Conventional trawl
- □ Continuous fishing system
- □ Pumping to clear codend
- \Box 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).

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	Haul ¹ -specific Haul ¹ -specific	Direct observation Direct observation	litre kg
		ρ = density of krill paste	Variable	Direct observation	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>	$M_{\text{tray}} = \text{mass of empty tray}$ 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	$M_{\rm meal}*MCF$	$M_{\text{meal}} = \text{mass of meal produced}$ MCF = meal conversion factor	Haul-specific Variable	Direct observation Meal to whole krill conversion	kg -
Codend volume	<i>W</i> * <i>H</i> * <i>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				

Guidelines for estimating the green weight of krill caught

Individual haul when using a conventional trawl, or integrated over a six-hour period when using the continuous fishing system.
 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 (ρ) 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	Estimate the green weight of him eaught (asing equation)
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:
5	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 month¹ 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.