

APPENDIX 37A

WORKING PARTY ON NERITIC TUNAS PROGRAM OF WORK (2026 - 2030)

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				
		2026	2027	2028	2029	2030
1. Stock structure (connectivity)	<p>Genetic research to determine the connectivity of neritic tunas throughout their distributions (This should build on the stock structure work conducted in other previous studies):</p> <ol style="list-style-type: none"> Review of stock structure methodologies with genetic expert during WPNT15 in order to determine the best approach to regional stock structure studies. Based on discussions develop and implement regional genetic sampling collection programme: <ul style="list-style-type: none"> Sampling of tissue samples DNA extraction and storage for preservation Carry out genetic sequencing on extracted DNA 					
2. 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					

	<ol style="list-style-type: none"> 1. 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 (e.g. CMSY, OCOM, LB-SPR, Risk based methods). 2. Exploration of priors and how these can be quantifiably and transparently developed. 3. Review size data and their suitability for monitoring stock status. <p>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.</p>					
3. Data mining and collation	<p>Improved collation and characterization of operational level data for the main neritic tuna fisheries in the Indian Ocean to investigate their suitability to be used for developing standardised CPUE indices. Improved characterisation of fisheries when CPCs present information to WPNT.</p> <p>The following data should be collated and made available for collaborative analysis:</p> <ul style="list-style-type: none"> ➤ catch and effort by species and gear by landing site; ➤ operational data: stratify this by vessel, month, and year for the development as an indicator of CPUE over time; and ➤ 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)). ➤ Reconstruction of historical catch by CPCs using recovered or captured information. ➤ Re-estimation of historic catches (with consultation and consent of concerned CPCs including India, Pakistan, Bangladesh, Mozambique, Tanzania, Madagascar, Kenya) for assessment purposes (taking into account updated identification of uncertainties and knowledge of the history of the fisheries. ➤ Improvements to species identification 					

Other Future Research Requirements		2026	2027	2028	2029	2030
4. Biological information (parameters for stock assessment)	<ol style="list-style-type: none"> 1. Review and summarise information on key biological parameters for neritic tuna species. 2. Review of studies 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. 3. Increase ecological traditional knowledge of all neritic tunas throughout their range. 					

	<ol style="list-style-type: none"> Exploring the development of tools and other methods which can be used to improve species identification. Exploring improved methods for ageing of neritic tuna species including exploration of epigenetic techniques. 					
5. Social economic study	<ol style="list-style-type: none"> Undertake quantitative studies on socio-economic aspects (including traditional knowledge) 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) Identify and utilise other sources of information, by engaging with other bodies such as SEAFDEC, SEAFO, RECOFI, BOBLME, SWIOFC, IOC, among others. Integrate or evaluate market support and recognition for neritic tuna (sub-regional markets) with a focus on data acquisition. Explore alternate sources of data collection, including the rapid use of citizen science-based approaches which are reliable and verified by the SC. Assess/scope/explore the significance and importance of neritic tuna species for food security, nutrition and contribution to national GDP. Strengthen the data collection of catches and species complexes and develop socio-economic indicators of neritic tuna species, related to the national and regional 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 tuna species. 					

APPENDIX 37B

WORKING PARTY ON TEMPERATE TUNAS PROGRAM OF WORK (2023 - 2027)

Table 1. Priority topics for obtaining the information necessary to develop stock status indicators for albacore in the Indian Ocean (2023-2027). No WPTmT meeting was held in 2023 to update this plan.

Topic	Sub-topic and project	Priority	Timing				
			2026	2027	2028	2029	2030
1	Stock structure (connectivity and diversity)	high (1)					
		Low (6)					
2	Biological information (parameters for stock assessment)	High (2)					

	including sex ratio; female length- and age-at-maturity; spawning location, periodicity and frequency; batch fecundity at length and age; spawning fraction and overall reproductive potential, to inform future stock assessments.					
3	CPUE standardisation	3.1 Continue the development of standardized CPUE series for each albacore fishery for the Indian Ocean, with the aim of developing appropriate CPUE series for stock assessment purposes. 3.1.1 Spatio-temporal structure and target changes need to be considered carefully, as fish density and targeting practices can vary in ways that affect CPUE indices. Developments may include changes to fishery spatial structure, new approaches for area weighting, time-area interactions in the model, and/or indices using spatial temporal model.	low (5)			
4	Size frequency data	4.1 Further investigate the size information provided by CPCs in order to better understand the stock dynamics and inputs into the assessment models. This is particularly necessary for the purse seine data.	low (4)			
5	Management strategy evaluation	5.1 Continue to collaborate with the WPM on input to the Management Strategy Evaluation (MSE) process.	High (3)			

APPENDIX 37C

WORKING PARTY ON BILLFISH PROGRAM OF WORK (2025 - 2029)

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

Topic in order of priority	Sub-topic and project	Timing				
		2026	2027	2028	2029	2030
CPUE standardization	Develop and/or revise standardized CPUE series for each billfish species and major fisheries/fleets in the Indian Ocean and develop Joint CPUE series where feasible <ul style="list-style-type: none"> • Swordfish: Priority LL fleets: Taiwan,China, EU(Spain, Portugal, France), Japan, Indonesia, South African • Striped marlin: Priority fleets: Japan, Taiwan,China • Black marlin: Priority fleets: Longline: Taiwan,China; Potential fleets (Gillnet: I.R. Iran, Sri Lanka, Indonesia) • Blue marlin: Priority fleets: Japan, Taiwan,China, Indonesia • I.P. Sailfish: Potential longline fleets: EU(Spain, Portugal, France), Japan, Indonesia; gillnet fleets: I.R. Iran and Sri Lanka; 					
1. Population biology	1.1 Age and growth research 1.1.1 CPCs to provide further research on billfish biology, namely age and growth studies including the use of fish otolith or other hard parts, as well as through genetic methods, either from data collected through observer programs, port sampling or other research programs. (Priority: all billfishes: swordfish, marlins and sailfish)					
	1.2 Spawning time and locations 1.2.1 Collect gonad samples from billfish or utilise any other scientific means to confirm the spawning time and location of the spawning areas that are presently hypothesized for each billfish species. This will also provide advice to the Commission on the request for alternative management measures (Res. 18-05, paragraph 6). Partially supported by EU, on-going support and collaboration from CPCs are required. 1.3 Literature review of biological parameters for billfish 1.3.1. Conduct a literature review of biological parameters for billfish through a consultancy and update the supplementary information that companies with species Executive Summaries.					
2 Population dynamics	2.1 Stock structure (connectivity and diversity)					

	<p>2.1.1 Continue work on determining stock structure of Billfish species, using complimentary data sources, including genetic and microchemistry information as well as other relevant sources/studies.</p> <p>2.1.2 Tagging research (PSAT tags) to determine connectivity, movement rates and mortality estimates of billfish (Priority species: swordfish). Similar projects have been partially funded by EU, with a focus on epipelagic species. More tags are needed for swordfish.</p> <p>2.2 CKMR</p> <p>2.2.1 Pilot design study to estimate abundance and papulation parameters including larval surveys</p>					
3 Billfish bycatch mitigation and management	<p>WPB and CPCs scientists to firstly, review and summarise existing information on billfish bycatch mitigation, including also factors influencing at-haul and post-release mortality of billfish, and secondly to undertake further research to inform gaps in understanding on potential effective mitigation approaches, to provide options for the Commission to reduce fishing mortality for species where that is required (e.g. Black Marlin, Striped Marlin and Sailfish) focusing on gillnet and longline fisheries but also including recreational and sport fishing activities .</p> <p>For example, implementing tagging data to better understand the issues of post release mortality of marlins</p> <p>How to provide scientific advice to management on billfish caught as bycatch</p>					
Other Future Research Requirements (not in order of priority)						
4 Data mining and processing - (Development of subsequent CPUE indices)	<p>Data on gillnet fisheries are available in Pakistan (and potentially other CPCs) and the recovery of this information and the development of gillnet CPUE indices as well as provision of length frequency data would improve species assessments, particularly for:</p> <ul style="list-style-type: none"> • Black marlin • Sailfish 					
5 Historical data review	<p>5.1 Changes in fleet dynamics</p> <p>5.1.1 Continue the work with coastal countries to address recent changes and/or increases of marlins catches especially in some coastal fleets. The historical review should include as much explanatory information as possible regarding changes in fishing areas, species targeting, gear changes and other fleet characteristics to assist the WPB understand the current fluctuations observed in the data and very high increases in some species (e.g., black marlin mainly due to very high catches reported by India in recent years). The possibility of producing alternative catch</p>					

	histories should also be explored. Priority countries: India, Pakistan, Iran, I.R., Indonesia.				
	5.2 Species identification				
	5.2.1 The quality of the data available at the IOTC Secretariat on marlins (by species) is likely to be compromised by species miss-identification. Thus, CPCs should review their historical data in order to identify, report and correct (if possible) potential identification problems that are detrimental to any analysis of the status of the stocks. Consider the application of DNA-Barcoding technology for billfish species identification.				
6. Climate change	Investigate impact and interaction of climate change on billfish fisheries				

APPENDIX 37D

WORKING PARTY ON ECOSYSTEMS AND BYCATCH PROGRAM OF WORK (2025 - 2029)

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

Topic in order of priority	Sub-topic and project	Timing				
		2026	2027	2028	2029	2030
Connectivity, movements, habitat use and post release mortality*	Electronic tags (PSATs, SPOT, Splash MiniPAT) to assess the efficiency of management resolutions on non-retention species (BSH in LL, marine turtles and rays in GIL and PS, whale sharks) and to determine connectivity, movement rates, mortality estimates and genetic studies					
1. Fisheries data collection and development of alternative inputs into assessments	1.1 Catch composition reconstruction (initial focus Sri Lanka, Pakistan, India and Indonesia)					
	1.1.1 Historical data mining for the key species and IOTC fleets (e.g., as artisanal gillnet and longline coastal fisheries) including workshops.					
	1.1.2 Historical data mining and development of baseline catch history series for key species, including blue shark and shortfin mako shark, through the collection and integration of information on catch, effort, and spatial distribution of fleets, as well as mining statistics for sharks not reported to species level.					

	<p>1.1.3 CPUE standardisation and review of additional abundance indicators series for each key shark species and fishery in the Indian Ocean</p> <p>1.2 Investigation of sampling options to explore different indices of abundance for sharks such as CKMR. Identify CPCs who may be able to collaborate.</p>					
2. Shark research and management strategy	2.1 Workshop to update and revise shark research plan with a small working group					
	2.2 Prioritising shark research based on previous work and including analysing gaps in knowledge to address the requests from the Commission contained within Resolution 25/08.					
	2.3 Implementation of work suggested by shark research plan					
3. Studies and training focused on gillnet bycatch mitigation	<p>3.1 Focused GN bycatch mitigation workshop - training, monitoring, determine study design</p> <p>3.2 Studies trialling gillnet mitigation measures such as: LED lights, sub-surface setting ...</p>					

Other Future Research Requirements (not in order of priority)						
Topic	Sub-topic and project	2026	2027	2028	2029	2030
1. Review and improve data collection for mobulid rays	1.1 Mobulid ID guide revision and translation. ID guides to be updated with help of CPC scientists					
2. Bycatch mitigation measures	2.1 Gears					
	2.1.1 Undertake a series of gear specific workshops focusing on multi-taxa bycatch issues					
	2.1.2 Develop studies on bycatch mitigation measures for the main gears using in the IOTC area (operational, technological aspects and best practices)					
	2.2 Sharks					
	a) Harmonise and finalise guidelines and protocols for safe handling and release of sharks and rays caught in IOTC fisheries					
	2.3 Sea turtles					
	2.3.1 Res. 12/04 (para. 11) Part I. The IOTC Scientific Committee shall request the IOTC Working Party on Ecosystems and Bycatch to:					
	a) Develop recommendations on appropriate mitigation measures for gillnet, longline and purse seine fisheries in the IOTC area; [mostly completed for LL and PS]					
	b) Develop regional standards covering data collection, data exchange and training					
	2.3.2 Res. 12/04 (para. 17) The IOTC Scientific Committee shall annually review the information reported by CPCs pursuant to this measure and, as necessary, provide recommendations to the Commission on ways to strengthen efforts to reduce marine turtle interactions with IOTC fisheries.					

2.3.3 Regional workshop to review the effectiveness of marine turtle mitigation measures					
2.3.4 Harmonise and finalise guidelines and protocols for safe handling and release of sea turtles caught in IOTC fisheries					
2.3 Seabirds					
2.3.1 Bycatch assessment for seabirds taking into account the information from the various ongoing initiatives in the IO and adjacent oceans					
2.3.2 Study on cryptic mortality of seabirds in tuna LL fisheries.					
2.3.3 Study post release survival rates for seabirds and harmonise and finalise guidelines and protocols for safe handling and release of seabirds caught in IOTC fisheries					
2.4 Cetaceans					
2.4.1 Testing mitigation methods for cetacean bycatch in tuna drift gillnet fisheries					
2.4.2 Harmonise and finalise guidelines and protocols for safe handling and release of cetaceans caught in IOTC fisheries					

2.4.3. Intersessional meeting to discuss cetacean guidelines, ERA, Data gaps.						
3. CPUE standardisation / Stock Assessment / Other indicators	3.1 Develop standardised CPUE series for each key shark species and fishery in the Indian Ocean:					
	3.1.1 Development of CPUE guidelines for standardisation of CPC data.					
	3.1.2 Blue shark: Priority fleets: TWN,CHN LL, EU,Spain LL, Japan LL; Indonesia LL; EU,Portugal LL					
	3.1.3 Shortfin mako shark: Priority fleets: Longline and Gillnet fleets					
	3.1.4 Oceanic whitetip shark: Priority fleets: Longline fleets; purse seine fleets					
	3.1.5 Silky shark: Priority fleets: Purse seine fleets					
	3.2 Joint CPUE standardization across the main LL fleets for silky shark, using detailed operational data					
	3.3 Stock assessment and other indicators					
4. Ecosystems	4.1 Develop a plan for Ecosystem Approach to Fisheries (EAF) approaches in the IOTC, in conjunction with the Common Oceans Tuna Project.					
	4.1.2 Workshop for CPCs on continuing efforts to the development of an EAF including delineation of candidate eco regions within IOTC.					
	4.1.3 Practical Implementation of EBFM with the development and testing of ecosystem report cards.					

	4.1.4 Evaluation of EBFM plan in IOTC area of competence by the WPEB to review its elements components and make any corrective measures.					
	4.2 Assessing the impacts of climate change and socio- economic factors on IOTC fisheries					
	4.3 Evaluate alternative approaches to ERAs to assess ecological risk					
	4.4 Progress on Climate webpage on IOTC website and liaise with WPDCS for technical implementation					
Ecoregions development	Support for the development and refinement of ecoregions in the Indian Ocean:					
	Development of a pilot study (focused on two ecoregions: one coastal, the Somali Current ecoregion and one oceanic, the Indian Ocean Gyre ecoregion)					
Development of Indian Ocean Digital Atlas	Facilitate the discussions with WPDCS to consolidate the Indian Ocean Digital Atlas project with stakeholders					

APPENDIX 37E

WORKING PARTY ON TROPICAL TUNAS PROGRAM OF WORK (2025 - 2029)

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

Topic in order of priority	Sub-topic and project	TIMING				
		2026	2027	2028	2029	2030
Abundance indices development	<p>Address the additional recommendations made by the WPTT in 2024 regarding the CPUE indices for yellowfin.</p> <p>In view of the coming assessments of yellowfin, bigeye, and skipjack develop abundance time series for each tropical tuna stock for the Indian Ocean</p> <ul style="list-style-type: none"> Continue to develop CPUE indices from Longline, purse seine, Pole and line fisheries, and fishery independent indices of abundance such as those derived from echosounder buoys. Explore and support the development of gillnet CPUE indices for fleets (e.g., Iran, Pakistan and Oman) Evaluate effect of changes of spatial coverage on the longline CPUE through the Joint CPUE workshop and estimate spatial temporal abundance distribution through VAST modelling approach 					
Fisheries Independent Monitoring	<p>Use of Close Kin Mark Recapture (CKMR) methods which can provide estimates of absolute spawning biomass, mortality, stock structure, and connectivity based on genotyping individuals to a level that can identify close relatives (e.g. parent-offspring or half-siblings).</p> <p>Plan for a staged approach for implementation of a YFT CKMR project</p>					
Biological and ecological information (incl. parameters for stock assessment)	<p>Biological sampling</p> <ol style="list-style-type: none"> Design and develop a plan for a biological sampling program to support research on tropical tuna biology. The plan would consider the need for the sampling program to provide representative coverage of the distribution of the different tropical tuna species within the Indian Ocean and make use of samples and data collected through observer programs, port sampling and/or other research programs. The plan would also consider the types of biological samples that could be collected (e.g. otoliths, spines, gonads, stomachs, muscle and liver tissue, fin clips, etc.), the sample sizes required for estimating biological parameters, and the logistics involved in collecting, transporting and processing biological samples. The specific biological parameters that could be estimated include, but are not limited to, estimates of growth, age at maturity, fecundity, sex ratio, spawning season, spawning fraction and stock structure. 					

	2. Collect gonad samples from tropical tunas to confirm the spawning periods and location of the spawning area that are presently hypothesized for each tropical tuna species.					
Analysis of environmental factors	Evaluate the impact of environmental factors on the dynamics of tropical tuna stocks and the possible role of climate change on changes to selectivity, recruitment deviates and fishing productivity.					

Other Future Research Requirements (not in order of priority)						
		2026	2027	2028	2029	2030
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.					
	1.2 Population genetic analyses to decipher intraspecific connectivity, levels of gene flow, genetic divergence and effective population sizes based on genome-wide distributed Single Nucleotide Polymorphisms (SNPs).					
	1.3 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).					
	1.4 Investigation into the degree of local or open population in main fishing areas (e.g., the Maldives and Indonesia - archipelagic and open ocean) by using techniques such flux in FAD arrays or used of morphological features such as shape of otoliths.					
2 Stock assessment priorities	2.1 Address the outstanding issues identified as priorities by the yellowfin tuna peer review panel (February 2023). Address any recommendations made by the WPTT or SC in 2025.					
3 Historical data review	3.1 Changes in fleet dynamics need to be documented by fleet					
	3.1.1 Provide an evaluation of fleet-specific fishery impacts on the stock of bigeye tuna, skipjack tuna and yellowfin tuna. Project potential impact of realizing fleet development plans on the status of tropical tunas based upon most recent stock assessments.					
4 Alternative indices	4.1 That methods be developed for standardising purse seine catch species composition using operational data, so as to provide alternative indices of relative abundance (see Terms of Reference, Appendix IXb IOTC-2017-WPTT19-R).					
	4.2 Investigate the potential to use the Indian longline survey as a fishery-independent index of abundance for tropical tunas.					

5	Stock assessment stock indicators	<p>5.1 Develop and compare multiple assessment approaches to determine stock status for tropical tunas</p> <p>5.2 Scoping of ongoing age composition data collection for stock assessment</p> <p>5.3 Develop a high resolution age structured operating model that can be used to test the spatial assumptions including potential effects of limited tags mixing on stock assessment outcomes (see Terms of Reference, Appendix IXa IOTC-2017-WPTT19-R).</p>					
6	Fishery monitoring	<p>6.1 Develop fishery independent estimates of stock abundance to validate the abundance estimates of CPUE series.</p> <p>All of the tropical tuna stock assessments are highly dependent on relative abundance estimates derived from commercial fishery catch rates, and these could be substantially biased despite efforts to standardise for operational variability (e.g. spatio-temporal variability in operations, improved efficiency from new technology, changes in species targeting). Accordingly, the IOTC should continue to explore fisheries independent monitoring options which may be viable through new technologies. There are various options, among which some are already under test. Not all of these options are rated with the same priority, and those currently under development need to be promoted, as proposed below:</p> <p>Acoustic FAD monitoring, with the objective of deriving abundance indices based on the biomass estimates provided by echo-sounder buoys attached to FADs</p> <p>6.2 Longline-based surveys (expanding on the Indian model) or “sentinel surveys” in which a small number of commercial sets follow a standardised scientific protocol</p> <p>6.3 Aerial surveys, potentially using remotely operated or autonomous drones</p> <p>6.4 Studies (research) on flux of tuna around anchored FAD arrays to understand standing stock and independent estimates of the stock abundance.</p> <p>6.5 Investigate the possibility of conducting ongoing ad hoc, low level tagging in the region</p>					
7	Target and Limit reference points	<p>7.1 To advise the Commission, on Target Reference Points (TRPs) and Limit Reference Points (LRPs). Used when assessing tropical tuna stock status and when establishing the Kobe plot and Kobe matrices</p>					
8	Fisheries Indicators	<p>8.1 Examination of additional fisheries indicators and their discussion at WP meetings. Perhaps a section in report to accommodate these. See how this is being addressed in other RFMOs.</p>					

APPENDIX 37F

Working Party on Data Collection and Statistics Program of Work (2026-2030)

Table 1. Priority topics for obtaining the information necessary to deliver the necessary advice to the Commission. * indicates activities with high priority for funding

Topic		Sub-topic and project	2026	2027	2028	2029	2030
1	Coastal fisheries data collection	1.1* Data support missions to assist the implementation of data collection and sampling activities for fisheries insufficiently sampled. Recommended actions include designing sampling guidelines for IOTC fisheries. Priority to be given to the following countries / fisheries: <ul style="list-style-type: none"> Indonesia Pakistan I.R. Iran Tanzania Comoros 					
		1.2 * Biological sampling workshop, including species identification and genetics sampling					
2	Data access and dissemination	2.1 Ocean-climate information: develop an online digital ocean atlas for the IOTC area of competence, linked by the IOTC website; develop indicators on ocean-climate status to be linked to the atlas portal, along with educational resources					
		2.2 Biological information: collaborate with CPCs to collect, Review, analyse, and manage of biological data and information.					
		2.3 Improve accessibility of IOTC scientific products and digital assets through standard metadata and DOI (e.g., remote workshops)					

3 Monitoring and improving data reporting requirement and performance	2.4	Secretariat To establish a photo and imagery tool library and archive and develop associated reporting guidelines					
	3.1	Drafting of indicators to assess performance of IOTC CPCs against IOTC Data Requirements; evaluation of performance of IOTC CPCs with those Requirements; development of plans of action to address the issues identified, including timeframe of implementation and follow-up activities required. Priority given to CPCs with low data compliance assessment scores and/or upon requests by the CPCs.					
	3.2 *	Workshops to clarify data reporting requirements ¹ and support preparation of annual submissions including ROS data					
	3.3	Support the documentation of sampling protocols and processing ²					
			2026	2027	2028	2029	2030

APPENDIX 37G
WORKING PARTY ON METHODS PROGRAM OF WORK (2026 - 2030)

Table 1. Priority topics for obtaining the information necessary to deliver the necessary advice to the Commission. Resolution 15/10 elements have been incorporated as required by the Commission.

Topic	Sub-topic and project	Timing				
		2026	2027	2028	2029	2030
1. Management Strategy Evaluation	Continuation of Management Strategy Evaluation for Albacore, Yellowfin, and Blue shark					
MP Implementation	Monitoring the implementation of SKJ, BET and SWO Management Procedures					
	Peer review of SKJ/SWO MSE/MPs as required by MP resolutions					
Future Research Requirements (not in order of priority)						
Management Strategy Evaluation	1.1 Albacore					

<p>1.1.2 Implementation of candidate MP simulation runs and presentation of results at the TCMP</p> <p>1.1.3 Revision and evaluation of new set of Management Procedures after presentation of MP runs to TCMP and Commission (as needed)</p>					
1.2 Skipjack tuna					
1.2.1 Run MP using the catch and CPUE standardisation input data, consider exceptional circumstances*, and provide the TAC advice					
1.2.2 Presentation of MP application and exceptional circumstances* and resulting TAC to the TCMP and Commission meeting for adoption of the TAC					
1.2.3 Stock assessment to provide information on stock status					
1.2.4 External peer review (2026-2028)					
1.3 Bigeye tuna					
1.3.1 Run MP using the catch and CPUE standardisation input data, consider exceptional circumstances*, and provide the TAC advice					
1.3.2 MP performance review (preceded by the					

development of TORs),					
1.3.3 Presentation of MP application and exceptional circumstances* and resulting TAC to the TCMP and Commission meeting for adoption of the TAC					
1.3.4 Stock assessment to provide information on stock status					
1.4 Yellowfin tuna					
1.4.1 Update OM & present preliminary MP results to TCMP, WPTT/WPM review of new OM					
1.4.2 Present revised MP results to TCMP; iteratively update development if required)					
1.4.3 additional iterations if required					
1.5 Swordfish					
1.5.1 Run MP using the catch and CPUE standardisation input data, consider exceptional circumstances*, and provide the TAC advice					
1.5.2 Presentation of MP application and exceptional circumstances* and resulting TAC to the TCMP and Commission meeting for adoption of the TAC					

<p>1.5.3 Stock assessment to provide information on stock status Stock assessment to provide information on stock status</p>					
<p>1.5.4 External peer review of the MSE/MP</p>					
<p>Stock status guidance and reference points.</p> <p>Review IOTC stock status characterization against reference points and the framework for the provision of management advice (Resolution 15/10) to address the TORs of ad hoc reference point WG.</p>					
<p>CPUE Standardisation</p> <p>Continue the development of CPUE series for IOTC Species to be used in stock assessment and MSE/MP.</p> <p>Develop mechanism to ensure that CPUE standardization for the MP follows the MP specifications.</p> <p>Consider alternative CPUE (and catch data) to explore alternative plausible time series to address potential uncertainties associated with productivity to be included in OM conditioning</p>					
<p>Stock assessment</p> <p>Exploration and development of next-generation integrated fisheries stock assessment models (e.g., age-structured state-space assessment models) and their application to tuna stocks.</p>					

CKMR pilot project	Implementation of a CKMR pilot project for Indian Ocean yellowfin tuna to evaluate the logistics and feasibility of sampling, and levels of cross contamination of DNA.					
Capacity Building	Ongoing development of tools, materials and courses to continue Capacity Building for increasing participation in the MSE process and develop improved MSE communication to fishery managers.					

Table 2. Schedule of work for the development of management procedures for key species in the IOTC Area

Year	Albacore	Skipjack	Yellowfin	Bigeye	Swordfish	Blueshark
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2026	TCMP: Provide advice to Commission on elements of OMs and, if possible, candidate MPs, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.	TCMP: Provide advice to the Commission on SKJ TAC for 2027-2029	TCMP: Provide advice to Commission on elements of OMs and, if possible, candidate MPs, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.	TCMP: Consider outcomes of BET MSE review and provide advice Commission.	TCMP:	TCMP: Provide advice to Commission on elements of OMs and, if possible, candidate MPs, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.
	Commission: Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.	Commission: Adopt the TAC for 2027-2029	Commission: Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE.	Commission: Consider outcomes of BET MSE review	Commission:	Commission: Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE.
	WPs/SC: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.	WPs/SC: Stock Assessment to monitor MP implementation Review Exceptional Circumstances	WPs/SC: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.	WPs/SC: Review Exceptional Circumstances	WPs/SC: Stock Assessment to monitor MP implementation Review Exceptional Circumstances	WPs/SC: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.
2027	TCMP: Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by		TCMP: Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission,		TCMP:	TCMP: Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the

	the Commission, including the performance of candidate MPs against Commission objectives.		including the performance of candidate MPs against Commission objectives.			Commission, including the performance of candidate MPs against Commission objectives.
	Commission: Consider work and advice from subsidiary bodies. Decision and adoption of an MP.	Commission:	Commission: Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.		Commission:	Commission: Consider work and advice from subsidiary bodies and provide direction to the WPs/SC on the need to undertake further MSE of candidate or alternative MPs.
	WPs/SC: Consider recommendations from the Commission	WPs/SC: Stock Assessment to monitor MP implementation Review Exceptional Circumstances	WPs/SC: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.	WPs/SC: Run BET MP and Review Exceptional Circumstances and agree in any corrective action, if needed. Provide TAC advice to the TCMP and Commission for 2029-2032.	WPs/SC: Run SWO MP and Review Exceptional Circumstances and agree in any corrective action, if needed. Provide TAC advice to the TCMP and Commission for 2029-2032.	WPs/SC: Consider recommendations from the Commission and undertake MSE to provide advice on the performance of candidate MPs.
2028	TCMP:	TCMP:	TCMP: Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against Commission objectives.	TCMP: Provide advice to the Commission on BET TAC for 2029-2032.	TCMP: Provide advice to the Commission on SWO TAC for 2029-2032.	TCMP: Provide advice to Commission on elements of candidate MPs, and any proposed Resolutions for an MP, that require a decision by the Commission, including the performance of candidate MPs against

						Commission objectives.
	Commission:	Commission:	Commission: Consider work and advice from subsidiary bodies. Decision and adoption of an MP.	Commission: Adopt the TAC for 2029-2032.	Commission: Adopt the TAC for 2029-2032.	Commission: Consider work and advice from subsidiary bodies. Decision and adoption of an MP.
	WPs/SC: Review Exceptional Circumstances	WPs/SC: Review Exceptional Circumstances	WPs/SC: Consider recommendations from the Commission	WPs/SC: Review Exceptional Circumstances.	WPs/SC: Review Exceptional Circumstances	WPs/SC: Consider recommendations from the Commission

