## CCSBT-ESC/2308/33 (ESC Agenda item 11)

Australia's National Science Agency



## SRP proposal: Preparatory work on detection of unaccounted mortality

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Prepared for the Extended Scientific Committee, for the Twenty Eighth Meeting of the Scientific Committee 28th August – 2nd September 2023 Jeju Island, Korea **SRP proposal**: Preparatory work on detection of unaccounted mortality (UAM).

A (Start year): 2024

B (Duration): 1 year

C (General category): CTP

D (Sub category): Catch

E (Project title): Preparatory work on detection of unaccounted mortality (UAM)

F (Problem): Currently, the CCSBT estimates potential UAM (Edwards and Hoyle, 2023) but there has been very limited detection of UAM to corroborate whether or not these catches are being taken. There are existing and potential techniques available for detection of UAM, including new genetic techniques.

G (Objectives):

- 1. Collate information from studies of existing and new UAM detection techniques.
- Develop a work plan and SRP proposal to provide consolidated advice on detection techniques that could be applied to SBT compliance and supply chain monitoring, in collaboration with the CCSBT's Compliance Manager, for consideration by the ESC and CC in 2024.

**Deliverables:** an SRP proposal for a project to provide advice on feasibility and cost-benefits of techniques for detection of UAM for CCSBT.

## H (Rationale):

The 2021 performance review identifies that uncertainty in UAM can undermine the rebuilding of the SBT stock (Performance Review recommendation number: PR2021-01). The current quantification of potential UAM does not provide any information on actual catches taken, which is unlikely to be improved by finessing of the data analysis method. New work should be focussed on detection of UAM, and then actions to reduce UAM.

The estimates of UAM are used in the exceptional circumstances process to check if the MP recommended TAC is safe to implement. The MP has been designed and tested to be robust to the UAM that was incorporated into the MSE operating models (in 2019). Current UAM estimates are below the threshold for exceptional circumstances.

The estimates of UAM are directly included in the stock assessment. The UAM sensitivity tests indicate that there is little effect on current stock status but faster rebuilding of the stock and a higher probability of reaching the target, if UAM is reduced.

I (Impact Scale): High

J (Impact timing): Medium

K (Priority): to be completed at ESC meetings.

L (Rank): to be completed at ESC meetings.

M (Budget): \$0 –CSIRO/Australia, will utilise existing work, to inform this initial stage.

N (CCSBT funding required): None