ANNEX V

CCAMLR CONVENTION AREA

PART A

PROHIBITION OF DIRECTED FISHING IN CCAMLR CONVENTION AREA

Target species	Zone	Period of prohibition
Sharks (all species)	Convention Area	From 1 January to 31 December 2018
Notothenia rossii	FAO 48.1. Antarctic, in the Peninsula Area FAO 48.2. Antarctic, around the South Orkneys FAO 48.3. Antarctic, around South Georgia	From 1 January to 31 December 2018
Finfish	FAO 48.1. Antarctic ^a FAO 48.2. Antarctic ^a	From 1 January to 31 December 2018
Gobionotothen gibberifrons Chaenocephalus aceratus Pseudochaenichthys georgianus Lepidonotothen squamifrons Patagonotothen guntheri Electrona carlsbergi ^a	FAO 48.3.	From 1 January to 31 December 2018
Dissostichus spp.	FAO 48.5. Antarctic	From 1 December 2017 to 30 November 2018
Dissostichus spp.	FAO 88.3. Antarctic ^a FAO 58.5.1. Antarctic ^{ab} FAO 58.5.2. Antarctic east of 79° 20' E and outside the EEZ to the west of 79° 20' E ^a FAO 58.4.4. Antarctic ^{ab} FAO 58.6. Antarctic ^{ab} FAO 58.7. Antarctic ^a	From 1 January to 31 December 2018
Lepidonotothen squamifrons	FAO 58.4.4. ^{ab}	From 1 January to 31 December 2018
All species except Champsocephalus gunnari and Dissostichus eleginoides	FAO 58.5.2. Antarctic	From 1 December 2017 to 30 November 2018
Dissostichus mawsoni	FAO 48.4. Antarctic ^a within the area bounded by latitudes	From 1 January to 31 December 2018
a Except for scientific research purpo	ses.	
b Excluding waters subject to national	l jurisdiction (EEZs).	

 55° 30' S and 57° 20' S and by longitudes 25° 30' W and 29° 30' W

a Except for scientific research purposes.

b Excluding waters subject to national jurisdiction (EEZs).

PART B

TACs AND BY-CATCH LIMITS FOR EXPLORATORY FISHERIES IN THE CCAMLR CONVENTION AREA IN 2016/2017

	Subarea/Region Se Division				Dissosti mawson		By-cato tonnes)	By-catch catch limit (in onnes)	
			SSRU	Limit	catch limit (in tonnes)		Skates and rays	<i>Macrou</i> spp.	r íð ther species
58.4.1.	Whole Division	1 Decembe	A, B, eD, F, H	0	545	5841-1	5	15	15
		2017 to 30 Nove	C mber (includin	193		5841-2	5	16	16
		2018	(includin 58.4.1_1 58.4. 1_2)		5841-3	9	30	30	
			Е	202		5841-4	1	3	3
			(58.4.1_3 58.4.1_4			5841-5	2	7	7
			G (includin 58.4.1_5 58.4.1_6	,		5841-6	5	17	17
58.4.2.	Whole Division	1 Decembe	A, B, eC, D	0	42		2	7	7
		2017 to 30 Nove 2018	E mber (includin 58.4.2_1	42 1g)	42 3				
58.4.3a.	Whole Division	1 518)e4:3anbe	ŧr		38		2	6	6
a Includ	ling for 88.2	A and B outsi	de the Ross S	Sea region m	arine protecte	ed area and n	orth of 70° S.		
b Includ	ling 45 tonnes	s for Ross Sea	a survey.						
c Includ	ling for 88.2 /	A and B outsi	de the Ross s	ea marine pr	otected area.				
	-			-	-		outh of 70° S.		
e Includ	ling for 88.2	A within the S	Special Resea	rch Zone of	the Ross Sea	region marii	ne protected a	rea.	
f Exclu	ding 88.2 A a	nd B which a	re included i	n 88.1.					
g Overa	Overall limit with no more than 200 tonnes in each research block.								

			Ι	0					
		31 Augu 2018	ЪН	200					
88.2.	Whole Subarea ^f	1 December 2017 to		419 ^g	619	C, D, E, F, G, H, I	10	32	32
		2018	Special Research Zone of the Ross Sea Region marine protected area	467 ^e		J, K ^d Special Research Zone of the Ross Sea Region marine protected area ^e	23	72	23
38.1.	Whole Subarea	2018 1	-	591 ^a	3 157 ^{bc}	A, B, C, G ^a G, H, I,	30	96	30

c Including for 88.2 A and B outside the Ross sea marine protected area.

d ~ Including for 88.2 A and B outside the Ross Sea region marine protected area and south of 70° S.

e Including for 88.2 A within the Special Research Zone of the Ross Sea region marine protected area.

f Excluding 88.2 A and B which are included in 88.1.

g Overall limit with no more than 200 tonnes in each research block.

Appendix to Annex V, Part B LIST OF SMALL-SCALE RESEARCH UNITS (SSRUs)

Region	SSRU	Boundary line
48.6	A	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.
	В	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.
	С	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.
D	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.
E	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.
F	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.
G	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.
A	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.
В	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.
С	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.
D	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.
E	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.
F	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.
G	From 60° S 130° E, due east to 140° E, due south to coast,

58.4.1

Status: Point in time view as at 31/01/2020.

		westward along coast to 130° E, due north to 60° S.
	Н	From 60° S 140° E, due east to 150° E, due south to coast westward along coast to 140° E, due north to 60° S.
58.4.2	A	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.
	В	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.
	С	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.
	D	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.
	E	From 62° S 70° E, due east to 73° 10′ E, due south to 64° S due east to 80° E, due south to coast, westward along coast to 70° E, due north to 62° S.
58.4.3a	A	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.
58.4.3b	A	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.
	В	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.
	С	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.
	D	From 59° S 79° E, due east to 86° E, south to 60° S, due

		west to 79° E, due north to 59° S.
	E	From 56° S 79° E, due east to 80° E, due north to 55° S, due east to 86° E, south to 59° S, due west to 79° E, due north to 56°S.
58.4.4	A	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.
	В	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.
	С	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.
	D	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.
58.6	A	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.
	В	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.
	С	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.
	D	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.
58.7	A	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.
88.1	А	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.
В	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.
C	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.
D	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.
E	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.
F	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.
G	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.
Η	From 70° 50' S 170° E, due east to 178° 50' E, due south to 73° S, due west to coast, northward along coast to 170° E, due north to 70° 50' S.
Ι	From 70° S 178° 50' E, due east to 170° W, due south to 73° S, due west to 178° 50' E, due north to 70° S.
J	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.
K	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.
	L	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 76° S.
	М	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.
88.2	A	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.
	В	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.
	С	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.
	D	From 70° 50' S 140° W, due east to 130° W, due south to coast, westward along coast to 140° W, due north to 70° 50' S.
	E	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.
	F	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.
	G	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.
	Н	From 65° S 150° W, due east to 105° W, due south to 70°

	Status: Point in time view Thanges to legislation: There are currently Jouncil Regulation (EU) 2018/120, ANNE	v no known outstanding effects for the
		50' S, due west to 150° W, due north to 65° S.
	Ι	From 60° S 150° W, due east to 105° W, due south to 65° S, due west to 150° W, due north to 60° S.
88.3	A	From 60° S 105° W, due east to 95° W, due south to coast, westward along coast to 105° W, due north to 60° S.
	В	From 60° S 95° W, due east to 85° W, due south to coast, westward along coast to 95° W, due north to 60° S.
	С	From 60° S 85° W, due east to 75° W, due south to coast, westward along coast to 85° W, due north to 60° S.
	D	From 60° S 75° W, due east to 70° W, due south to coast, westward along coast to 75° W, due north to 60° S.

PART C ANNEX 21-03/ANOTIFICATION OF INTENT TO PARTICIPATE IN A FISHERY FOR EUPHAUSIA SUPERBAGeneral information

Member: ...

Fishing season: ...

Name of vessel: ...

Expected level of catch (tonne): ...

Vessel's daily processing capacity (tonnes in green weight): ... Intended fishing subareas and divisions

This conservation measure applies to notifications of intentions to fish for krill in Subareas 48.1, 48.2, 48.3 and 48.4 and 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
	D 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) ^a	
Whole frozen		
Boiled		
Meal		
Oil		
Other product, please specify		
a If the method is not listed in Annex 21-03/B, then please describe in detail		

Net configuration

Net	Net 1	Net 2	Other net(s)			
measurem	ents					
Net opening (mouth)						
Maximum vertical opening (m)						
Maximum horizontal opening (m)						
Net circumferen at mouth ^a (m)	nce					
a Expected	a Expected in operational conditions.					
b Size of ou	Size of outer mesh, and inner mesh where a liner is used.					

c Inside measurement of stretched mesh based on the procedure in Conservation Measure 22-01.

Mouth area (m ²)						
Panel average mesh size ^e (mm)	Outer ^b	Inner ^b	Outer ^b	Inner ^b	Outer ^b	Inner ^b
1st panel						
2nd panel						
3rd panel						
Final panel (Codend)						
a Expected in operational conditions.						

b Size of outer mesh, and inner mesh where a liner is used.

c Inside measurement of stretched mesh based on the procedure in Conservation Measure 22-01.

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 (www.ccamlr.org/node/74407), 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 (www.ccamlr.org/ node/74407), 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

Method	Equation	Parameter			
	(kg)	Description	Туре	Estimation method	Unit
Holding tank volume	W * L * H * ρ * 1 000	W = tank width	Constant	Measure at the start of fishing	m
		L = tank length	Constant	Measure at the start of fishing	m
		ρ = volume- to-mass conversion factor	Variable	Volume- to-mass conversion	kg/litre
		H = depth of krill in tank	Haul-specific	Direct observation	m
Flow meter ^a V * F _{krill} * p	V = volume of krill and water combined	Haul ^a -specific	Direct observation	litre	
		F _{krill} = fraction of krill in the sample	Haul ^a -specific	Flow meter volume correction	
		ρ = volume- to-mass conversion factor	Variable	Volume- to-mass conversion	kg/litre

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

b Individual haul when using a conventional trawl, or a two-hour period when using the continuous fishing system.

Flow meter ^b	$(V * \rho) - M$	V = volume of krill paste	Haul [*] -specific	Direct observation	litre
		M = amount of water added to the process, converted to mass	Haul ^a -specific	Direct observation	kg
		$\rho = \text{density of}$ krill paste	Variable	Direct observation	kg/litre
Flow scale	M * (1 – F)	M = mass of krill and water combined	Haul ^b -specific	Direct observation	kg
		F = fraction of water in the sample	Variable	Flow scale mass correction	
Plate tray	(M – M _{tray}) * N	M _{tray} = mass of empty tray	Constant	Direct observation prior to fishing	kg
		M = mean mass of krill and tray combined	Variable	Direct observation, prior to freezing with water drained	kg
		N = number of trays	Haul-specific	Direct observation	
Meal conversion	M _{meal} * MCF	M _{meal} = mass of meal produced	Haul-specific	Direct observation	kg
		MCF = meal conversion factor	Variable	Meal to whole krill conversion	
Codend volume	W * H * L * ρ * π/4 * 1 000	W = codend width	Constant	Measure at the start of fishing	m
		H = codend height	Constant	Measure at the start of fishing	m
		$\rho =$ volume- to-mass	Variable	Volume- to-mass conversion	kg/litre

b Individual haul when using a conventional trawl, or a two-hour period when using the continuous fishing system.

			conversion factor			
			L = codend length	Haul-specific	Direct observation	m
Ot	ner	Please specify				
a	Individual haul when using a conventional trawl, or integrated over a six-hour period when using the continuous fishing system.					
b	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 $\pm 0,05$ m)		
Every month ^a	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 \pm 0,1 m)		
	Estimate the green weight of krill caught (using equation)		
Flow meter ^a	1		
Prior to fishing	Ensure that the flow meter is measuring whole krill (i.e. prior to processing)		
More than once per month ^a	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 ^b	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[▶]

a A new period will commence when the vessel moves to a new subarea or division.

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

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 ^a	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 ^b	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 ^b	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 $\pm 0,1$ 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	1
Every month ^a	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
a A new period will commence when the vessel mo	by to a new subarea or division.
b Individual haul when using a conventional trawl, system.	or integrated over a six-hour period when using the continuous fishing

	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 $\pm 0,1$ m)
Every month ^a	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 $\pm 0,1$ m)
	Estimate the green weight of krill caught (using equation)
a A new period will commence when the vessel moves to a	new subarea or division.

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

Status:

Point in time view as at 31/01/2020.

Changes to legislation:

There are currently no known outstanding effects for the Council Regulation (EU) 2018/120, ANNEX V.