



## REVISION OF THE WPNT PROGRAM OF WORK (2016–2020)

PREPARED BY: IOTC SECRETARIAT, 28 MAY 2015

### PURPOSE

To ensure that participants at the 5<sup>th</sup> Working Party on Neritic Tunas (WPNT05) 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 17<sup>th</sup> Session of the SC:

- (Para. 175) The SC **NOTED** paper IOTC–2014–SC17–10 which outlined the proposed research priorities for each of the Working Parties, with the aim of developing an IOTC Science Program of Work for 2015 to 2019.
- (Para. 176) The SC **REMINDED** the IOTC Secretariat that any projects recommended by the SC in 2013, and which were subsequently endorsed by the Commission and funded for implementation in 2014 and/or 2015 budget, should occur in 2015, if not already completed.
- (Para. 177) The SC **NOTED** the proposed Program of Work and priorities for each of the Working Parties and **AGREED** to a consolidated Program of Work as outlined in [Appendix XXXVIII](#). The Chairs and Vice-Chairs of each working party shall ensure that the efforts of their working party is 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. 178) The SC **REQUESTED** that during the 2015 Working Party meetings, each group not only develop a Draft Program of Work for the next five years containing low, medium and high priority projects, but that all High Priority projects are ranked. The intention is that the SC would then be able to review the rankings and develop a consolidated list of the highest priority projects to meet the needs of the Commission. Where possible, budget estimates should be determined, as well as the identification of potential funding sources.
- (Para. 179) The SC **AGREED** that identifying research priorities among its Working Parties ([Appendix XXXVIII](#)) will assist individual CPCs and the IOTC Secretariat to identify funding sources for the implementation of priority research projects. Accordingly, and in the interest of transparency, the SC **REQUESTED** the IOTC Secretariat to follow the following consultative process involving the SC and Working Party Chairs and Vice-Chairs and the IOTC Secretariat:
- **Step 1:** Working Parties to identify research needs (based on the needs of the Commission), rank them by order of priority, provide cost estimates and list potential funding sources;
  - **Step 2:** The SC and Working Party Chair and Vice-Chair, in liaison with the IOTC Secretariat should develop a consolidated document taking into account the different Working Party research needs and priorities, with the objective of ranking the research needs among all Working Parties;
  - **Step 3:** The Chair of the SC shall present these to the SC, to be discussed and endorsed as the consolidated research priorities for the IOTC Science process;
  - **Step 4:** The IOTC Secretariat, in consultation with the Chair and Vice-Chair of the SC and Chair and Vice-Chair or relevant Working Parties, shall identify funding possibilities to undertake the consolidated research priorities;
  - **Step 5:** Once the funding sources have been committed to a particular research priority, the panel mentioned above in Step 2 shall develop terms of reference of the 'Expression of Interest' (including tasks, timelines and deliverables) and the selection procedure/criteria;
  - **Step 6:** IOTC Secretariat to advertise a call for 'Expression of Interest' among the IOTC Commissioner's and Science contact lists, and via the IOTC website;
  - **Step 7:** The Chair of the SC, Chair(s) and Vice-Chair(s) of the WP(s) concerned, in liaison with the IOTC Secretariat shall determine the most appropriate project proposal, based on the

criteria defined in Step 5 and in line with the financial rules of the Commission and FAO. Potential contracted candidate will be contacted by the IOTC Secretariat to confirm availability.

### **Commission**

At Sessions of the Commission, Conservation and Management Measures adopted contained elements that call on the Scientific Committee, via the WPNT, to undertake specific tasks. These requests will need to be incorporated into a revised Program of Work for the WPNT:

#### **Resolution 12/12 *To prohibit the use of large-scale driftnets on the high seas in the IOTC area***

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

(para. 6) The IOTC shall periodically assess whether additional measures should be adopted and implemented to ensure that large-scale driftnets are not used on the high seas in the IOTC area of competence. The first such assessment shall take place in 2013.

#### **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 WPNT05 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 (previously outlined in paper IOTC–2015–WPNT05–03) to match those priorities.

### **RECOMMENDATION/S**

That the WPNT:

- 1) **NOTE** paper IOTC–2015–WPNT05–08, which encouraged the WPNT to further develop and refine its Program of Work for 2016–2020 to align with the requests and directives from the Commission and Scientific Committee.
- 2) **RECOMMEND** a revised Program of Work for 2016–2020 to the Scientific Committee for its consideration and potential endorsement.

<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 (2016–20)

The Program of Work consists of the following, noting that a timeline for implementation would be developed by the SC once it has agreed to the priority projects across all of its Working Parties:

- **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.

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

Topic	Sub-topic and project	Priority	Est. budget and/or potential source	Timing				
				2016	2017	2018	2019	2020
1. Stock structure (connectivity)	Genetic research to determine the connectivity of neritic tunas throughout their distributions <ul style="list-style-type: none"> <li>➤ Determine the degree of shared stocks for all neritic tunas under the IOTC mandate in the Indian Ocean, so as to better equip the SC in providing management advice based on unit stocks delineated by geographic distribution and connectivity.</li> <li>➤ Genetic research to determine the connectivity of neritic tunas throughout their distributions: Table 2b should be used as a starting point for research project development to delineate potential stock structure for neritic tunas in the Indian Ocean.</li> <li>➤ The IOTC Secretariat to coordinate a review of the available literature on neritic tuna stock structure across the Indian Ocean to assess the data already available such as the location of spawning grounds to identify potential sub-stocks.</li> </ul>	High	1.3 m Euro: European Union TBD					
2. Biological information (parameters for stock assessment)	Age and growth research; Age-at-Maturity <ul style="list-style-type: none"> <li>➤ Quantitative biological studies are necessary for all neritic tunas</li> </ul>	High	CPCs directly					

throughout their range to determine key biological parameters including age-at-maturity and fecundity-at-age/length relationships, age-length keys, age and growth, which will be fed into future stock assessments.

**Table 1.** Estimated budget required to hire a consultant to carry out a workshop for data mining and capacity building on neritic tuna and tuna-like species in 2016 and 2017.

Description	Unit price	Units required	2016 Total (US\$)	2017 Total (US\$)
Workshop to support neritic tuna stock assessments and/or indicator development through data-mining, meta-analysis (Longtail tuna, kawakawa, narrow-barred Spanish mackerel, Indo-Pacific king mackerel) (fees)	500	15	11,250	11,250
Neritic tuna capacity building workshop (travel)	5,000	1	5,000	5,000
		Total estimate	<b>16,250</b>	<b>16,250</b>

3. CPUE standardisation

Develop standardised CPUE series for the main fisheries for longtail, kawakawa and Spanish mackerel in the Indian Ocean, with the aim of developing CPUE series for stock assessment purposes.

- Longtail tuna. Priority fleets: Iran (gillnet), Indonesia (line and gillnet), Malaysia (purse seine), Pakistan, Oman and India (all gillnet).
- Spanish mackerel. Priority fleets: Gillnet fisheries of Indonesia, India, Iran and Oman.
- Kawakawa. Priority fleets: Indonesia (purse seine/ line), India (gillnet), Iran (gillnet) and Pakistan (gillnet).
- Indo-Pacific king mackerel. Priority fleets: Gillnet fisheries of India, Indonesia and Iran.

High

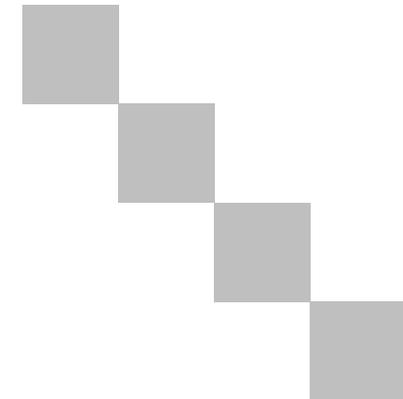
CPUE Workshop (TBD)

CPCs directly

CPCs directly

CPCs directly

CPCs directly



**Table 1.** Estimated costs for an inter-sessional meeting to investigate CPUE standardisation from the neritic tuna fleets (Indonesia, Iran and India (3

total), or alternatively Kenya and Thailand (2 total) operating in the IOTC area of competence

Description	Unit price (US\$)	Units required	Total (US\$)
Meeting venues across all CPCs	0	Hosts to provide	-
Consultant travel (three countries 1 week at a time) + 1 week for Final results	15,000	SA Consultant 1	15,000
Time Consultant	500/day	50 days (25 days work for CPUE standardizations + 25 days assembling datasets with CPC's help)	25,000
Time Stock Assessment Scientist (IOTC)	0 (as time donated)	10 days	0
Final Meeting with Secretariat and CPCs at WPNT		4 days + 2 day travel	3,500
<b>Total estimate (US\$)</b>			<b>43,500</b>

4. Stock assessment / Stock indicators	<p>Develop and compare multiple assessment approaches to determine stock status for longtail tuna, kawakawa and Spanish mackerel (SS3, ASPIC etc).</p> <ul style="list-style-type: none"> <li>➤ 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.</li> <li>➤ The following data should be collated and made available for collaborative analysis: <ul style="list-style-type: none"> <li>1) catch and effort by species and gear by landing site;</li> <li>2) operational data: stratify this by vessel, month, and year for the development as an indicator of CPUE over time; and</li> <li>3) operational data: collate other information on fishing techniques</li> </ul> </li> </ul>	High	IOTC Regular Budget	
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(i.e. area fished, gear specifics, depth, environmental condition (near shore, open ocean, etc.) and vessel size (length/horsepower).

**Table 2.** Hiring of a consultant to assist in building capacity among WPNT participants by supplementing the skill set available within IOTC CPCs to further develop the CPUE and alternate assessment approaches for longtail, kawakawa and Spanish mackerel. An indicative budget is provided below:

<b>Description</b>	<b>Unit price</b>	<b>Units required</b>	<b>2016 Total (US\$)</b>	<b>2017 Total (US\$)</b>
SS3 Stock assessment for LOT (fees)	550	30	16,500	
SS3 Stock assessment for LOT (travel)	4,000	1	4,000	
SS3 Stock assessment for COM (travel)	550	30		16,500
SS3 Stock assessment for COM (travel)	4,000	1		4,000
		Total estimate	20,500	20,500



**Table 2.** Assessment schedule for the IOTC Working Party on 2015-20120 (adapted from IOTC-2014-SC17-R).

Species	<i>Working Party on Neritic Tunas</i>					
	2015	2016	2017	2018	2019	2020
Bullet tuna	Indicators	Indicators	Indicators	Data-poor assessment	Indicators	Data-poor assessment
Frigate tuna	Indicators	Indicators	Indicators	Data-poor assessment	Indicators	Data-poor assessment
Indo-Pacific king mackerel	Data-poor assessment	Indicators	Indicators	<b>Integrated assessment</b>	Indicators	Data-poor assessment
Kawakawa	<b>Full assessment</b>	Indicators	Data-poor assessment	<b>Integrated assessment</b>	Data-poor assessment	Indicators
Longtail tuna	Data-poor assessment	<b>Integrated assessment</b>	Data-poor assessment	Indicators	<b>Integrated assessment</b>	Indicators
Narrow-barred Spanish mackerel	Data-poor assessment	Data-poor assessment	<b>Integrated assessment</b>	Indicators	Data-poor assessment	<b>Integrated assessment</b>