

Project proposal for enhancing education on and implementation of Ecologically Related Species seabird measures within CCSBT fisheries.

DRAFT V4

Authors: BirdLife International with input from CCSBT Members through an intersessional group formed after ERSWG13

Background

In response to the recommendation from the October 2018 meeting of the CCSBT Compliance Committee (CC13 paragraphs 101 and 111), the CCSBT Secretariat has supported BirdLife International and CCSBT Members to develop a project proposal for enhancing the implementation of Ecologically Related Species (ERS) measures through outreach/education and further development of systems to verify onboard implementation of measures.

The proposal has been developed with a purpose of seeking and securing external funding. One potential source of funding is from the UN Global Environment Facility (GEF), via the FAO, as part of the follow-up to the current Common Oceans project, focused on projects concerning Areas Beyond National Jurisdiction (ABNJ). GEF funding may be available from 2021 onwards. Additional potential funding sources are being explored, which might enable activities to begin earlier.

Feedback received on earlier drafts

An initial outline of a proposal was discussed at the meeting of the CCSBT Ecologically Related Species Working Group (ERSWG13) in May 2019 and has been further developed by an intersessional group involving CCSBT Members, BirdLife International and the CCSBT Secretariat. Input has been received from representatives from Australia, Indonesia, Japan, Korea, New Zealand, South Africa and Taiwan.

Updates to the initial draft include greater emphasis being given to education and training elements of the proposal, and postponing budget development until after further detail is added on planned project activities. Some Members have a particular interest in engaging in the technical-innovation aspect of the project. Others have indicated interest across the range of activities contained the proposal but need further time to identify the specific elements that they would like to be involved with.

There has been discussion of what would be effective indicators to measure project success.

Current draft project outline

Proposed project period: 3-4 years, starting in 2020 if feasible, but timing dependent on securing external funding. The table format below is based on a template developed by FAO in early 2019 to solicit potential projects for Common Oceans follow-up GEF funding.

Activity in Brief	Education and outreach with industry, training of observers and compliance officers, and technical innovation, in order to enhance the ability of CCSBT Members to monitor and minimize bycatch of seabirds.
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Potential Partners	<p>To be confirmed at CC14.</p> <ul style="list-style-type: none"> • Japan • Fishing Entity of Taiwan • Republic of Korea • South Africa • Indonesia • New Zealand • Australia • BirdLife International • Agreement for the Conservation of Albatrosses and Petrels • Ocean Outcomes
Links to other programmes of work	<p>Activities underway in each of the five tuna RFMOs to reduce seabird bycatch</p>
Objective	<p>Use educational outreach, capacity-building and technical innovation to enhance the capacity of CCSBT Members to implement and monitor the use of seabird bycatch mitigation measures, in order to reduce bycatch of seabirds.</p>
Rationale/ Global Environmental Benefits	<p>Rationale/Environmental benefits:</p> <p>Albatrosses are the most threatened group of seabirds in the world. There are 15 of the 22 albatross species on the IUCN Red List. Bycatch in global pelagic longline fisheries is a key conservation threat. Impacts on albatross and petrel populations are one of the main biodiversity impacts of fisheries in the ABNJ.</p> <p>Successive meetings of CCSBT’s Ecologically Related Species Working Group (ERSWG) have confirmed that the level of interaction between seabirds and Southern Bluefin Tuna (SBT) fisheries has remained at a high level and is a significant level of concern.</p> <p>Binding requirements are in place in the five tuna RFMOs for use of mitigation measures to reduce the risk of incidental capture of seabirds, particularly albatrosses. The CCSBT ERSWG has advised that mitigation measures and their effective implementation should be further promoted. In 2018, CC13 agreed that the Secretariat should work with Members and BirdLife International to develop a project involving both outreach/education and verification of compliance with seabird bycatch mitigation measures and seek external funding for that proposal (CC13 paras 110-111).</p> <p>The first global seabird bycatch assessment for tuna fisheries south of 20°S was completed through collaborative work under the first Common Oceans project and produced an estimate of 36,000 seabirds caught per year south of 20° S based on 2016 data and using a range of analytical approaches (CCSBT-ERS/1905/23). Nevertheless the assessment also identified that there are data gaps and sources of bias and uncertainty in currently-available data (in relation to observer data, seabird density distribution data and fishing effort data) that have an impact on the estimate of number of birds caught per year.</p>

	<p>With legal and technical aspects in place, keys to implementation of bycatch mitigation measures are (i) further education and outreach to industry; (ii) capacity-building among onboard observers and compliance officers; (iii) creation of systems to monitor vessel-level implementation of bycatch mitigation measures.</p>
<p>Context (i.e. any activities already underway)</p>	<p>The seabird bycatch element of the current FAO Common Oceans ABNJ Tuna 1 project, which has been coordinated by BirdLife International, has conducted national awareness-raising for seabird bycatch mitigation measure requirements with a number of fleets, along with observer training and provision of support for the collaborative efforts undertaken to produce the global seabird bycatch estimate for the area south of 20° S.</p> <p>Pilot studies conducted elsewhere, and by RFMO members, have proven the concept of using cameras for Electronic Monitoring onboard pelagic longline vessels.</p> <p>New Zealand is looking to trial a prototype of EARS (Electronic Automated Reporting System).</p> <p>An analysis by BirdLife/Global Fishing Watch (paper CCSBT-CC/1810/Info03) described a novel method for monitoring the use of night setting using Global Fishing Watch's data. There is potential for this technique to be extended to analysis by CCSBT Members of their VMS data. This project would support innovation of tools for national analysis of VMS data.</p> <p>The 2018 meeting of the CCSBT Compliance Committee and Extended Commission recommended that BirdLife International, the CCSBT Secretariat and CCSBT Members develop an externally funded proposal to enhance education and the verification of compliance with seabird mitigation measures to actively encourage full implementation of these measures.</p> <p>BirdLife International through its Albatross Task Force engages with pelagic longline, demersal longline and trawl fleets in South Africa, Brazil, Argentina, Namibia and Chile to support fleets to reduce seabird bycatch.</p>
<p>Technical Approach:</p> <p>The project will engage with CCSBT Members to deliver educational outreach; capacity-building of observers and compliance officers; and innovation of partially automated remote monitoring systems, to enable CCSBT Members to enhance and measure the degree of implementation of bycatch mitigation measures by vessels (for seabirds this is principally the use of night setting, branch-line weighting and bird scaring lines).</p> <p>1. Education and outreach to industry</p> <p>Education and outreach to participating fleets will provide information and support to facilitate vessel-level implementation of the required seabird bycatch mitigation measures. As far as possible, the project will support sustainable enhancement of existing national systems for</p>	

education and outreach to industry, so that impact will continue beyond the lifespan of the project.

Taiwan: support enhancement of Taiwan Fisheries Agency education on seabird mitigation measures currently provided to industry during approval of operation permits and meetings to promote legislation. Organizations participating include Taiwan Tuna Association, Taiwan Tuna Longline Association, Fisherman Association and Overseas Fisheries Development Council of the Republic of China.

[Note to CC14: Detail to be added here on which other Members would like to engage in this activity, and the nature of activity]

2. Capacity-building to enhance monitoring

The project will support:

1. Observer training
2. Training compliance officers of CCSBT Members in key ports to increase capacity to monitor presence of bycatch mitigation measures onboard vessels.

[Note to CC14: this section is awaiting detail to be added on which countries would like to engage in this activity, and the nature of activity. As far as possible, the project will support enhancement of existing national systems for training so that impact will continue beyond the lifespan of the project.]

3. Innovate automated systems to allow fishery managers to monitor automatically vessel-level implementation of bycatch mitigation measures

The proposed project approach will involve fishery managers, industry and technology innovators to enhance development of systems that can undertake remote-monitoring of implementation by vessels of seabird bycatch mitigation measures.

This may also include development of a VMS-based analysis of use of night setting (cf. CCSBT-CC/1810/Info03).

Work in this area is looking to go ahead in New Zealand, where there is a project to develop an early stage concept product known as EARS (Electronic Automated Reporting System), which is designed to detect and remotely report on the use of seabird mitigation. New Zealand has plans to undertake device development and initial testing of devices that can monitor the use of tori lines, line weighting, hook shielding device and night setting.

This project proposal would include further development and testing of such devices on fleets where they could be utilised to monitor the use of required seabird bycatch mitigation measures.

4. Update global seabird bycatch estimate

[Note to CC14: Feedback from Members indicates broad agreement on the need for a future repeat global seabird bycatch estimate for the area south of 20° S to assess change in bycatch levels since 2016. However, feedback also included:

- *That a repeat assessment would be most useful if regular process could be found to periodically monitor/update the global bycatch estimate. The question of establishing a*

regular process is a topic that would require broader discussion beyond this CCSBT intersessional group.

- *That a repeat assessment, while important, might be funded or arranged under a different project/process rather than this one*
- *That while the first global seabird bycatch assessment for the area South of 20S intentionally used a range of analytical approaches (to explore which was most appropriate under which conditions of data availability), that a current priority for future assessment is further development of the SEFRA approach.*
- *That there is potential also to develop a methodology for a CCSBT-specific estimate (baseline and progress) as part of the project. However, other feedback was that there is value in repeating a global estimate (this would need to involve non-CCSBT countries), and that an estimate based only on fishing effort in which SBT were caught is less ecologically-meaningful than an estimate based on all fishing effort overlapping with albatross distribution (using number of birds caught per species by Quarter on a 5x5 resolution such as analyzed in the first global seabird bycatch assessment).*

A repeat assessment would take the form of providing support to national scientists of tuna RFMOs to engage in analysis of their bycatch data, through a workshop format similar to the Common Oceans' first estimate. Since analytical methods were developed during the first assessment, the repeat assessment is anticipated to take less time and resources than the first]

<p>Nature of innovation</p>	<p>Development of education and outreach programmes that will sustainably enhance implementation of seabird bycatch mitigation measures.</p> <p>Strengthening of capacity to monitor implementation of seabird bycatch mitigation measures, including systems that will sustainably enhance capacity of observers and compliance officers.</p> <p>Development of remote and partially automated systems to monitor implementation of mitigation measures, such that national fishery managers will have information available in a timely manner. Accurate implementation data can then be reported to the tuna RFMOs, in a way that reduces the work required by national and tuna RFMO data managers.</p>
<p>Degree of sustainability</p>	<p>Development of seabird elements for ongoing education and outreach systems will provide impact beyond the lifetime of the project.</p> <p>Establishment of elements to be incorporated into ongoing observer training and compliance officer training will mainstream bycatch monitoring into national and tuna RFMO MCS systems.</p> <p>Automated systems will provide a technique that CCSBT Members can use beyond the conclusion of the project to continue monitoring bycatch implementation by their fleets.</p> <p>[Potentially: establishment of an ongoing system for future periodic repeats of the global seabird bycatch estimate]</p>
<p>Extent of scalability</p>	<p>Proof of concept systems that can be scaled across other flag states whose longline fleets overlap with albatross distribution.</p>

Measures of project success

[Note to CC14: Members are agreed on the need for indicators through which to measure project progress and success. However, several Members cautioned that data limitations and likely revisions of methods for analysis will mean that care will be needed in development and interpretation of indicators.

Four levels of project progress indicators have been under discussion or proposed:

- 1. Monitoring project activity (e.g. number of education/training sessions held)*
- 2. Proportion of vessels using remote monitoring to monitor use of bycatch mitigation measures*
- 3. Monitoring % implementation of bycatch mitigation measures by vessels*
- 4. Monitoring number of birds killed per year (by species)*

Measuring project activity (1) is not controversial but is limited in terms of monitoring process and not conservation outcome. Measuring uptake of use of remote-monitoring (2) will measure progress in one aspect of the project while not covering the full range of project activities. The most direct measure of progress against the stated project objective (enhancing implementation of bycatch mitigation measures) would be (3). In principle, this would use the data on % mitigation use provided by Members through the CCSBT data exchange. However, feedback has flagged that the CCSBT data exchange is currently mostly based on observer data, and changes to data collection methods (as planned as part of the technical innovation parts of this project) will need to be taken into account for comparisons between years. Furthermore, the ERSWG advised that the 2017 data should be treated with caution and that the 2018 data may require the same caution to be applied.

Measuring the number of birds killed per year, by species as far as possible, (4) would be a measure progress against the ultimate objective of the project to reduce seabird bycatch. In principle, the result of the first global seabird bycatch estimate (based on 2016 data) is the baseline for this project indicator and a repeat bycatch estimate at the end of the project would measure progress. However, as described above, further development of analytical methods and input data (such as further refinement and gap-filling of seabird density distributions) may lead to a refinement of the 2016 baseline, and care will need to be taken in order to make it possible to have meaningful comparisons. In addition, feedback flagged that number of birds killed per year can also be affected by changes in other factors such as time/area of fishing and total fishing effort and it is therefore an indirect measure of project success. While there is general agreement that a repeat of the first seabird bycatch assessment will be needed, there are differing views on whether a repeat estimate will provide a meaningful comparison to the current baseline estimate of 36,000 birds caught per year.

	<i>Further work to define indicators will be progressed when project activities are further defined]</i>
Assumptions:	Interest and willingness of CCSBT Members to engage in the project; technological innovation will solve challenges of observer deployment, vessel data storage and data transfer.
Budget:	<p>Outline of potential budget:</p> <ol style="list-style-type: none"> 1. Education and outreach to industry and observer/compliance-officer training (possible ballpark figure \$300K) 3. Technical innovation workshops, gear development and testing (Members and number of workshops to be confirmed) (possible ballpark figure \$500K) 4. Repeat seabird bycatch estimate for pelagic longline fleets south of 20° S (\$100K)
Co-financing:	(To be identified once project concept further developed)
Next steps:	<p>Submit outline to CCSBT Compliance Committee 14 (October 2019) for its consideration. The Compliance Committee is invited to:</p> <ul style="list-style-type: none"> • Consider and endorse this project outline; • Provide an opportunity during the CC14 meeting for further development of the proposal, including further identification of project activities (this could be through discussion in the margins of the meeting followed by a summary and further discussion in plenary); and • Propose a process for developing this outline into specific funding proposals.