





## DRAFT: REVISION OF THE WPNT PROGRAM OF WORK (2021–2025)

PREPARED BY: IOTC SECRETARIAT, 08 JULY 2020

#### **PURPOSE**

To ensure that participants at the 10<sup>th</sup> Working Party on Neritic Tunas (WPNT10) revise the Program of Work for the WPNT by taking into consideration the specific requests of the Commission and Scientific Committee.

#### **BACKGROUND**

## Scientific Committee

At the 22<sup>nd</sup> Session of the SC:

- (Para. 137) The SC **NOTED** paper IOTC–2019–SC22–09 which provided the Scientific Committee (SC) with a proposed Program of Work for each of its Working Parties (WP), including prioritisation of the elements requested by each WP.
- (Para. 138) The SC **NOTED** the proposed Program of Work and priorities for the Scientific Committee and each of the Working Parties and **AGREED** to a consolidated Program of Work as outlined in <u>Appendix 35a-g</u>. The Chairpersons and Vice-Chairpersons of each working party shall ensure that the efforts of their working party are focused on the core areas contained within the appendix, taking into account any new research priorities identified by the Commission at its next Session.
- (Para. 148) The SC **ADOPTED** a revised assessment schedule, ecological risk assessment and other core projects for 2020–24, 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.

#### **Commission**

In the past the Commission has made a number of requests that call on the Scientific Committee, via the WPNT, to undertake specific tasks. These requests need to be incorporated into the Program of Work for the WPNT:

## Resolution 18/07 On measures applicable in case of non-fulfilment of reporting obligations in The IOTC

(para. 4) To facilitate the reporting of zero catches as required under paragraph 1 of Annex I of this Resolution, the following procedure shall apply:

- a) as part of the IOTC 1RC electronic form used to report nominal catches, the Secretariat shall include a matrix by IOTC species as well as the most commonly caught elasmobranch species according to records of catches and incidents as established in Resolution 15/01 on the recording of catch and effort data by fishing vessels in the IOTC area of competence (or any subsequent superseding Resolution) and main IOTC gear groups on the basis of the format set out in Annex II of this Resolution;
- b) CPCs, as part of their total catch data reporting, shall complete the cells in the matrix with either a value of 'one' (1) to indicate where that CPC had catches (positive catch) for a particular species/gear combination or a value of 'zero' (0) to indicate where that CPC had no catches (zero landings + zero discards) for a particular species/gear combination;
- c) The "Catch columns" section of the electronic Form 1RC shall only include reports of positive catches

(para. 2) The use of large-scale driftnets<sup>1</sup> on the high seas within the IOTC area of competence shall be prohibited. The use of large-scale driftnets in the entire IOTC area of competence shall be prohibited by 1 January 2022.

(para. 7) The Commission shall periodically assess whether additional measures should be adopted and implemented to ensure that large-scale driftnets are not used in the IOTC area of competence and to take into account the latest advice of the Scientific Committee. The first such assessment shall take place in 2023.

## Resolution 11/04 On a regional observer scheme

(para. 2) In order to improve the collection of scientific data, at least 5 % of the number of operations/sets for each gear type by the fleet of each CPC while fishing in the IOTC area of competence of 24 meters overall length and over, and under 24 meters if they fish outside their Exclusive Economic Zone (EEZ) shall be covered by this observer scheme. For vessels under 24 meters if they fish outside their EEZ, the above mentioned coverage should be achieved progressively by January 2013.

(para. 4) The number of the artisanal fishing vessels landings shall also be monitored at the landing place by field samplers. The indicative level of the coverage of the artisanal fishing vessels should progressively increase towards 5% of the total levels of vessel activity (i.e. total number of vessel trips or total number of vessels active).

(para. 15) The elements of the Observer Scheme, notably those regarding its coverage, are subject to review and revision, as appropriate, for application in 2012 and subsequent years. Basing on the experience of other tuna RFMOs, the IOTC Scientific Committee will elaborate an observer working manual, a template to be used for reporting (including minimum data fields) and a training program.

### **DISCUSSION**

Participants at the WPNT10 are requested to consider the priorities set by the Commission and the Scientific Committee, via Conservation and Management Measures, and revise its Program of Work to match those priorities.

### **RECOMMENDATION/S**

That the WPNT:

- 1) NOTE paper IOTC-2020-WPNT10-08, which encouraged the WPNT to further develop and refine its Program of Work for 2020-2024 to align with the requests and directives from the Commission and Scientific Committee.
- 2) RECOMMEND a revised Program of Work for 2020–2024 to the Scientific Committee for its consideration and potential endorsement.

<sup>&</sup>lt;sup>1</sup> "Large-scale driftnets" are defined as gillnets or other nets or a combination of nets that are more than 2.5 kilometres in length whose purpose is to enmesh, entrap, or entangle fish by drifting on the surface of, or in, the water column.





## WORKING PARTY ON NERITIC TUNAS PROGRAM OF WORK (2021–2025)

The current Program of Work as approved by the SC consists of the following:

- Table 1: Priority topics for obtaining the information necessary to develop stock status indicators for neritic tunas in the Indian Ocean;
- Table 2: Stock assessment schedule.

This is to be reviewed, discussed and updated for the next 5 years by participants during the WPNT10 meeting to be put forward for consideration by SC24.

Table 1. Priority topics for obtaining the information necessary to develop stock status indicators for neritic tunas in the Indian Ocean

Topic in order of priority	Sub-topic and project	Timing				
		2021	2022	2023	2024	2025
1. CPUE standardisation	Develop standardised CPUE series for the main fisheries for longtail, kawakawa, Indo-Pacific King mackerel and Spanish mackerel in the Indian Ocean, with the aim of developing CPUE series for stock assessment purposes.					
	<ul> <li>Sri Lanka (priority species: Frigate tuna, Kawakawa, bullet tuna)</li> </ul>					
	Indonesia (priority species: Kawakawa, Bullet tuna, Frigate tuna)					
	Pakistan (priority species: Longtail tuna, Kawakawa, narrow-barred Spanish mackerel)					
	> Iran gillnet CPUEs for all species					
	Capacity building support for CPCs to develop standardised CPUEs for their fisheries					

2. Stock assessment / Stock assessment / Stock indicators  Explore alternative assessment approaches and develop improvements where necessary based on the data available to determine stock status for longtail tuna, kawakawa and Spanish mackerel  The Weight-of-Evidence approach should be used to determine stock status, by building layers of partial evidence, such as CPUE indices combined with catch data, life-history parameters and yield-per recruit metrics, as well as the use of data poor assessment approaches.  Exploration of priors and how these can be quantifiably and transparently developed  Take into consideration the outputs of genetic studies to investigate stock structure and regional differences in populations  Improve the presentation of management advice from different assessment approaches to better represent the uncertainty and improve communication between scientists and managers in the IOTC.  Collate and characterize operational level data for the main nertic tuna fisheries in the Indian Ocean to investigate their suitability to be used for developing standardised CPUE indices.  The following data should be collated and made available for collaborative analysis:  1) catch and effort by species and gear by landing site;  2) operational data: stratify this by vessel, month, and year for the development as an indicator of CPUE over time; and  3) operational data: collate other information on fishing techniques (i.e. area fished, gear specifics, depth, environmental condition (near shore, open ocean, etc.) and vessel size (length/horsepower)).  4) Re-estimation of historic catches for assessment purposes (taking into account updated identification of uncertainties and knowledge of the history of the fisheries)	2 Charle		·		
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<ol> <li>catch and effort by species and gear by landing site;</li> <li>operational data: stratify this by vessel, month, and year for the development as an indicator of CPUE over time; and</li> <li>operational data: collate other information on fishing techniques (i.e. area fished, gear specifics, depth, environmental condition (near shore, open ocean, etc.) and vessel size (length/horsepower)).</li> <li>Re-estimation of historic catches for assessment purposes (taking into account updated identification of uncertainties and knowledge of the history of the</li> </ol>	_	Collate and characterize operational level data for the main neritic tuna fisheries in the Indian Ocean to investigate their suitability to be used for developing standardised CPUE			
(Data support missions to priority countries: India, Oman, Pakistan)		<ol> <li>catch and effort by species and gear by landing site;</li> <li>operational data: stratify this by vessel, month, and year for the development as an indicator of CPUE over time; and</li> <li>operational data: collate other information on fishing techniques (i.e. area fished, gear specifics, depth, environmental condition (near shore, open ocean, etc.) and vessel size (length/horsepower)).</li> <li>Re-estimation of historic catches for assessment purposes (taking into account updated identification of uncertainties and knowledge of the history of the fisheries)</li> </ol>			
Other Future Research Requirements					

4. Biological information (parameters for stock assessment)	Quantitative biological studies are necessary for all neritic tunas throughout their range to determine key biological parameters including age-at-maturity, and fecundity-at-age/length relationships, age-length keys, age and growth, longevity which will be fed into future stock assessments.	
5. Social economic study	<ul> <li>Undertake quantitative studies on socio-economic aspects of all neritic tunas throughout their range, to determine and explore other sources of data, such as but not limited to trade data from individual countries, nominal catch or other catch data on neritic tuna, information on important and significance of neritic for food security (animal protein), nutrition, contribution to national GDP. (priority countries, Indonesia, Iran, India, Malaysia, Thailand, Pakistan)</li> <li>Identify and utilise other sources of information, by engaging with other bodies such as SEAFDEC, SEAFO, RECOFI, BOBLME, SWIOFC, IOC, among others.</li> <li>Integrate or evaluate market support and recognition for neritic tuna (sub-regional markets) with a focus on data acquisition</li> <li>Explore alternate sources of data collection, including the rapid use of citizen science based approaches which are reliable and verified by the SC.</li> <li>Assess/scope/explore the significance and importance of neritic species for food security, nutrition and contribution to national GDP.</li> <li>Strengthen the data collection of catches and species complexes and develop socioeconomic indicators of neritic species, related to the national and regional</li> </ul>	
	livelihoods and economics of coastal CPCs.  Collate information and address data gaps and challenges by taking advantage of regional programmes or joint collaboration with NGOs/CPCs in order to support and facilitate data collection for neritic species.	

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**Table 2.** Proposed assessment schedule for the IOTC Working Party on 2020-2024

Working Party on Neritic Tunas						
Species	2021*	2022**	2023*	2024**	2025*	
Bullet tuna	Assessment	Data preparation	Data preparation	Assessment	Data preparation	
Frigate tuna	Assessment	Data preparation	Data preparation	Assessment	Data preparation	
Indo-Pacific king mackerel	Assessment	Data preparation	Data preparation	Assessment	Data preparation	
Kawakawa	Data preparation	Data preparation	Assessment	Data preparation	Data preparation	
Longtail tuna	Data preparation	Data preparation	Assessment	Data preparation	Data preparation	
Narrow-barred Spanish mackerel	Data preparation	Data preparation	Assessment	Data preparation	Data preparation	

<sup>\*</sup> Including data-limited stock assessment methods;

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

<sup>\*\*</sup> 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);