25-02 TRO

RECOMMENDATION BY ICCAT REPLACING RECOMMENDATION 24-04 ON A CANDIDATE MANAGEMENT PROCEDURE FOR WESTERN ATLANTIC SKIPJACK TUNA

RECALLING the intent of the Commission to adopt management procedures (MPs) tested through management strategy evaluation (MSE) for priority stocks, including western skipjack tuna (SKJ-W), as established in the *Recommendation by ICCAT on the development of harvest control rules and of management strategy evaluation* (Rec. 15-07) to manage fisheries more effectively in the face of identified uncertainties;

RECALLING the application of the precautionary approach in accordance with relevant international standards as established in the *Resolution by ICCAT concerning the use of a precautionary approach in implementing ICCAT conservation and management measures* (Res. 15-12);

TAKING INTO ACCOUNT the efforts to sustainably manage the western Atlantic skipjack stock, consistent with the objectives of the Convention and the *Recommendation by ICCAT on the principles of decision making for ICCAT conservation and management measures* (Rec. 11-13);

TAKING FURTHER INTO ACCOUNT the relatively short life cycle and highly variable population dynamic of the skipjack tuna species;

NOTING the conclusions of the 2022 Stock Assessment conducted by the ICCAT Standing Committee on Research and Statistics (SCRS), which indicated that the western Atlantic skipjack stock is most likely located in the green quadrant of the Kobe plot, indicating that the stock is not overfished and overfishing is not occurring;

RECALLING that the preliminary performance indicators agreed to by the Commission for tropical tunas, as outlined in *Recommendation by ICCAT on a Multi-annual Conservation and Management Programme for Tropical Tunas* (Rec. 16-01), included four categories of management objectives, namely Status, Safety, Yield and Stability;

RECALLING the conceptual management objectives agreed by ICCAT for western skipjack in Resolution by ICCAT on development of initial conceptual management objectives for western Atlantic skipjack (Res. 22-02);

NOTING that the objective of the Convention is to maintain populations of tuna and tuna-like species at levels that will support maximum sustainable catch (usually referred to as Maximum Sustainable Yield (MSY));

CONSIDERING the work of the SCRS since 2020 to test through MSE several candidate management procedures (CMPs);

RECALLING that the Commission requested the SCRS to continue testing various CMPs in 2024 and to meet with Panel 1 to review the results and support the Panel in selecting one to adopt in 2024 and for this purpose Panel 1 held three intersessional meetings in 2024, including one dedicated to the western skipjack MSE;

RECOGNIZING that paragraph 8 of Recommendation by ICCAT on a candidate management procedure for western Atlantic skipjack tuna (Rec. 24-04) called for the SCRS to finalize MP tuning and for the Commission to adopt an MP for western Atlantic skipjack in 2025 and apply the MP to establish the total allowable catch (TAC) for 2026-2028 and future years;

NOTING the importance of establishing an exceptional circumstances protocol in 2026 that could result in suspending or modifying the application of the MP;

RECOGNISING that after 6 years of implementation of the MP it is advisable to review;

THE INTERNATIONAL COMMISSION FOR THE CONSERVATION OF ATLANTIC TUNAS (ICCAT) RECOMMENDS THAT:

Part I General provisions

1. Contracting Parties and Cooperating non-Contracting Parties, Entities or Fishing Entities (CPCs) whose vessels fish for western Atlantic skipjack tuna in the Convention area shall implement the MP set out in **Annex 1**. This MP shall be used to calculate the TAC for the western Atlantic management area for 2026 and beyond.

Management objectives

- 2. The management objectives for the western Atlantic skipjack tuna stock are:
 - a) Stock status: The stock should have a 60% or greater probability of occurring in the green quadrant of the Kobe matrix over the medium-term (4-10 years) using a 30-year projection period.
 - b) Safety: There should be no greater than 10% probability of the stock falling below B_{LIM} (0.4* B_{MSY}) at any point during the 30-year projection period.
 - c) Yield: Maximize overall catch levels.
 - d) Stability: Any changes in TAC between management periods should be 25% or less.

Performance indicators used to evaluate MP performance for each management objective are found in **Annex 2**.

Part II Management procedure and exceptional circumstances

3. Consistent with the management objectives specified in paragraph 2, the Index Ratio (IR) management procedure is adopted. The MP is fully described in **Annex 1**.

TAC setting

- 4. The first constant annual TAC of 30,844 t derived from the MP shall apply in 2026, 2027, and 2028. The management cycle length shall be three years; therefore, the MP shall be applied every three years. The procedure for the establishment of the 3-year constant annual TAC is set out in **Annex 3**.
- 5. If SKJ-W catches exceed by more than 5% the TAC in force for this stock during two consecutive years, the Commission shall consider adopting mechanisms to reduce fishing pressure.
- 6. According to the timeline set out in **Annex 3**, the SCRS shall run the MP and advise the Commission of the resulting TAC per the process specified in **Annex 3**.
- 7. The Commission shall then adopt the TAC based on the outcome of the MP, unless the SCRS identifies exceptional circumstances that require consideration of alternative management actions to be taken by the Commission.
- 8. The SCRS shall assess the occurrence of exceptional circumstances annually and the Commission shall act in accordance with the exceptional circumstances protocol, developed based on scientific advice provided by the SCRS and adopted by the Commission.

Part III Final provisions

- 9. Panel 1, with scientific guidance from the SCRS, shall develop the exceptional circumstances protocol for this MP for review and adoption by the Commission at its 2026 Annual Meeting or as soon as possible thereafter. The protocol will become Annex 4 of this Recommendation once adopted.
- 10. A review of the performance of the MP by the Commission and the SCRS shall be completed by 2031 and every 6 years thereafter. The aim of the review is to ensure the MP is performing as expected and to determine whether there are conditions that justify its continuation, or that warrant reconditioning the MSE operating models; retuning the existing MP; including new indices into a new MP; and/or considering alternate CMPs or development of a new MSE framework. Based on that review and subsequent SCRS advice, the Commission shall decide on future management measures, approaches, and strategies, including, inter alia, regarding TAC levels, for western Atlantic skipjack.
- 11. Any changes in the dynamics of the western skipjack fisheries that may have bearings on the multistock MSE will be included as a trigger for exceptional circumstances when the exceptional circumstances protocol is developed for western skipjack in 2026.
- 12. This Recommendation repeals and replaces *Recommendation by ICCAT on a candidate management procedure for western Atlantic skipjack tuna* (Rec. 24-04).
- 13. This measure does not replace or repeal any measure within *Recommendation by ICCAT replacing Recommendation 22-01 on a multi-annual conservation and management programme for tropical tunas* (Rec. 24-01), which will continue to apply to CPCs harvesting western skipjack.

Description and formulae for calculating the Total Allowable Catch (TAC) for western Atlantic skipjack tuna using the Index Ratio (IR) Management Procedure (MP)

Index Ratio (IR)

The IR management procedure is an empirical MP that uses a single standardized relative abundance index (for the SKI-W, the Combined Index) to structure its harvest control rule. The core principle of the IR MP is to adjust the TAC in proportion to systematic changes in the index (for example, catch levels increase when the index shows an increasing tendency and decrease when the index signals a decline). This is implemented by comparing the mean value of the index over a recent window (i.e. past 3 years) to a historical reference level (i.e. 2018-2020), producing a ratio that reflects the relative condition of the stock.

The resulting multiplier is then scaled by a tuning parameter, which was calibrated through MSE to balance the management objective defined for the SKJ-W stock. Specifically, the tuning targeted maximizing long-term yield while ensuring (i) a maximum 10% probability of the stock falling below BLIM (0.4*SSBMSY) over the 30-year projection period, and (ii) achieving at least a 60% probability of being in the Kobe green quadrant (i.e. $SSB \ge SSB_{MSY}$ and $F \le F_{MSY}$) in the medium-term (years 4–10). Stability safeguards, including caps on the size of TAC adjustments and interannual ramping limits, were applied to avoid abrupt changes in catch levels and support operational feasibility of this MP.

Abundance Index (the Combined Index)

The Combined Index integrates the annual abundance indices provided by Brazil, United States of America and Venezuela, which together account for more than 95% of the total reported catches of this stock in the western Atlantic Ocean and span the core latitudinal range of the SKI-W distribution. To construct the Combined Index, each individual index is weighted by the inverse of its estimated variance, giving greater influence to indices with higher precision while down-weighting those with greater uncertainty (SCRS/2024/162).

Finally, the combined time series is standardized so that its mean value across years equals 1, ensuring that all subsequent comparisons reflect relative changes in stock availability. This standardized series is referred to as *I*.

MP specifications

This MP uses a 3-year management cycle length. The input data (i.e. catches and the Combined Index) are included with a one-year lag (i.e. TAC for 2026 is set in 2025 with data through 2024).

The TAC will be derived from the average catches of the current 3 years and weighted by θ parameter following the equations below:

$$TAC = \theta C_{curr}$$

where θ is the regulatory adjustment factor, calculated as the ratio between the recent 3-year average of the Combined Index (I_{curr}) and a historical 3-year reference average (I_{hist}) of the Combined Index, multiplied by a tuning parameter (λ). The tuning parameter for IR MP is λ = 1.0341645. Thus, these quantities can be estimated as follows:

- $I_{hist}^- = \frac{1}{Y_h} \sum_{1}^{Y} I_h$, where h belongs to the time window of historical years (Y); $I_{curr}^- = \frac{1}{Y_c} \sum_{1}^{Y} I_c$, where c belongs to the time window of current years (Y).

And subsequently, the regulatory adjustment factor can be estimated as:

$$\theta = \left(\frac{I_{curr}}{I_{hist}}\right)\lambda$$

The MP-based TAC is subject to the following additional restrictions:

- A maximum TAC of 45,000 t; and
- A 25% limit on both TAC increases and decreases from one management cycle to the next.

Table of operational management objectives and performance indicators

Management objectives	Corresponding performance indicators
Status The stock should have a 60% or greater probability of occurring in the green quadrant of the Kobe matrix over the medium-term (4-10 years) using a 30-year projection period.	PGK _{short} : Probability of being in the Kobe green quadrant (i.e., SSB≥SSB _{MSY} and F <f<sub>MSY) in year 1-3 PGK_{medium}: Probability of being in the Kobe green quadrant (i.e., SSB≥SSB_{MSY} and F<f<sub>MSY) in year 4-10* PGK_{long}: Probability of being in the Kobe green quadrant (i.e., SSB≥SSB_{MSY} and F<f<sub>MSY) over years 11-30 PGK: Probability of being in the Kobe green quadrant (i.e., SSB≥SSB_{MSY} and F<f<sub>MSY) over years 1-30 POF: Probability of F>F_{MSY} over years 1-30 PNOF: Probability of F<f<sub>MSY over years 1-30</f<sub></f<sub></f<sub></f<sub></f<sub>
Safety There should be no greater than 10% probability of the stock falling below B _{LIM} (0.4*B _{MSY}) at any point during the 30-year projection period.	LRP _{short} : Probability of breaching the limit reference point (i.e., SSB<0.4*SSB _{MSY}) over years 1-3 LRP _{medium} : Probability of breaching the limit reference point (i.e., SSB<0.4*SSB _{MSY}) over years 4-10 LRP _{long} : Probability of breaching the limit reference point (i.e., SSB<0.4*SSB _{MSY}) over years 11-30 LRP _{all} : Probability of breaching the limit reference point (i.e., SSB<0.4*SSB _{MSY}) over years 1-30
Yield Maximize overall catch levels.	AvC _{short} : Median catches (t) over years 1-3 AvC _{medium} : Median catches (t) over years 4-10 AvC _{long} : Median catches (t) over years 11-30
Stability Any changes in TAC between management periods should be 25% or less.	VarC _{medium} : Variation in TAC (%) between management cycles over years 4-10 VarC _{long} : Variation in TAC (%) between management cycles over years 11-30 Var _{all} : Variation in TAC (%) between management cycles over years 1-30

^{*}Tuning objective used for CMP development.

Schedule for management procedure implementation

3-Year Cycle

	2025	2026	2027	2028	2029	2030	2031
SCRS checks for exceptional circumstances		X	X	X	X	X	X
SCRS runs CMPs	X						
Commission adopts an MP	X						
SCRS runs MP	X			X			X
Commission adopts TAC based on MP	X			X			X
TAC in effect		X	X	X	X	X	X
SCRS MP review							X
Status Check/Assessment ¹							X
Commission assesses SCRS review and next steps							X

 $^{^1}$ The Status Check/Assessment will follow the methodology of the 2022 Stock Assessment, running both the SPSS and Stock Synthesis (SS3) models.