Australian Government
Department of Agriculture, Fisheries and Forestry

A guide for adopting a CCSBT Management Procedure: short-term and long-term considerations

Background

The main decision to be taken by CCSBT at its 17th meeting in October 2010 is to continue its commitment to rebuilding the southern bluefin tuna (SBT) stock through the adoption of a management procedure (MP)—or set of decision rules guiding future catch levels—that will achieve CCSBT's agreed interim target of rebuilding the SBT spawning stock to 20 per cent of its unfished levels.

At its second meeting in April 2010, CCSBT's Strategy and Fisheries Management Working Group (SFMWG) agreed a series of parameters to provide guidance to the Scientific Committee in testing and making recommendations on candidate MPs. These parameters included the probability (or confidence) of achieving the interim rebuilding target of 20 per cent, the timeframe in which the interim target is to be reached, and the frequency and magnitude of changes to the global TAC required to attain the interim target (Table 1). Different combinations of these technical parameters dictate: how precautionary the short-term catch levels are; the rate at which the stock can rebuild; and the level of catch available to Members in the short- and long-term.

In addition to the parameters listed in Table 1, SFMWG agreed that the following rules should govern future changes to the TAC:

- The frequency of TAC changes should be limited to once every 3 years
- The minimum TAC change allowed every 3 years should be 100 t
- MP testing of early TAC changes was preferred over late TAC changes

SFMWG also agreed several short-term checkpoints to monitor and describe the rate of stock recovery:

- If the timeframe is 2035: that the SBT spawning stock biomass rebuilds to (a) 10% of unfished levels by 2022 or (b) double its 2009 biomass by 2022
- If the timeframe is 2040: that the SBT spawning stock biomass rebuilds to (a) 10% of unfished levels by 2025 or (b) double its 2009 biomass by 2025

The performance of candidate MPs against these short-term checkpoints may be taken into consideration by CCSBT when finalising and adopting an MP.

In September 2010, the CCSBT Extended Scientific Committee (ESC) tested the performance of nine candidate MPs against the technical parameters established by SFMWG and recommended three MPs for consideration by CCSBT in October 2010: MP_1, MP_2 and Average_MP. The performance of these three MPs is summarised in Section 10.2 of the ESC's 2010 report (paragraphs 55–62; Figures 1–6; Table 1).

In order to finalise and adopt an MP in October 2010, CCSBT will need to reach agreement on the type of MP to be used, based on the recommendations of the ESC, and several other parameters that will establish the decision rules under which the MP will operate. A guide to the decisions required to finalise and adopt an MP is provided in Table 1.

A guide to decisions required to finalise and adopt the MP

Table 1. Summary of parameters tested by the ESC in September 2010 under the guidance of SFMWG. Note: In April 2010, SFMWG requested that the frequency of TAC changes be every 3 years; and that the minimum TAC change be 100 t. These are considered to be fixed variables for the purpose of this summary.

Criteria	Options (evaluated)	Consideration
MP structure	Model Empirical	There was not an obvious difference in performance. The type of MP may be less important than the criteria and tuning levels chosen.
MP type	MP_1 (more reactive)	The more reactive MP minimises the risk of further declines in stock biomass and is the more precautionary in the short-term. Higher global TACs are available to Members in the long-term.
	MP_2 (less reactive)	The less reactive MP generates higher TACs in the short-term but exposes the stock to a higher risk of further decline. Lower TACs are available to Members in the long-term.
	Average_MP	An average of MP_1 and MP_2.
Timeframe	2035	Interim rebuilding target to be attained within 25 years of 2010. 2035 is more precautionary.
	2040	Interim rebuilding target to be attained within 30 years of 2010.

Probability	60%	60% was considered by SFMWG2 to be the minimum acceptable probability for achieving the interim rebuilding target.
	70%	Under the *Harvest Strategy Standard for New Zealand Fisheries*, stocks are considered fully rebuilt when a rebuilding target is achieved with 70% probability.
	90%	Under Australia's *Commonwealth Fisheries Harvest Strategy Policy*, stocks should be maintained above 20% unfished biomass at least 90% of the time. 90% is the most precautionary.
Maximum TAC change	3000 t	3000 t minimises impacts on industry, especially when reductions in the TAC are required.
	5000 t	5000 t maximises the rate at which TACs can increase and still attain the 20% interim target. However, 5000 t has a greater impact on industry when reductions are needed.
Lag	No lag	Members' industries will have between 6 weeks and 12 months to prepare for the following fishing season after the determination of the global TAC.
	1-year lag	Members' industries will have a minimum of 12 months' notice to adjust to any change in the global TAC.