SCIENTIFIC ADVISORY COMMITTEE 14TH MEETING

La Jolla, California (USA) 15-19 May 2023

DOCUMENT SAC-14 INF-S

Subject to Change as more Information Becomes Available to the ISC

At this time the ALBWG stresses that the criteria developed in this document are incomplete and without implementation indicators based on adopted HCR(s) the application of these incomplete criteria may bias results and introduce uncertainty.

Preliminary Criteria for identifying exceptional circumstances for north Pacific albacore tuna

The Albacore Working Group (ALBWG) of the International Science Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) was tasked by the Western and Central Pacific Fisheries Commission (WCPFC) and the Inter-American Tropical Tuna Commission (IATTC) with developing criteria for the identification of exceptional circumstances that would result in suspending or modifying the application of the adopted harvest strategy, and potentially may require updated Management Strategy Evaluation (MSE) simulation work. Exceptional circumstances define situations outside the range of scenarios over which robustness of the harvest strategies was evaluated in the MSE analysis, and for which a different management action than specified by the adopted harvest strategy may have to be taken. This preliminary guidance document provides an outline of the process for identifying exceptional circumstances. However, the document does not provide all necessary actions to apply should an exceptional circumstance be identified, nor does it cover all possible exceptional circumstances.

These criteria for identifying exceptional circumstances for north Pacific albacore tuna (NPALB) were developed by the ALBWG based on criteria developed by other Regional Fisheries Management Organizations (RFMOs), such as the International Commission for the Conservation of Atlantic Tunas (ICCAT), for other tuna stocks. The ALBWG noted that not all the elements of a harvest strategy [e.g. harvest control rules (HCRs)] for NPALB were fully developed by the IATTC and WCPFC in 2022. Therefore, the WG could not develop detailed criteria for some aspects of exceptional circumstances. For example, some exceptional circumstances include criteria based on implementation failure of the HCRs but detailed HCRs have not yet been included in the harvest strategy. Therefore, these potential exceptional circumstances will need to be reexamined once control rules are adopted.

To identify exceptional circumstances for NPALB, the ALBWG will continue to conduct benchmark stock assessments for the stock every 3 years with updated data sources and research as well as examine new evidence about the current stock status and environmental conditions.

The following general elements will be considered when examining signals of possible exceptional circumstances for NPALB:

Stock and Fleet Dynamics: Evidence from stock assessment estimates that the stock is in a state not previously simulated in the MSE (e.g., current or projected SSB estimates are outside the range of uncertainty, or new evidence about the biology of the stock is presented). As well as evidence that the fleet structure or fishing operations have changed substantially.

Application: Data collection required to produce the stock assessment is no longer available and/or appropriate to apply the adopted harvest strategy.

Implementation: The implementation of the management action is substantially different from what is prescribed by the HCRs (Note that HCRs have not yet been adopted for NPALB). For example, the total removals or effort by the fishery differ substantially (i.e. more than what was specified by the implementation error used in the MSE) from what is prescribed by the HCRs.

Based on the general elements above, several indicators for NPALB were identified by the ALBWG and are summarized in the following table:

Element	Indicator	Range	Evaluation Schedule
Stock and Fleet Dynamics	Depletion stock biomass (SSB/SSB _{current} , F=0) Relative fishing intensity (F%) defined as (1-SPR) where SPR is the spawning potential ratio	In any year estimates fall outside the range of uncertainty simulated by the operating models (OMs) used in the most recent MSE (accepted by the ALBWG in 2021)	Benchmark stock assessment every 3 years
	Changes in fleet dynamics Biological parameters	Any substantial differences from the structure and parameterization used in the OMs of the most recent MSE (accepted by the ALBWG in 2021)	As new evidence and research is presented and accepted by the ALBWG
Application	Stock assessment	Not producible or unreliable	Benchmark stock assessment every 3 years

Draft – Subject to Change upon ISC Plenary Review in July 2023.

Implementation	TBD (will depend on	The implementation of the	TBD
	adopted HCRs)	management action is	
		substantially different from	
		what is prescribed by the	
		HCR	

Should evaluation of the above criteria identify any exceptional circumstances, the ALBWG will assess the severity and potential impacts on the performance of harvest strategies, including the HCRs, and provide advice on the action required, including the need for a change in harvest strategy (e.g., reference points, HCRs) and/or updates to the MSE framework for NPALB.

