ARK COMMITMENT REVIEW PROCESS

Version 5.4 (2-July-2019)

The ARK Commitment emerged as a fishing-lead initiative to implement best practices to avoid potentially negative interactions with land-based breeding predators. This is an industry response while we wait for CCAMLR to take action regarding enhanced regulations for conserving the Antarctic ecosystem.

Starting on 1 December 2018, during every penguin breeding season (October – 1 March) ARK Members will voluntarily preclude their vessels from fishing within a penguin buffer zone around critical colonies in the Antarctic Peninsula and the South Shetland Islands. The original ARK Commitment is presented in Appendix 1.

This initiative will be assessed every year to analyze the measures' impact on fishing performance and the extent to which the measure fulfills ARK's Commitment to protecting krill-dependant predators.

This review process consists of a two-step approach. First, an Expert Panel will analyze fishing data and provide an assessmentregarding compliance issues, fishing performance and an update from penguin populations regarding their status and breeding performance.

On a second step, a Review Panel, conformed by a broader group of representatives, will review the overall performance of this voluntary measure, its capacity to fulfill its main objective and advise on necessary adjustments. The Review Panel will take into consideration the outcomes of the Expert Group.

ARK COMMITMENT (ArkCom) EXPERT PANEL TERMS OF REFERENCE

Mission

Provide an objective assessment of the performance and compliance of the krill fishery regarding the implementation of ARK's Commitment, as well as an update on penguin populations performance.

Goal

Provide a technical review and advice for improving ARK capacity to fulfill its commitment towards the improved sustainability of the krill fishery.

Objectives

- 1. Assess the compliance with the Voluntary Restricted Zones (VRZ) by ARK's fishing vessels, herein the possible operational challenges in complying with the VRZ as a seasonal measure and the principle of "best commercial effort" outside of the seasonal measure.
- 2. Provide an update on penguin population trends in the areas subject to the ARK's Commitment.
- 3. Review the required changes to modify the seasonal VRZs into a year-round protection measure and the size of such protection.
- 4. Harmonize current voluntary measures with other initiatives discussed in CCAMLR (i.e., D1MPA, FBM, CM 51-07).
- 5. Provide advice on complementary, operable industry measures to provide adequate ecosystem protection while waiting for equivalent CCAMLR regulations to be adopted.

Data

Data on fishing operation will be made available by ARK Members.

- 1. Haul-by-haul catch and effort data (C1 data Form)
- 2. Systematic information from the fishing companies on their experience
 - a. Description of operational challenges
- 3. Information from the scientific community about the status and trends in the involved predator populations
- 4. Information from the scientific community about the status and trends in the distribution and abundance of the krill population

ARK, ARK Members and participants in the Review Panel are invited to provide input to the Expert Panel no later than August 30 on operational or other relevant experience with VRZ-measure as well as science, data, documentation and recommendations that the Expert Panel is advised to take into consideration.

Outcome

A report to be submitted to the Review Panel.

In addition, the Expert Panel's Secretary will submit the report to the D1MPA proponents for their review and comments. Any feedback from the D1MPA proponents will be presented, along with the Expert Panel's Report, to the Review Panel.

Annual Meeting and Members integrating the Expert Panel 2019

<u>Meeting date</u>: late August - early September. The group will work electronically during August, by email or other means, to analyze fishing and complementary data for the season. A meeting (in person, videconference or both) will be scheduled for early September, to discuss the findings.

<u>List of Members</u>: Members are expected to participate for two consecutive years in the ArkCom Expert Panel.

- Olav Rune Godø NORCE (Lead review panel)
- Simeon Hill BAS
- Taro Ichii NRIFSS (Japan)
- Grant Humphries Oceanites
- Rodolfo Werner ASOC
- Steve Nicol Scientific Advisor to ARK
- Javier Arata ARK (Secretary)

ARK COMMITMENT (ArkCom) REVIEW PANEL TERMS OF REFERENCE

Mission

Provide advice to ARK on options to improve the principles and objectives of the ARK Commitment towards improved sustainability in krill fishing activity.

Goal

To provide a yearly review and advice on the performance and need for improvements of ARK's Commitment to protecting krill-dependent predators.

Objectives

- 1. Review the compliance to the VRZs, based on the outcome from the Expert Panel.
- 2. Review the required changes to modify the seasonal VRZs into a year-round protection measure.
- 3. Review the harmonization of the current voluntary measures with the development of the D1MPA and related initiatives discussed in CCAMLR (i.e., FBM, CM 51-07).
- 4. Review efforts and progress on achieving a network of MPAs and improved the ecosystem-based management of the krill fishery, by ARK and other stakeholders.
- 5. Review progress on best practices for transhipments and how ARK can be of assistance to CCAMLR in the development of transshipment regulations.
- 6. Propose possible changes to the current ARK's Commitment guidelines for the coming fishing season.

Outcome

A Report to be submitted to the ARK AGM.

Annual Meeting and Members integrating the Review Panel 2019

<u>Meeting date</u>: the Review Panel will meet every year during the regular SC-CAMLR meeting at Hobart. <u>List of Members</u>: Members are expected to participate for two consecutive years in the ArkCom Review Panel.

- Ron Naveen Oceanites
- Chris Johnson WWF
- Frida Bengtsson Greenpeace Global (Sweden)
- Will McCallum Greenpeace (UK)
- Andrea Kavanagh, PEW
- President of ARK

- Pal Skogrand ARK
- Other ARK Members
- Javier Arata ARK (Secretary)
 A captain from an ARK krill fishing vessel (if possible to arrange)

Appendix 1.

<u>Commitment to a stepwise implementation of voluntary restricted zones and implementation of transshipment and vessel standards for the krill fishery in the Antarctic Peninsula</u>

The Association of Responsible Krill Harvesting Companies (ARK) recognizes that there is a potential for improvement in the current krill fishery operations in the Antarctic. As a response, the companies have decided to make a number of commitments as part of improving sustainability as well as recognizing industry's role in contributing to the long-term ambition for a large-scale network of marine protected areas in the Antarctic Ocean.

The Commitment today is made by ARK. The signatories to this Commitment, Members of ARK, commit to the initiatives described in points 1) to 5) below and agree to work for broader acceptance of these measures by advocating for these measures to ultimately be adopted as CCAMLR conservation measures.

1) STEPWISE IMPLEMENTATION OF VOLUNTARY RESTRICTED ZONES

With the aim of having a permanent closure of the voluntary restricted zones after a stepwise transition in 2019, starting from 1 January 2019, the signatories commit to:

- a. Implement the voluntary restricted zones (as described in Appendix 2), and
- b. Apply their best commercial effort to stay out of the voluntary restricted zones (as described in Attachment 1) all year already in 2019, to gain experience of the practicalities and potential impact on the commercial fishery of implementing the voluntary restricted zones as a full year measure.
- c. From the 2020 catch season onwards, based on review and evaluation procedures outlined below, refrain from fishing in the agreed full year zone permanently.

2) ANNUAL REVIEW OF VOLUNTARY RESTRICTED ZONES

The signatories will review implementation of voluntary restricted zones annually, with the first review to be complete by the end of 2019. The annual review shall include:

- a. Viability for fishery
 Review the catch inside and immediately outside the voluntary restricted zones and share
 key findings with environmental NGOs and scientists who have expertise relating to the krill
 fishery and the CCAMLR Domain 1 planning process. This will be an independent review
 and participation in the review process shall be discussed with stakeholders and agreed to
 by the signatories to this Commitment.
- b. New Science
 Review of new science, such as biomass survey and other relevant data and science.
- c. Feedback from expert- and scientific committees in CCAMLR

Evaluation of the formal expert/scientific process of the Western Antarctic Peninsula proposal (D1MPA). Such as the Scientific Committee in CCAMLR and its working groups.

3) IMPLEMENTATION OF FULL YEAR VOLUNTARY RESTRICTED ZONES

Based on the review of the voluntary restricted zones (described in paragraph 2.), the size of the full year protected zone shall be agreed, with the starting size considered to be 30 to 40km from the coast (as described in Attachment 1), or attenuating incrementally from that point. The agreed full year zone shall be implemented from 1 January 2020.

4) TRANSSHIPMENT

The signatories shall commit to developing a practice in line with an adequate code of conduct and principle of transparency.

5) VESSEL SAFETY

The signatories commit to operating its' vessels in line with the IMO Torremolinos protocol for the Safety of Fishing Vessels described in Attachment 2.

6) VALIDITY OF COMMITTMENT

- a. This Commitment is valid from the date of signing until 1 January 2024. At least three months prior to the expiry date, the signatories shall evaluate the Commitment and if the implementation is considered to be successful, the signatories shall prolong the Commitment for another five years.
- b. The signatories' goal is to get an MPA in Domain 1 adopted by the CCAMLR Commission, recognizing the industry's role in contributing to the long term ambition for a large scale network of MPAs in the Antarctic Ocean. When such MPA is adopted it will replace the VBPZ described herein and the annual reviews described at 2) will discontinue accordingly. To the extent they are consistent with the MPA, all other elements of this Agreement will remain.

Appendix 2.

Improving conservation and management of Antarctic krill: VOLUNTARY PRECAUTIONARY RESTRICTED ZONES IN THE WESTERN ANTARCTIC PENINSULA (Area 48.1)

A spatial restriction under an experimental framework of the fisheries on the krill hotspots to avoid interference with the breeding colonies in the proximity of the hotspots (Figure 1).

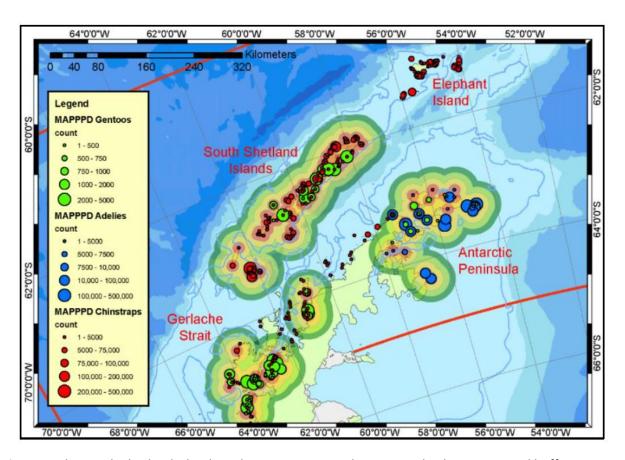


Figure 1. The South Shetland Islands and Antarctic Peninsula. Proposed voluntary coastal buffers focussed around the major breeding aggregations of chinstrap (red), Adélie (blue) and Gentoo (green) penguins; breeding site information for penguins is from MAPPPD. Proposed buffers are shown at 10 km (pink), 20 km (yellow), 30 km (lime green) and 40 km (bottle green).

Temporal and spatial closures

Antarctic Peninsula – closed to krill fishing within 40 km of land between 1 October and 1
February. This area is predominantly occupied by Adélie penguins, but with some chinstrap and
gentoo penguin colonies.

- Gerlache Strait closed to krill fishing within 30 km of land between 15 October and 15
 February. This area is predominantly occupied by gentoo penguins, but with some Adélie and
 chinstrap penguin colonies.
- South Shetland Islands closed to krill fishing within 40 km of land between 1 November and 1
 March. This area is predominantly occupied by chinstrap penguins, but with some Adélie and
 gentoo penguin colonies.
- Elephant Island open to krill fishing all year.
- Bransfield Strait open to krill fishing all year.

Duration

- Buffers zones will remain in place for 10 years from 1 January 2019 or as otherwise specified by a CCAMLR Domain 1 MPA. The buffer zones are not to be considered as a substitute, but a step supporting the establishment of an MPA in Domain 1.
- The experiment is reviewed and evaluated after 5 years, and then again after 10 years. If there has been insufficient engagement in the project, thus undermining the scientific value, the measure could be discontinued as a voluntary effort.

Scientific support

- The Measure, operated in accordance with a scientific framework for experimental fishing, will support the need for precaution at the same time as collecting valuable scientific information in support of spatial management as well as preparing the ground for other measures under discussion (e.g. Feedback management).
- There is a common understanding between the industry and science that it would be mutual beneficial to use the fleet to collect data (such as krill density data from acoustics and oceanographic observations) and support marine operations (such as launch and recovery of moorings) in support of research and management.

Interaction with other measures and proposed Domain 1 MPA

- The introduction of voluntary precautionary restricted zones under an experimental scientific framework is an action that will develop best practice with the ultimate goal of unanimous acceptance by the krill industry.
- The obvious gap in information outside the limited time-space windows covered by research vessels can in part be filled by this collaborative effort and become an important groundwork in a future Domain 1 MPA structure.
- The voluntary measure shall support CCAMLR activities and process of establishing an MPA in domain 1
- An overview of this voluntary conservation measure will be presented to the D1MPA Expert Group