Draft proposal to enhance education on and the implementation of ERS measures.

BirdLife International

Background

The October 2018 meeting of the Compliance Committee (CC13) recommended that the CCSBT Secretariat work with BirdLife and Members to develop a proposal to enhance the implementation of ERS measures through outreach/education and to verify compliance with measures, and that the Secretariat work with BirdLife and Members to seek external funding for that proposal (CC13 paragraph 115). One option put forward was to develop a joint project under the Common Oceans umbrella. This document contains a first outline of a proposal, for discussion by CCSBT Members at ERSWG13.

In relation to the potential for Common Oceans funding, this is the potential for funding from the UN Global Environment Facility, GEF, via the FAO, for projects related to Areas Beyond National Jurisdiction. This funding would form a follow-up to the initial Common Oceans Tuna ABNJ project, which finishes in 2019. The FAO has undertaken initial discussion of potential project activities via stakeholder workshops in December 2018 and April 2019. Discussion is still at an early stage and FAO's aim is to develop the programme and project concepts by the end of 2019. The output of discussion at ERSWG13 can therefore feed into further FAO discussion. GEF funding requires there to be substantial co-financing of project activities.

Draft project outline

The draft outline below is in the 'project capsule' format that has been used by FAO to gather initial expressions of interest for projects under the Common Oceans ABNJ funding.

<table>
<tr><td colspan="2">Common Oceans (ABNJ) Project Phase II Activity Proposal</td><td></td></tr>
<tr><td colspan="2">Activity in Brief:
Technical innovation and capacity-building to enhance the ability of fishery managers and Members to monitor and minimize bycatch</td><td>Potential Partners:
BirdLife International, CCSBT (to be discussed at CCSBT ERSWG meeting, May 2019)</td></tr>
<tr><td colspan="2">ABNJ Tuna Project: Y
ABNJ Deep Sea Project: N</td><td>Linkages to existing programmes (ABNJ or other): Activities underway in each of the 5 tuna RFMOs to reduce seabird bycatch</td></tr>
<tr><td>Objective:</td><td colspan="2">Use technological advances and capacity-building to enhance the capacity of ABNJ pelagic longline fleets to monitor and report on the use of seabird bycatch mitigation measures.</td></tr>
<tr><td>Rationale/Global Environmental Benefits:</td><td colspan="2">Rationale/Environmental benefits:
Albatrosses are the most threatened group of seabirds in the world: 15 of the 22 species are on the IUCN Red List, with bycatch being a key threat. Impacts on albatross and petrel populations are one of the main biodiversity</td></tr>
</table>

	impacts of fisheries in the ABNJ, and of global pelagic longline fishing. Regulations are in place in the 5 tuna RFMOs that should, when fully implemented, significantly reduce bycatch of albatrosses and petrels. However, the 2017 meeting of the CCSBT's Ecologically Related Species Working Group (ERSWG) meeting confirmed that the level of interaction between seabirds and SBT fisheries has remained at a high level and is still a significant level of concern. The ERSWG commented that this suggests that mitigation measures and their implementation should be further promoted. The first Common Oceans ABNJ Tuna project led to the world's first baseline estimate of annual seabird mortality in tuna RFMO pelagic longline fleets south of 20° S (~36,000 birds per year). With legal and technical aspects in place, and efforts made to date on education and outreach, a key barrier to implementation is lack of drivers and incentives for vessel-level use of bycatch mitigation measures. Evidence from various Electronic Monitoring (EM) projects has shown that use of mitigation measures and reporting by fleets improves dramatically with the implementation of EM. Automation of remote-monitoring of use of bycatch mitigation for fleet managers and Members will be a key factor in driving delivery of environmental benefit. **Links between the proposed activity and the outcomes in FAO's draft ABNJ Theory of Change:** (i) Monitoring and minimization of bycatch; (ii) Improved compliance processes with Members' implementation and enforcement of RFMO measures (iii) Investment in development and application of technological solutions for improved and transparent information.
Existing Baseline and Proposed Increment:	**Baseline:** 36,000 birds killed per year (2016 data). XX% mitigation use based on CCSBT Data Exchange. **Proposed increment:** XXXX (to be developed)
Context (i.e. any activities already underway):	The current Common Oceans ABNJ Tuna 1 project, implemented by BirdLife International as part of the FAO project, has conducted national awareness-raising for seabird bycatch mitigation measure requirements with a number of fleets, along with observer training and coordination of the collaborative efforts undertaken to produce the global seabird bycatch estimate below 20S. Pilots conducted elsewhere and by RFMO members have proven the concept of using cameras for Electronic Monitoring onboard pelagic longline vessels. 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 AIS data. There is potential for this technique to be

	extended to analysis by Members of their VMS data, in cases where 1-hour data are available. This project would support innovation of the tools that would enable Members to undertake such an analysis. The October 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 in order to actively encourage full implementation of these measures. BirdLife International has an Albatross Task Force programme of work that engages with pelagic longline, demersal longline and trawl fleets in South Africa, Brazil, Argentina, Namibia and Chile to support fleets to reduce seabird bycatch.

Technical Approach:

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

The project will engage with a group of CCSBT Members to deliver innovation of partially automated remote monitoring systems that will enable Members to measure the degree of implementation of bycatch mitigation measures by vessels (for seabirds this is principally monitoring the use of night setting and bird scaring lines, and to explore the potential for remote monitoring of line weighting). GEF funding is available for GEF-eligible countries. Co-funding would be needed for non GEF-eligible countries.

The proposed project approach is to use national-based workshops (involving fishery managers, industry and technology innovators) to initiate development of remote semi-automated bycatch compliance monitoring systems for the national fleet. This is likely to include development of a VMS version of the pilot AIS-based analysis of use of night setting (paper CCSBT-CC/1810/Info03),. The project will also trial low-cost conventional camera-based EM systems (as opposed to video EM systems) or non-camera sensors for monitoring usage of mitigation measures.

2. Port inspector training

The project will support a group of CCSBT Members and key ports to undertake training of port inspector personnel to increase capacity to monitor presence of bycatch mitigation measures onboard vessels. Training would cover all required seabird bycatch mitigation measures, with particular focus on techniques for confirming the presence of suitable line-weighting regimes because correct use of this mitigation measure may be difficult to confirm through automated techniques.

As far as possible, port inspector training events would will be scheduled in coordination with the technical innovation workshops above, to reduce costs.

3. Education and outreach

Once compliance monitoring systems are in development, education and outreach to participating fleets is an important aspect of supporting vessels and fleets to achieve success. Educational activities would include Port Based Outreach with fleets (as was done in Cape Town under the current Common Oceans ABNJ Tuna 1 project), and national awareness-raising workshops.

4. **Measure scale of bycatch reduction**
In 2021 or 2022, a repeat global seabird bycatch estimate will be undertaken, to assess change in bycatch levels since 2016. This will take the form of providing support to tuna RFMO national scientists to engage in analysis of their bycatch data, through a workshop format similar to the Common Oceans' first estimate.

Dissemination and Uptake of Products:

Nature of innovation?	Remote and partially automated systems to monitor compliance with mitigation measures, such that national fishery managers will have compliance information at their finger-tips. Accurate compliance data can then be reported to the Tuna RFMOs, in a way that reduces the work required by national and RFMO data managers.
Degree of sustainability?	Automated systems will provide a technique that Members can use beyond the conclusion of this project to continue monitoring bycatch implementation by their fleets. Port inspector training will mainstream bycatch monitoring into national and RFMO MCS systems
Extent of scalability?	Proof of concept systems which can be scaled across all five RFMOs
Potential indicators	WCPFC and CCSBT have established systems through which Members will be reporting % use of bycatch mitigation measures. In 2021 or 2022, a repeat analysis of the global seabird bycatch estimate, to assess change since 2016.
Assumptions:	Interest and willingness of Members to engage in the project; Members' co-funding to support activities; Technological innovation will solve challenges of vessel data storage and data transfer.
Budget:	c. $500K First outline of potential GEF budget:

1. Technical innovation workshops (3 countries, 3 workshops each)	$ US dollar
Consultant/expert travel	27,000
Delegates accommodation/meals/ travel	33,750
Consultants 50 days	20,000
BirdLife staff time	18,000
Venue hire	2,250
Translation	3,600
Gear development (very rough estimate)	150,000
Sub total	$254,600

	2. Port-inspector training (9 one-day workshops)
	Meals 7,500
	BirdLife staff time 10,800
	Consultant time 15 days 6,000
	Translation 3,600
	Trainer travel (Combine with innovation workshops) 0
	Sub total $27,900
	3. Education and outreach (3 countries)
	Staff costs consultants/experts 30,000
	Meeting costs 5,000
	Materials, supplies, travel or accommodation 15,000
	Sub total $50,000
	4. Repeat seabird bycatch estimate for pelagic longline fleets south of 20S
	20 delegates travel 30,000
	20 delegates accommodation/meals 30,000
	Consultant 20 days 8,000
	Update seabird tracking analysis 7,500
	Venue hire 12,000
	BirdLife staff time 15,000
	Sub total $102,500
	Contingency 10% $43,500
	Total $478,500
Co-financing:	Members' time and support to conduct VMS analysis, use of research vessels, funding to support activities in non-GEF-eligible countries.
Next steps:	Submit draft outline to CCSBT Ecologically Related Species Working Group meeting (28-31 May 2019) for its consideration.
Key words:	Bycatch, Compliance, innovation