REVISION OF THE WPTT PROGRAM OF WORK

PREPARED BY: IOTC SECRETARIAT[1], 7 OCTOBER 2015

PURPOSE

To ensure that the participants at the 17th Working Party on Tropical Tunas (WPTT17) revise the Program of Work for the WPTT by taking into consideration the specific requests of the Commission and Scientific Committee.

BACKGROUND

Scientific Committee

At the 17th 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;

[1] secretariat@iotc.org, David Wilson (david.wilson@iotc.org)

- **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 WPTT, to undertake specific tasks. These requests will need to be incorporated into a revised Program of Work for the WPTT:

- **Resolution 15/10** ***On target and limit reference points and a decision framework***

DISCUSSION

Participants at the WPTT17 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–WPTT17–03) to match those priorities.

RECOMMENDATION/S

That the WPTT:

1) **NOTE** paper IOTC–2015–WPTT17–08, which encouraged the WPM 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.

APPENDICES

Appendix A: DRAFT: Working Party on Tropical Tunas Program of Work (2016–2020)

APPENDIX A

DRAFT: WORKING PARTY ON TROPICAL TUNAS PROGRAM OF WORK (2016–2020)

The following is the Draft WPTT Program of Work (2015–2019) and is based on the specific requests of the Commission and Scientific Committee, and will need to be modified to incorporate topics identified during the WPTT16. The Program of Work consists of the following, noting that a timeline for implementation would be developed by the Scientific Committee 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 tropical tunas in the Indian Ocean;
- **Table 2**: Stock assessment schedule.

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

	Topic	Sub-topic and project	Priority ranking	Lead	Est. budget (potential source)	Timing				
						2016	2017	2018	2019	2020
1.	Stock structure (connectivity and diversity)	1.1 Genetic research to determine the connectivity of tropical tuna species throughout their distribution (including in adjacent Pacific Ocean waters as appropriate) and the effective population size.	High	CSIRO/AZTI /IRD/RITF	1.3 m Euro: (European Union; 20% additional co-financing)					
		1.1.1 Next Generation Sequencing (NGS) to determine the degree of shared stocks for tropical tuna species in the Indian Ocean. Population genetic analyses to decipher inter- and intraspecific evolutionary relationships, levels of gene flow (genetic exchange rate), genetic divergence, and effective population sizes.								
		1.1.2 Nuclear markers (i.e. microsatellite) to determine the degree of shared stocks for tropical tuna species in the Indian Ocean with the Pacific Ocean, as appropriate.								

Topic	Sub-topic and project	Priority ranking	Lead	Est. budget (potential source)	Timing				
					2016	2017	2018	2019	2020
	1.2 Connectivity, movements and habitat use								
	1.2.1 Connectivity, movements, and habitat use, including identification of hotspots and investigate associated environmental conditions affecting the tropical tuna species distribution, making use of conventional and electronic tagging (P-SAT).	High	???	US$?? (TBD)					
2. Biological and ecological information (incl. parameters for stock assessment)	2.1 Age and growth								
	2.1.1 CPCs to provide further research reports on tropical tuna biology, namely age and growth studies including through the use of vertebrae or other means, either from data collected through observer programs or other research programs.	High	CPCs directly	US$?? (TBD)					
	2.2 Age-at-Maturity								
	2.2.1 CPCs to provide further research reports on tropical tuna biology, namely age and growth studies including using through the use of fish otoliths, either from data collected through observer programs or other research programs.	High	CPCs directly	US$?? (TBD)					
3. Ecological information	3.1 Spawning time and locations								
	3.1.1 Collect gonad samples from tropical tunas to confirm the spawning time and location of the spawning area that are presently hypothesised for each tropical tuna species.	High		US$?? (TBD)					
4. Historical	4.1 Changes in fleet dynamics need to be documented by fleet								

Topic	Sub-topic and project	Priority ranking	Lead	Est. budget (potential source)	Timing				
					2016	2017	2018	2019	2020
data review									
5. CPUE standardisation	5.1 Develop standardised CPUE series for each tropical tuna fleet/fishery for the Indian Ocean								
	5.1.1 There is an urgent need to investigate the CPUE issues as detailed for bigeye tuna, skipjack tuna and yellowfin tuna in the WPTT15 report, and for these to be a high priority research activity for the tropical tuna resources in the Indian Ocean.	High	CPCs directly	US$?? (TBD)					
	5.1.2 Develop and/or revise standardised CPUE series for each tropical tuna species and fishery for the Indian Ocean								
	5.1.3 That standardised CPUE index for juvenile yellowfin tuna and bigeye tuna caught by the EU purse seiner fleets, be estimated and submitted to the WPTT before the next round of stock assessments of tropical tunas.								
	5.1.4 The standardisation of purse seine CPUE be made where possible using the operational data on the fishery.								
	Bigeye tuna: High priority fleets	High	CPCs directly	US$?? (TBD)					
	Skipjack tuna: High priority fleets	High	CPCs directly	US$?? (TBD)					
	Yellowfin tuna: High priority fleets	High	CPCs directly	US$?? (TBD)					
6. Stock assessment /	6.1 Develop and compare multiple assessment approaches to determining	High	CPCs	US$??					

Topic	Sub-topic and project	Priority ranking	Lead	Est. budget (potential source)	Timing				
					2016	2017	2018	2019	2020
stock indicators	stock status for tropical tunas		directly	(TBD)					
7. Target and Limit reference points	7.1 To advise the Commission, by end of 2016 at the latest on Target Reference Points (TRPs) and Limit Reference Points (LRPs).								
	7.1.1 Used when assessing tropical tuna stock status and when establishing the Kobe plot and Kobe matrices	High	CPCs directly	US$?? (TBD)					
8. Management measure options	8.1 To advise the Commission, by end of 2016 at the latest, on potential management measures having been examined through the Management Strategy Evaluation (MSE) process.								
	8.1.1 These management measures will therefore have to ensure the achievement of the conservation and optimal utilisation of stocks as laid down in article V of the Agreement for the establishment of the IOTC and more particularly to ensure that, in as short a period as possible (i) the fishing mortality rate does not exceed the fishing mortality rate allowing the stock to deliver MSY and (ii) the spawning biomass is maintained at or above its MSY level.	High	CPCs directly	US$?? (TBD)					

Table 2. Assessment schedule for the IOTC Working Party on Tropical Tunas (WPTT)

Species	2016	2017	2018	2019	2020

Working Party on Tropical Tunas					
Bigeye tuna	**Full assessment**	Indicators	Indicators	**Full assessment**	Indicators
Skipjack tuna	Indicators	**Full assessment**	Indicators	Indicators	**Full assessment**
Yellowfin tuna	Indicators	Indicators	**Full assessment**	Indicators	Indicators