

Marine Stewardship Council - Variation Request

Date submitted to MSC	03/Aug/2018
Name of CAB	Acoura
Fishery Name/CoC Certificate Number	Aker Biomarine Antarctic krill
Lead Auditor/Programme Manager	Andrew Payne/Billy Hynes
Variation Prepared By	Lucia Revenga w. Polly Burns
Scheme requirement(s) for which variation requested	<p>FCR 7.4.14.2</p> <p>Allow fish or fish products considered as coming from IPI stocks to enter chains of custody, with an exemption to the additional assessment requirements for IPI stocks given in PA 4.2.</p>
Is this variation sought in order to fulfil IPI requirements (FCR 7.4.14)?	Yes

1. Proposed variation	
As catches of myctophid (lanternfish), channichthyid (icefish) and nototheniids, identified as Inseparable or Practically Inseparable species, are below the 2% level specified in 7.4.14.2.a.i, the CAB submits this variation request to the requirements section 7.4 to the MSC to allow fish or fish products as coming from IPI stocks to enter chain of custody with an exemption to the additional assessment requirements for IPI stocks given in PA 4.2 (as the UoA complies with the requirements described in 7.4.14.2).	
2. Rationale/Justification	
See section 7.	
3. Implications for assessment (required for fisheries assessment variations only)	
N/A	
4. Have the stakeholders of this fishery assessment been informed of this request? (required for fisheries assessment variations only)	Stakeholders will be informed if variation is accepted.
5. Further Comments	
NA	
6. Inseparable or practicably inseparable (IPI) catches	
Is this request to allow fish or fish products from IPI stocks to enter into chains of custody?	Yes
Is this request to allow an exemption to detailed requirements for IPI stocks?	Yes
The estimated proportion of IPI catches of myctophid (lanternfish), channichthyid (icefish), nototheniids in the AKER krill fishery is 0.2%, while the remaining 99.8% is the targeted krill.	

According to FCR v.2 7.4.14.2.a.i, variations are permitted, given that “The catch proportion of IPI stocks calculated in 7.4.13.1.c is less than or equal to 2% and the total catch of IPI stock(s) by the UoA does not create a significant impact on the IPI stock(s) as a whole”. Further, “CABs shall note that significance will be assessed on basis of the status of the IPI stock, and the risk that the IPI catch poses to the health of the IPI stock.” In this case the catch proportion of IPI Stocks is less or equal to 2%.

Data from the official CCAMLR observer scheme was reviewed by MRAG in order to conduct an analysis of larval fish bycatch by the UoA. This analysis concluded (as shown in MRAG Report, 2012) that the estimates of fish larval bycatch in the AKER krill fishery accounted for a 0.2% of the total catch (taking into consideration all retained species, this is, lanternfish, icefish) and that the impact of the AKER krill fishery on these stocks is negligible (even considering both AKER vessels fishing at their maximum annual capacity).

The UoA has 100% observer coverage. The tasks of the observer are specified in the Scientific Observers Manual, following the CCAMLR Scheme of International Scientific Observation. The observer’s tasks are listed in Annex I of the Manual, and include, among others:

- sampling of catches to determine biological characteristics,
- recording biological data by species caught,
- recording bycatches, their quantity and other biological data,
- recording entanglement and incidental mortality of birds and mammals,
- recording the procedure by which declared catch weight is measured.

Cruise reports submitted by CCAMLR scientific observers record catch details for all species and a summary of the biological data collected. Comprehensive information on the length, weight, sex and maturity of the individuals sampled is recorded in the observer’s electronic logbook.

Sampling methodology is established in Part II, section 11 of the Manual. The observer is requested to select a haul or a two-hour period of continuous fishing, and to ensure that all large fish are removed from the conveyor during this haul/time-period and are retained for subsequent weighing and identification. At the same time, the observer is instructed to take a 25 kg sample, to remove all fish and to record the total mass of each fish species. Then he/she has to take a 10 kg subsample from the remaining krill sample and to sort carefully through this, again removing any fish and recording the total mass of each fish species. Following that, the requirement is to take two 1-kg subsamples from the remaining krill sample and to sort through each of these, again removing and recording the total mass of any remaining fish species (paying particular attention to larval fish). When accurate taxonomic identification of material is impossible, samples are photographed and kept for later study.

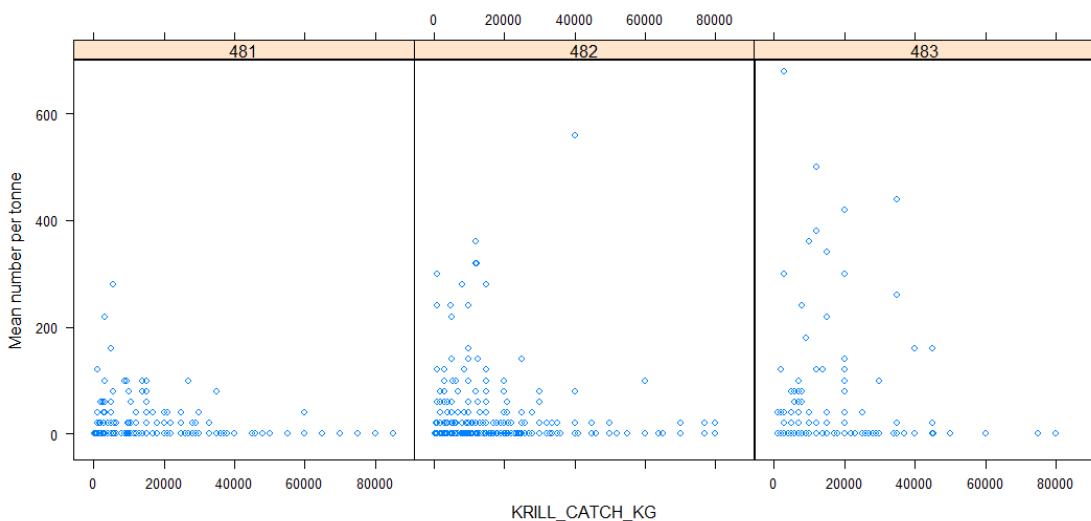
Following AKER BioMarine’s first MSC certification, and to meet the second condition that arose then, information from observers’ reports for the period 2007–2011 was submitted to MRAG for analysis of larval fish bycatch. The results of the analysis showed that myctophid (lanternfish) and channichthiid (icefish) species dominated the bycatch, but with occasional small quantities of nototheniids present too. The MRAG report also summarizes bycatch rates of the different species into species groups (see Table 1 below), where ‘ICE’ refers to all icefish species group, ‘LAN’ to myctophids (lanterfish), ‘NOT’ to the nototheniid species group and ‘FIN’ refers to all other finfish species.

Table 1: Total numbers of fish larvae in the Saga Sea catch composition by species group, 2007–2011. Source: Analysis of larval bycatch report, MRAG 2012.

Code	English name	Area 48.1	Area 48.2	Area 48.3	Total
FIN	Finfish group	2	47	28	77
ICE	Icefish group	143	210	389	742
LAN	Lanternfish group	10	352	229	591
NOT	Nototheniid group	14	110	40	164
Totals		169	719	686	1574

MRAG report (2012) also shows standardized counts of icefish, lanternfish and nototheniid individuals per tonne sampled. Together, the three groups account for ~1000 individuals per sampled tonne. As a precautionary proxy, one could consider that each larva weighs about 2 g, which would yield a final weight of 2 kg of retained larvae per tonne sampled. In other words, 0.2% of the catch composition can be considered as retained species other than krill. The gear and the fishing strategy can be considered as highly selective. However, because this small weight represents a large number of individuals, continued monitoring of fish larvae is necessary in future.

Figure 1: Bycatch numbers (standardised count per tonne catch sampled) for all species groups for 48.1 (left plot), 48.2 (middle plot) and 48.3 (right plot) against krill catch. Source: Analysis of larval bycatch report, MRAG 2012.



MRAG report (2012) also provides the precautionary total larval fish bycatch estimates (numbers and tonnes) by subarea, species group and season for a normal ice year and a low ice year (see Table 2). The report assumes that the bycatches of channichthyids and nototheniids were exclusively *Champscephalus gunnari* and *Notothenia rossii*, respectively, the species of greatest concern in the analysis. It is also of note that very few of the icefish larvae recorded in Subarea 48.1 and 48.2 were actually *C. gunnari*, the main species of concern in the area.

Table 2: Precautionary total larval bycatch estimates (numbers and tonnes) by subarea, species group and season for a normal ice year and a low ice year. Source: Analysis of larval bycatch report, MRAG 2012.

Scenario	Area	Spp code	Summer (n)	Winter (n)	Total (n)	Total (t)
Normal ice year	48.1	ICE	18,816	6,272	25,088	0.132
Normal ice year	48.2	ICE	88,549	24,913	113,462	0.596
Normal ice year	48.3	ICE	0	175,911	175,911	0.925
Normal ice year	48.1	LAN	0	0	0	0.000
Normal ice year	48.2	LAN	79,222	106,777	185,999	1.019
Normal ice year	48.3	LAN	0	176,677	176,677	0.968
Normal ice year	48.1	NOT	2,514	838	3,352	0.008
Normal ice year	48.2	NOT	28,154	37,946	66,100	0.160
Normal ice year	48.3	NOT	0	12,936	12,936	0.031
Low ice year	48.1	ICE	31,360	344,956	376,316	1.978
Low ice year	48.2	ICE	111,648	4,018	115,667	0.608
Low ice year	48.3	ICE	0	45,234	45,234	0.238
Low ice year	48.1	LAN	0	0	0	0.000
Low ice year	48.2	LAN	99,888	17,222	117,110	0.641
Low ice year	48.3	LAN	0	45,431	45,431	0.249
Low ice year	48.1	NOT	4,189	46,084	50,273	0.122
Low ice year	48.2	NOT	35,498	6,120	41,618	0.101
Low ice year	48.3	NOT	0	3,326	3,326	0.008

The MRAG report concludes that it is highly unlikely that the rates of larval fish bycatch of the Saga Sea pose any threat to lanternfish, icefish or nototheniid stocks in Area 48. MRAG report also concludes that it is unlikely that the addition of the Antarctic Sea to the UoA (with both vessels fishing at their maximum possible annual capacity) would result in significant risk to these stocks. The IPI stocks under consideration have been scored under PI 2.1.1 as retained catch and have achieved a score above the SG80. It is therefore considered that the IPI catches in the AKER krill fishery meet the requirements in FCR 7.4.14.2.a, I and ii.

If this variation is accepted, a recommendation will be raised in this surveillance highlighting the need for up to date and/or ongoing data to support the IPI status

References:

MRAG, 2012. Analysis of larval bycatch on the Saga Sea during continuous trawling for krill in CCAMLR Areas 48 between December 2007 and September 2011. MRAG, London. 36 pp.

CCAMLR Scientific Observer Manual. <http://www.ccamlr.org/en/system/files/obsman.pdf>