

## OUTCOMES OF THE 26<sup>th</sup> SESSION OF THE SCIENTIFIC COMMITTEE

PREPARED BY: IOTC SECRETARIAT, JUNE 2024

### PURPOSE

To inform participants at the 14<sup>th</sup> Working Party on Neritic Tunas (WPNT14) of the recommendations arising from the 26<sup>th</sup> Session of the IOTC Scientific Committee (SC) held from 4 – 8 December 2023, specifically relating to the work of the WPNT.

### BACKGROUND

At the 26<sup>th</sup> Session of the SC, the SC noted and considered the recommendations made by the WPNT in 2023 that included: the organization of training workshops for fish species identification; the amendment of the IOTC data reporting requirements relating to standard effort units by gear type; the development of a large-scale regional sampling programme focusing on the collection of size-frequency data from coastal fisheries as well as requests for CPCs to improve data collection and reporting and to develop their own CPUE series. These requests were made in order to be able to properly assess the stock status of these species.

IOTC code	English name	Scientific name
LOT	Longtail tuna	<i>Thunnus tonggol</i>
FRI	Frigate tuna	<i>Auxis thazard</i>
BLT	Bullet tuna	<i>Auxis rochei</i>
KAW	Kawakawa	<i>Euthynnus affinis</i>
COM	Narrow-barred Spanish mackerel	<i>Scomberomorus commerson</i>
GUT	Indo-Pacific king mackerel	<i>Scomberomorus guttatus</i>

Based on the recommendations arising from the WPNT13, the SC26 adopted a set of recommendations, provided in [Appendix A](#) of this paper.

The recommendations contained in [Appendix A](#) were provided to the Commission for consideration at its 28<sup>th</sup> Session which was held in May 2024.

In addition, the SC26 reviewed and endorsed a Program of Work (2024–28) for the WPNT, including a revised stock assessment schedule, as detailed in [Appendix B](#) and [Appendix C](#). A separate paper (IOTC–2024–WPNT14–08) will outline the review and development process for a Program of Work for the WPNT for the next five years.

### DISCUSSION

In addition to the recommendations outlined in [Appendix A](#), [Appendix B](#) and [Appendix C](#), the SC made several other comments relevant to the WPNT, which participants are asked to consider:

#### Report of the 13<sup>th</sup> Session of the Working Party on Neritic Tunas (WPNT13)

(para. 41) The SC **NOTED** the report of the 13<sup>th</sup> Session of the Working Party on Neritic Tunas (IOTC–2023–WPNT13–R), including the consolidated list of recommendations provided as an appendix to the report. The meeting was attended by 35 participants (cf. 36 in 2022). Eight participants received funding through the MPF.

(para. 42) The SC **NOTED** that for several of these species, the advice and assessments are treating them all as if they are a single stock in the Indian Ocean region. The SC **ACKNOWLEDGED** that the data is limited, but preliminary analyses indicate that there is significant stock structure for many of these species even though this structure has not been accurately delineated at this stage. The SC therefore **ENCOURAGED** additional studies to determine stock structure for neritic tuna and seerfish species.

(para. 43) The SC **ENDORSED** the development of a large-scale regional sampling program focusing on the collection of size-frequency data and tissue samples from coastal fisheries and also including the collection of morphometric data required to develop robust conversion factors, length-length and length-weight relationships. To this end, several Members expressed their interest to share samples in order to build on the stock structure project conducted and presented in 2020 (IOTC-2020-WPNT10-10).

(para. 44) The SC **NOTED** the comments from some CPCs questioning whether these species should be under the mandate of the IOTC as they are largely coastal and shared between coastal states. The Secretariat clarified that this question would be better addressed by the Commission as the SC is following the current IOTC Agreement which lists these species as being under the IOTC competence.

(para. 45) The SC **NOTED** the importance of data collection and mining for these species as they are of high importance to many Members. In addition, the socio-economic importance of these species should be investigated by the newly formed Working Party on Socio-Economics (WPSE).

(para. 46) The SC **NOTED** the recommendation by the WPNT to consider changing the name of the WP from the Working Party on Neritic Tunas to the Working Party on Neritic Tunas and Seerfish. The SC **AGREED** that this change may cause confusion to managers but that seerfish species will continue to be monitored and evaluated by the WP.

(para.47) **NOTING** how issues in species identification are common for neritic tunas and seerfish in several fisheries and that this affects the accuracy of the time series of catch which are the main input for the assessment models, the SC **ENDORSED** the organisation of training workshops for fish species identification.

#### ***Executive summaries for neritic tuna species***

The SC also adopted revised Executive Summaries for each of the neritic tuna species that can be found as appendices to the SC26 report, and which can be downloaded from the IOTC website in English and French:

English: <http://iotc.org/science/scientific-committee>

French: <https://iotc.org/fr/science/comité-scientifique>

#### **RECOMMENDATION/S**

That the WPNT:

- 1) **NOTE** paper IOTC–2024–WPNT14–03 which outlined the main outcomes of the 26<sup>th</sup> Session of the Scientific Committee (SC26), specifically related to the work of the WPNT.
- 2) **CONSIDER** how best to progress these issues at the present meeting.

#### **APPENDICES**

**Appendix A:** Consolidated set of recommendations of the 26<sup>th</sup> Session of the Scientific Committee to the Commission, relevant to the Working Party on Neritic Tunas.

**Appendix B:** Schedule of stock assessments for the WPNT (2024–28).

## APPENDIX A

**CONSOLIDATED SET OF RECOMMENDATIONS OF THE 25<sup>th</sup> SESSION OF THE SCIENTIFIC COMMITTEE (5-9 December 2022) TO THE COMMISSION RELEVANT TO THE WORKING PARTY ON NERITIC TUNAS**

*Extract of the Report of the 25<sup>th</sup> Session of the Scientific Committee*

*(IOTC-2022-SC25-R[E]; Appendix 38, Page 261)*

**STATUS OF TUNA AND TUNA-LIKE RESOURCES IN THE INDIAN OCEAN**

***Tuna and seerfish – Neritic species***

SC26.02 (para. 161) The SC **RECOMMENDED** that the Commission note the management advice developed for each neritic tuna (and seerfish) species under the IOTC mandate, as provided in the Executive Summary for each species, and the combined Kobe plot for the three species assigned a stock status in 2022 (Fig. 2):

Bullet tuna (*Auxis rochei*) – [Appendix 12](#)

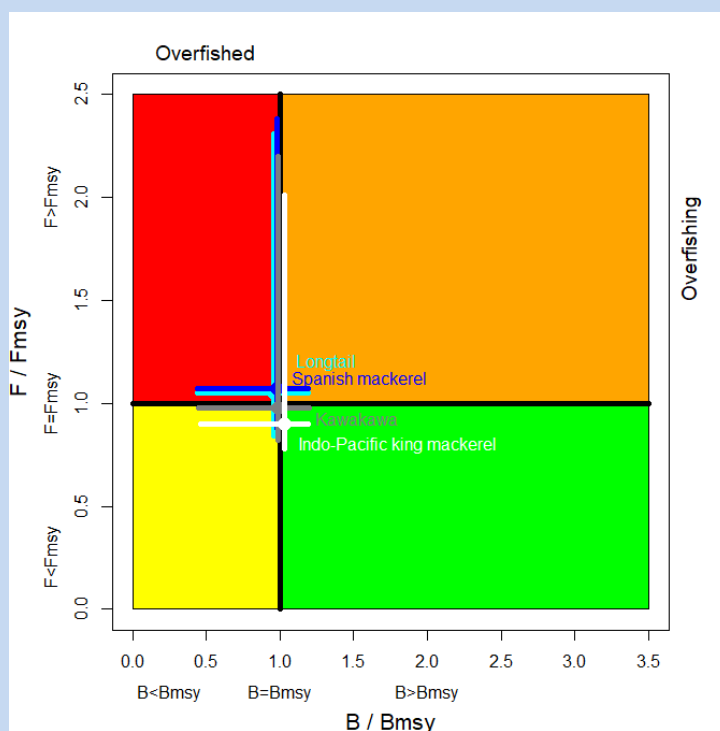
Frigate tuna (*Auxis thazard*) – [Appendix 13](#)

Kawakawa (*Euthynnus affinis*) – [Appendix 14](#)

Longtail tuna (*Thunnus tonggol*) – [Appendix 15](#)

Indo-Pacific king mackerel (*Scomberomorus guttatus*) – [Appendix 16](#)

Narrow-barred Spanish mackerel (*Scomberomorus commerson*) – [Appendix 17](#)



**Fig. 2.** Combined Kobe plot for longtail tuna (cyan), narrow-barred Spanish mackerel (blue), kawakawa (grey) (all for 2021 with assessment conducted in 2023) and Indo-Pacific king mackerel (2019 with assessment conducted in 2021 (white)), showing the estimates of stock size (B) and current fishing mortality (F) in relation to optimal biomass and optimal fishing mortality. Cross bars illustrate the range of uncertainty from the model runs. Given unresolved uncertainty in the assessment, status for bullet tuna, frigate tuna and Narrow-barred Spanish mackerel should be interpreted with caution.

**GENERAL RECOMMENDATIONS TO THE COMMISSION, TO SPECIFIC CPCs AND/OR OTHER BODIES*****SUMMARY DISCUSSION OF MATTERS COMMON TO WORKING PARTIES (CAPACITY BUILDING ACTIVITIES – STOCK ASSESSMENT COURSE; CONNECTING SCIENCE AND MANAGEMENT, ETC.)******National Reports from CPCs***

SC26.08 (para. 38) The SC **RECOMMENDED** that the Compliance Committee and Commission note the lack of compliance by 5 Contracting Parties (Members) that did not submit a National Report to the Scientific Committee in 2023, **NOTING** that the Commission agreed that the submission of the annual reports to the Scientific Committee is mandatory.

***Invited Expert(s) at the WP meetings***

SC26.22 (para. 153) Given the importance of external independent review for working party meetings, the SC **RECOMMENDED** the Commission continue to allocate sufficient budget for invited scientific experts to be regularly invited to scientific working party meetings.

***IOTC species identification guides: Tuna and tuna-like species***

SC26.23 (para. 155) The SC reiterated its **RECOMMENDATION** that the Commission allocates budget towards continuing the translation and printing of the IOTC species ID guides so that hard copies of the identification cards can continue to be printed as many CPC scientific observers, both on board and at port, need to have hard copies.

***Chairpersons and Vice-Chairpersons of the SC and its subsidiary bodies***

SC26.24 (para. 157) The SC **RECALLED** its recommendation in 2022 that the Commission revise the current Rules of Procedure (if necessary) to allow Chairs to serve an additional year or years beyond two terms if no suitable candidates are available to replace them once their terms are completed. The SC **NOTED** that the Commission endorsed the SC recommendations as its own and that therefore this recommendation was approved. In light of this recommendation the terms of several Working Party Chairs as well the SC Chair was extended beyond their two terms and the SC **RECOMMENDED** that this be noted and endorsed by the Commission.

SC26.25 (para. 158) The SC **RECOMMENDED** that the Commission note and endorse the Chairpersons and Vice-Chairpersons for the SC and its subsidiary bodies for the coming years, as provided in [Appendix 7](#).

***IMPLEMENTATION OF THE REGIONAL OBSERVER SCHEME***

SC26.26 (para. 175) The SC **ACKNOWLEDGED** that the estimated levels of coverage provided in Appendix B.1 of IOTC-2023-SC26-07\_rev1 are based on the number of hooks (observed and total), as this effort unit is the only one generally available to the IOTC Secretariat. The SC further **NOTED** that the issue had been previously raised during SC25 and therefore **REITERATED** its **RECOMMENDATION** (SC25.34 (Para. 172)) that at the next revision of Res. 15/02 this is amended to include the mandatory reporting of sets/operations as a additional unit of effort for longline fisheries.

***PROGRAM OF WORK AND SCHEDULE OF WORKING PARTY AND SCIENTIFIC COMMITTEE MEETINGS******Consultants***

SC26.27 (para. 187) Noting the highly beneficial and relevant work done by IOTC stock assessment consultants in previous years, the SC **RECOMMENDED** that the engagement of consultants be continued for each coming year based on the Program of Work. Consultants will be hired to supplement the skill set available within the IOTC Secretariat and CPCs.

***Data preparatory meetings and Hybrid meetings***

SC26.28 (para. 189) **ACKNOWLEDGING** that holding data preparatory meetings prior to stock assessments is considered to be best practice (as identified by the yellowfin stock assessment external reviewer, the WPTT and the WPDCS) and noting that since 2019 data preparatory meetings were successfully held for the WPTmT, WPTT and WPEB, the SC **AGREED** to continue the practice of having data preparatory

meetings in addition to stock assessment meetings for the major IOTC species. The SC **RECOMMENDED** that data preparatory meetings could continue to be held virtually so as not to increase the travel and costs required for the already full IOTC timetable of meetings.

SC26.29 (para. 190) The SC **NOTED** that there had been a few teething problems holding meetings in a hybrid format in 2023, especially related to the costs associated with the audio-visual equipment required, as well as the issues associated with ensuring the equipment was suitable to ensure full participation of both those in person as well as those connecting virtually. However, the SC **AGREED** on the utility of facilitating both in-person and virtual participation at future meetings to ensure increased participation and reduce the logistical costs for many CPCs and observers. As such, the SC **RECOMMENDED** that future Scientific Committee meetings continue to be held in a hybrid format, as well as working parties if possible. The SC further **RECOMMENDED** that all presentations at these meetings be made in person to ensure the aforementioned issues did not adversely affect the quality of the advice being provided.

## APPENDIX B

## ASSESSMENT SCHEDULE FOR IOTC SPECIES AND SPECIES OF INTEREST FROM 2023–2027

Extract of the Report of the 25<sup>th</sup> Session of the Scientific Committee

(IOTC–2023–SC26–R; Appendix 36, Page 197)

The SC **ADOPTED** a revised assessment schedule, ecological risk assessment and other core projects for 2024–28, for the tuna and tuna-like species under the IOTC mandate, as well as the current list of key shark species of interest, as outlined in Appendix 36 (IOTC–2023–SC26–R, Para. 186).

<i>Working Party on Neritic Tunas</i>					
Species	2024*	2025**	2026*	2027*	2028*
Bullet tuna	<b>Assessment</b>	Data preparation	Data preparation	<b>Assessment</b>	Data preparation
Frigate tuna	<b>Assessment</b>	Data preparation	Data preparation	<b>Assessment</b>	Data preparation
Indo-Pacific king mackerel	<b>Assessment</b>	Data preparation	Data preparation	<b>Assessment</b>	Data preparation
Kawakawa	Data preparation	Data preparation	<b>Assessment</b>	Data preparation	<b>Assessment</b>
Longtail tuna	Data preparation	Data preparation	<b>Assessment</b>	Data preparation	<b>Assessment</b>
Narrow-barred Spanish mackerel	Data preparation	Data preparation	<b>Assessment</b>	Data preparation	<b>Assessment</b>

\* Including data-limited stock assessment methods;

\*\* Including species-specific catches, CPUE, biological information and size distribution as well as identification of data gaps and discussion of improvements to the assessments (stock structure);

**Note:** the assessment schedule may be changed dependent on the annual review of fishery indicators, or SC and Commission requests